

NONEXTENSIVE STATISTICAL MECHANICS AND THERMODYNAMICS: BIBLIOGRAPHY *

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GENERAL THEORY

Generalized entropy and thermostatics: [1]
Connection to thermodynamics, ensembles and Jaynes' information theory: [2–43, 45–169, 171–308, 308–372, 374–578, 580–1033, 1033–1135, 1137–1294, 1296–1661, 1661–1794, 1796–2046, 2049–2148, 2170–2201, 2203–2232, 2234–2316, 2318–2446, 2448–3433]
H-theorem and irreversibility: [3434–3500]
Ehrenfest theorem, von Neumann equation: [3, 3501–3507]
Quantum statistics: [3508–3642]
Variational and perturbative methods; Bogolyubov inequality; Green functions; Path integral; Boltzmann equation: [3527, 3643–3745]
Langevin and Fokker-Planck equations: [3438–3460, 3466–3477, 3479–3516, 3721–3724, 3726–3939, 3941–4308]
Fluctuation-dissipation, Nyquist and Onsager reciprocity theorems, Kubo's linear response theory and Kramers-Kronig relation: [6, 4309–4331]
Poisson equation: [4332–4348]
Callen identity: [4349]
Ising transmissivity: [4350]
Classical equipartition principle: [4351–4353]
Connection with quantum uncertainty: [4354–4412]
Connection with Fisher information measure: [4413–4428]
Connection with ergodicity, nonlinear dynamical systems, self-organized criticality, cellular automata, fractals: [9, 119–127, 3607, 4429–4653, 4655–4726, 4728–4962]
Connection with general relativity, cosmology, dark energy, string theory: [4414, 4963–5187]
Connection with quantum groups and quantum mechanics: [5188–5241]
Connection with wavelets; Signal processing; EEG: [5242–5353, 5353–5368]
Connection with quantum correlated many-body problems: [5369–5381]
Connection with the Gentile and the exclusion Haldane statistics: [5382–5385]
Connection with finite systems: [4309, 5382]
Rigorous results (generalized entropy and thermostatics): [4433–4438, 5386–5391]
Integral transformations (Hilhorst and Prato formulae): [3514, 4309, 5392–5395]

ONE-BODY SYSTEMS

Two-level system: [1, 5396]
Harmonic and anharmonic oscillators: [1807–1813, 1816–1831, 5390–5398]
Free particle: [5399–5404]
Larmor precession: [3503]

*This regularly updated Bibliography (at <http://tsallis.cat.cbpf.br/biblio.htm>) contains 10938 articles from 17956 signing (co)authors. It does *not* address the vast existing literature addressing nonadditive entropies and nonextensive thermodynamical anomalies, but *only* articles including at least one substantial relation with nonadditive entropies, nonextensive statistical mechanics and thermodynamics. It is a fairly complete listing whose classification and indexation are, however, only indicative.

Rigid rotator: [5394–5400, 5405–5408]
Hydrogen and hydrogen-like atoms: [2043–2049, 2054–2060, 5409–5441]

MANY-BODY SYSTEMS

Ideal, classical gases, and other toy models: [4309–4351, 5392–5399, 5405–5468]
Independent spin paramagnet, Landau magnetism: [5194–5200, 5469–5476]
Black-body radiation and photonic systems: [5477–5541]
 $d = 1$ Ising ferromagnet: [5542–5546]
 $d \geq 2$ Ising and other ferromagnets: [4350, 5547–5597]
Infinite-range Ising ferromagnet: [5598]
Potts ferromagnet, Molecular field approximation: [4349, 5564–5583, 5588–5602]
Percolation: [5603–5605]
Electron-phonon systems; tight-binding-like Hamiltonians; nanosystems; theoretical chemistry: [5606–5662]

APPLICATIONS

Self-gravitating systems, Stellar polytropes, Vlasov equation, Galaxies, Galaxy clusters: [3703, 4332, 4414, 5663–5855]
Lévy-like and correlated anomalous diffusion: [19, 3826, 3827, 3900–3929, 3932–3939, 3941–3957, 5856–5921, 5929–5936, 5938]
Turbulence; Granular matter; Viscous fingering; Navier-Stokes equation; Boltzmann equation; Mossbauer effect: [4332, 5901–5930, 5939–6309]
Solar neutrinos; High energy physics: [6310–6476, 6478–6542, 6544–6599, 6601–6621, 6623–6656, 6658? –7082]
Ferrofluid-like materials, Lennard-Jones and other fluids: [5588, 7072, 7083–7105]
Solitons: [7106, 7107]
Plasma (electron velocity distribution, magnetohydrodynamics): [7108–7691]
Glass, Spin-glass: [7692–7733]
Superfluid helium; Bose-Einstein condensation: [7734–7759]
Test of Boltzmann-Gibbs thermostatics: [4995, 5506, 5507]
Cosmic rays; Elementary particles: [7757–8024]
Biological systems; Microemulsions; Liquid crystals: [8025–8027, 8029–8175]
Stochastic resonance; Brownian motors: [8176–8202, 8205, 8207–8222]
Connection with the Theory of perceptions: [19, 20]
Connection with the Theory of finances: [8194–8454]
Consistent testing; Statistical inference; Theory of probabilities: [1197–1203, 1205–1215, 1217–1294, 3699, 8456–8565]
Theory of functions: [2147–2169, 2174–2201, 2203, 2206–2232, 2234–2247, 2260–2272, 2274, 2275, 2277–2285, 2287–2307, 2344–2363, 2367–2418, 2422–2427, 2442–2460, 2463–2482, 2485, 2486, 2488–2496, 2506–2508, 7294, 8566–8866]
Simulated annealing and optimization techniques; Monte Carlo (Genetics, Traveling salesman problem, Data fitting curves, Quantum chemistry, Gravity models, Lennard-Jones clusters, Thomson model, spin systems, proteins, nucleic acids): [3722, 5575, 8867–9357]
Neural and other networks: [1208, 8126, 8127, 9358–9502, 9504–9520]
Analysis of time series (nonlinear dynamics, epilepsy, earthquakes, economics) and images: [5242–5270, 9521–10275]
Geophysics: [5269, 5270, 9618, 10276–10381]
Medicine; Tomography: [5271–5278, 9521–9523, 9919, 10382–10486]
Symbolic dynamics, linguistics, philology, cognitive sciences, social sciences, hydrology, ecology: [4486–4497, 4499–4521, 4525–4548, 8801, 10487–10697]

GENERAL READING

Generalized thermostatics; Generalized distributions: [1112, 10698–10856, 10858–10938]

References

- [1] C. Tsallis, *Possible generalization of Boltzmann-Gibbs statistics*, J. Stat. Phys. **52**, 479-487 (1988) [First appeared as preprint in 1987: CBPF-NF-062/87, ISSN 0029-3865, Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro].
- [2] E.M.F. Curado and C. Tsallis, *Generalized statistical mechanics: connection with thermodynamics*, J. Phys. A **24**, L69-72 (1991); Corrigenda: **24**, 3187 (1991) and **25**, 1019 (1992).
- [3] A.R. Plastino and A. Plastino, *Tsallis' entropy, Ehrenfest theorem and information theory*, Phys. Lett. A **177**, 177 (1993).
- [4] C. Tsallis, *What are the numbers that experiments provide?*, Quimica Nova **17**, 468 (1994).
- [5] A.R. Plastino and A. Plastino, *From Gibbs microcanonical ensemble to Tsallis generalized canonical distribution*, Phys. Lett. A **193**, 140 (1994).
- [6] C. Tsallis, *Some comments on Boltzmann-Gibbs statistical mechanics*, Chaos, Solitons and Fractals **6**, 539 (1995).
- [7] J.D. Ramshaw, *Thermodynamic stability conditions for the Tsallis and Renyi entropies*, Phys. Lett. A **198**, 119 (1995).
- [8] J.D. Ramshaw, *Entropy ambiguity in a system in equilibrium with a finite heat bath*, Phys. Lett. A **198**, 122 (1995).
- [9] C. Tsallis, *Nonextensive thermostatistics and fractals*, Fractals **3**, 541 (1995).
- [10] R.N. Silver and C. Tsallis, *Generalized entropy as a possible basis for a nonlinear Schroedinger-like equation*, preprint (1993).
- [11] R. Li, Z.H. Ye and W. Cui, *Higher-order logarithmic Schroedinger equation for correlated physical systems*, preprint (2024).
- [12] E.S. Loscar and C.M. Horowitz, *Size effects in finite systems with long-range interactions*, Phys. Rev. E **97**, 032103 (2018).
- [13] A. Chame, *Irreversible processes: The generalized affinities within Tsallis statistics*, Physica A **255**, 423 (1998).
- [14] S. Martinez, F. Pennini and A. Plastino, *Thermodynamics' zeroth-th law in a nonextensive scenario*, Physica A **295**, 416 (2001).
- [15] G.L. Ferri, F. Pennini, A. Plastino and M.C. Rocca, *New mathematics for the nonadditive Tsallis' scenario*, Internat. J. Modern Phys. B, 1750151 (2017) (19 pages), doi: 10.1142/S021797921750151X
- [16] S. Martinez, F. Pennini and A. Plastino, *The concept of temperature in a nonextensive scenario*, Physica A **295**, 246 (2001) [Proc. IUPAP Workshop on New Trends on Fractal Aspects of Complex Systems (16-20 October 2000, Maceio-AL, Brazil), ed. M.L. Lyra (Elsevier, Amsterdam, 2001)].
- [17] C. Tsallis, *Comment on "Thermodynamic stability conditions for the Tsallis and Renyi entropies" by J.D. Ramshaw*, Phys. Lett. A **206**, 389 (1995).
- [18] G.R. Guerberoff and G. A. Raggio, *Remarks on "Thermodynamic stability conditions for the Tsallis and Renyi entropies" by Ramshaw*, Phys. Lett. A **214**, 313 (1996).
- [19] C. Tsallis, *Non-extensive thermostatistics: brief review and comments*, Physica A **221**, 277 (1995).
- [20] L.S. dos Santos and A.S. Martinez, *Inconsistency and subjective time dilation perception in intertemporal decision making*, Front. Appl. Math. Stat. **4**, 54 (2018), doi: 10.3389/fams.2018.00054
- [21] A.R. Plastino and H.G. Miller, *Generalized statistical mechanics with unknown entropic parameter q: An extended variational approach*, preprint (1996).
- [22] F. Pennini, A.R. Plastino and A. Plastino, *Dynamical evolution and Tsallis generalized quantum thermostatics*, Physica A **235**, 388 (1997).
- [23] R.J.V. dos Santos, *Generalization of Shannon's theorem for Tsallis entropy*, J. Math. Phys. **38**, 4104 (1997).
- [24] S. Abe, *Axioms and uniqueness theorem for Tsallis entropy*, Phys. Lett. A **271**, 74 (2000).
- [25] E.H. Mulalic, M.S. Stankovic and R.S. Stankovic, *Remarks on the pseudo-additivity in the axiomatization of Tsallis entropy*, Open Systems and Information Dynamics **21** (4), 1450012 (2014) (20 pages), doi: 10.1142/S1230161214500127
- [26] V.M. Ilic and M.S. Stankovic, *An axiomatic characterization of generalized entropies under analyticity condition*, Applied Mathematics and Information Sciences **9** (2), 609-613 (2015).
- [27] A. Fahad, Y. Wang, Z. Ali, R. Hussain and S. Furuichi, *Exploring properties and inequalities for geometrically arithmetically-Cr-convex functions with Cr-order relative entropy*, Information Sciences **662**, 120219 (2024).
- [28] A.M. Bikchentaev, F. Kittaneh, M.S. Moslehian and Y. Seo, *Trace inequalities: For matrices and Hilbert space operators*, Springer (2024).

- [29] Z. Zhang, H. Huang and H. Xu, *Khinchin's fourth axiom of entropy revisited*, *Stats* **6**, 763-772 (2023).
- [30] K.S. Fa, *Note on generalization of Shannon theorem and inequality*, *J. Phys. A* **31**, 8159 (1998).
- [31] S.F. Kwok, *Langevin and Fokker-Planck equations and their generalizations: Descriptions and solutions*, 1-195 (2018).
- [32] T. Wada and H. Suyari, *A two-parameter generalization of Shannon-Khinchin axioms and the uniqueness theorem*, *Phys. Lett. A* **368**, 199-205 (2007).
- [33] T. Oikonomou and G.B. Bagci, *A completeness criterion for Kaniadakis, Abe and two-parameter generalized statistical theories*, *Reports on Math. Phys.* **66** (1), 137-146 (2010).
- [34] T. Oikonomou and G.B. Bagci, *Misusing the entropy maximization in the jungle of generalized entropies*, *Phys. Lett. A* **381**, 2017-211 (2017).
- [35] T. Oikonomou and G.B. Bagci, *Entropy maximization with linear constraints: The uniqueness of the Shannon entropy*, preprint (2018), 1803.02556 [cond-mat.stat-mech].
- [36] A. Plastino and M.C. Rocca, *Rescuing the MaxEnt treatment for q-generalized entropies*, *Physica A* **491**, 1023-1027 (2018).
- [37] A. Plastino and M.C. Rocca, *Strong correlations between the exponent α and the particle number for a Renyi monoatomic gas in Gibbs' statistical mechanics*, *Phys. Rev. E* **95**, 062110 (2017) (4 pages).
- [38] R. Hanel and S. Thurner, *A classification of complex statistical systems in terms of their stability and a thermodynamical derivation of their entropy and distribution functions*, preprint (2010), 1005.0138 [physics.class-ph].
- [39] R. Hanel and S. Thurner, *A comprehensive classification of complex statistical systems and an axiomatic derivation of their entropy and distribution functions*, *Europhys. Lett.* **93**, 20006 (2011) (6 pages).
- [40] R. Hanel and S. Thurner, *When do generalised entropies apply? How phase space volume determines entropy*, *EPL* **96**, 50003 (2011) (6 pages).
- [41] J. Korbelt, R. Hanel and S. Thurner, *Classification of complex systems by their sample-space scaling exponents*, *New J. Phys.* **20**, 093007 (2018).
- [42] J. Korbelt, R. Hanel and S. Thurner, *Information geometric duality of Φ -deformed exponential families*, *Entropy* **21**, 112 (2019), doi: 10.3390/e21020112
- [43] M. Kelbert and Y. Suhov, *Context-sensitive hypothesis-testing and exponential families*, *Statistics* (2025).
- [44] A. Moreno, S. Nagesh, Z. Wu, W. Dempsey and J.M. Rehg, *Kernel deformed exponential families for sparse continuous attention*, preprint (2021), 2111.01222 [cs.LG].
- [45] F.L.J. Vieira, L.H.F. de Andrade, R.F. Vigelis and C.C. Cavalcante, *A deformed exponential statistical manifold*, *Entropy* **21**, 496 (2019), doi :10.3390/e21050496
- [46] R. Hanel, S. Thurner and M. Gell-Mann, *How multiplicity determines entropy: derivation of the maximum entropy principle for complex systems*, *PNAS* **111** (19), 6905-6910 (2014), doi: www.pnas.org/cgi/doi/10.1073/pnas.1406071111
- [47] S. Thurner, B. Corominas-Murtra and R. Hanel, *Three faces of entropy for complex systems – information, thermodynamics and the maximum entropy principle*, *Phys. Rev. E* **96**, 032124 (2017) (12 pages).
- [48] R. Hanel and S. Thurner, *What do generalized entropies look like? An axiomatic approach for complex, non-ergodic systems*, preprint (2011), 1104.2070 [cond-mat.stat-mech].
- [49] S. Thurner and R. Hanel, *Is there a world behind Shannon? Entropies for complex systems*, in *Emergence, Complexity and Computation in Nature*, eds. A. Sanayei, I. Zelinka and O.E. Rossler, ISCS 2013: Interdisciplinary Symposium on Complex Systems, Emergence, Complexity and Computation **8**, 9-13 (Springer, Berlin, 2014).
- [50] R. Hanel and S. Thurner, *Generalized (c,d)-entropy and aging random walks*, *Entropy* **15**, 5324-5337 (2013), doi:10.3390/e15125324
- [51] H. Suyari and M. Tsukada, *Tsallis differential entropy and divergences derived from the generalized Shannon-Khinchin axioms*, *Proc. IEEE International Symposium on Information Theory (ISIT)* **1-4**, 149-153 (Seoul, Korea, June 28-July 3, 2009).
- [52] S. Alhihi, M. Almheidat, G. Abufoudeh, R.A. Awwad, S. Alokaily and A. Almomani, *Statistical inference of normal distribution based on several divergence measures: A comparative study*, *Symmetry* **16**, 212 (2024).
- [53] L. Leskela, *Information divergences and likelihood ratios of Poisson processes and point patterns*, *IEEE Transactions on Information Theory* **70** (12), 9084 (2024).
- [54] K. Uohashi, *Extended divergence on a foliation by deformed probability simplexes*, *Entropy* **24**, 1736 (2022).
- [55] I.T. Koponen, E. Palmgren and E. Keski-Vakkuri, *Characterising heavy-tailed networks using q-generalised entropy and q-adjacency kernels*, *Physica A* **566**, 125666 (2021), doi: 10.1016/j.physa.2020.125666
- [56] I.T. Koponen, *Systemic states of spreading activation in describing associative knowledge networks: From key items to relative entropy based comparisons*, *Systems* **9**, 1 (2021), doi: 10.3390/systems9010001

- [57] I.T. Koponen, *Systemic states of spreading activation in describing associative knowledge networks II: Generalisations with fractional graph Laplacians and q -adjacency kernels*, Systems **9**, 22 (2021), doi: 10.3390/systems9020022
- [58] M.A. Kumar and I. Sason, *Projection theorems for the Renyi divergence on α -convex sets*, IEEE Transactions on Information Theory **62** (9), 4924-4935 (2016).
- [59] A.V. Lackovic, J. Lerga and M. Tomic, *Local Shannon, Renyi, and Tsallis entropy for useful content extraction from Choi-Williams and Zhao-Atlas-Marks time-frequency distributions*, communicated at 2022 International Conference on Electrical, Computer, Communications and Mechatronics Engineering, IEEE (2022).
- [60] M.A. Kumar and I. Sason, *On projections of the Renyi divergence on generalized convex sets*, preprint (2016).
- [61] L. Lang, R. Quax, P. Baudot and P. Forre, *Information decomposition diagrams applied beyond Shannon entropy: A generalization of Hu's theorem*, preprint (2022), 2202.09393 [cs.IT].
- [62] V. Ahrari and A. Habibirad, *Exponentiality test based on progressively type-II censor data via extension of cumulative Tsallis divergence*, Revista Colombiana de Estadística **44** (2), 297-312 (2021).
- [63] S. Neumayer, V. Stein and G. Steidl, *Wasserstein gradient flows for Moreau envelopes of f -divergences in reproducing kernel Hilbert spaces*, preprint (2024), 2402.04613 [stat.ML].
- [64] K. Cheng and J. Zhang, *λ -Deformed evidence lower bound (λ -ELBO) using Renyi and Tsallis divergence*, Geometric Science of Information, Lecture Notes in Computer Science **14071**, 186-196 (2023).
- [65] H. Bao, S. Sakaue and Y. Takezawa, *Any-stepsize gradient descent for separable data under Fenchel-Young losses*, preprint (2025), 2502.04889 [stat.ML].
- [66] A. Cichocki, T. Tanaka and S. Cruces, *Mirror Descent and Novel Exponentiated Gradient Algorithms Using Trace-Form Entropies and Deformed Logarithms*, preprint (2025), 2503.08748 [cs.LG].
- [67] K. Tojo and T. Yoshino, *A q -Analogue of the family of Poincare distributions on the upper half plane*, Geometric Science of Information, Lecture Notes in Computer Science **14071**, 167-175 (2023).
- [68] S. Chakraborty, R. Bhattacharya and B. Pradhan, *Cumulative entropy of progressively type-II censored order statistics and associated optimal life testing-plans*, Statistics (2023).
- [69] M.K.H. Hassan, *Estimation of three entropies for Dagum distribution using Type-II censored data*, Journal of Statistics and Management Systems **27** (8), 1541-1556 (2024).
- [70] R. Alotaibi, M. Nassar, Z.A. Khan, W.A. Alajlan and A. Elshahhat, *Entropy evaluation in inverse Weibull unified hybrid censored data with application to mechanical components and head-neck cancer patients*, AIMS Mathematics **10** (1), 1085-1115 (2025).
- [71] D.C. Raju, S.M. Sunoj and G. Rajesh, *Results and applications of a new inaccuracy measure based on cumulative Tsallis entropy*, Comm. Statistics - Theory and Methods (2023), doi: 10.1080/03610926.2023.2179371
- [72] M. Asadi, K. Devarajan, N. Ebrahimi, E. Soofi and L. Spirko-Burns, *Elaboration models with symmetric information divergence*, International Statistical Review (Wiley, 2022).
- [73] C. Fu, P. Xu, Y. Huo, S. Li and X. Cai, *Tsallis divergence as strategy for radioactive sources search and location*, Nuclear Science and Engineering (2022), doi: 10.1080/00295639.2022.2052551
- [74] A. Gayen and M.A. Kumar, *Projection theorems and estimating equations for power-law models*, J. Multivariate Analysis (2021), in press, doi: 10.1016/j.jmva.2021.104734
- [75] Y. Li and R.E. Turner, *Variational inference with Renyi divergence*, preprint (2016), 1602.02311 [stat.ML].
- [76] Y. Li and R.E. Turner, *Renyi Divergence Variational Inference: Appendix*, preprint (2016).
- [77] P.G. Popescu, V. Preda and E.I. Slusanschi, *Bounds for Jeffreys-Tsallis and Jensen-Shannon-Tsallis divergences*, Physica A **413**, 280-283 (2014), doi: <http://dx.doi.org/10.1016/j.physa.2014.06.073>
- [78] F. Hassanzad, H. Mehri-Dehnavi and H. Agahi, *Quantum Tsallis-Jensen-Shannon divergence and its bounds*, preprint (2024), doi: 10.22541/au.170666828.88481188/v1
- [79] M. Antonetti, H. Donancio and F. Forbes, *An analysis of distributional reinforcement learning with Gaussian mixtures*, hal-04941480 (2025).
- [80] J. Xu, *Quantifying the imaginarity of quantum states via Tsallis relative entropy*, Physics Letters A **528**, 130024 (2024).
- [81] K. Chen and Q. Wang, *Improved sample upper and lower bounds for trace estimation of quantum state powers*, preprint (2025), 2505.09563 [quant-ph].
- [82] I.E. Hirica, C.L. Pripoe, G.T. Pripoe and V. Preda, *Weighted relative group entropies and associated Fisher metrics*, Entropy **24**, 120 (2022).
- [83] C.L. Pripoe, I.E. Hirica, G.T. Pripoe and V. Preda, *Lie symmetries of the nonlinear Fokker-Planck equation based on weighted Tsallis entropy*, Carpathian J. Math. **38** (3), 597-617 (2022).
- [84] V. Preda and R.-C. Sfetcu, *Some properties of fractal Tsallis entropy*, Fractal Fract. **7**, 375 (2023).

- [85] C.L. Pripoae, I.E. Hirica, G.T. Pripoae and V. Preda, *Holonomic and non-holonomic geometric models associated to the Gibbs-Helmholtz equation*, preprint (2023), 2305.05435 [math-ph].
- [86] Z. Wang, O. So, J. Gibson, B. Vlahov, M.S. Gandhi, G.H. Liu and E.A. Theodorou, *Variational inference MPC using Tsallis divergence*, preprint (2021), 2104.00241 [cs.LG].
- [87] Burda, *Variational autoencoders trained with q -deformed lower bounds*, communicated at ICLR (2019).
- [88] S. Cao, J. Li, K. Nelson and M. Kon, *Coupled VAE: Improved accuracy and robustness of a variational autoencoder*, Entropy **24**, 423 (2022).
- [89] R.M.S. Farias, T.O. Maciel, G. Camilo, R. Lin, S. Ramos-Calderer and L. Aolita, *Quantum encoder for fixed Hamming-weight subspaces*, Phys. Rev. Applied **23**, 044014 (2025).
- [90] R.P. Bonidia, D.S. Domingues, D.S. Sanches and A.C.P.L.F. de Carvalho, *MathFeature: feature extraction package for DNA, RNA and protein sequences based on mathematical descriptors*, Briefings in Bioinformatics (2021), in press, doi: 10.1093/bib/bbab434
- [91] T. Kobayashi, *q -VAE for disentangled representation learning and latent dynamical systems*, IEEE Robotics and Automation Letters **5** (4), 5669 (2020).
- [92] L. Zhu, *Entropy regularization for scalable, safe and robust reinforcement learning*, Doctor Thesis (Nara Institute of Science and Technology, Japan, 2022).
- [93] D.S. Smith Jr. and H.E. Sevil, *Design of a rapid structure from motion (SfM) based 3D reconstruction framework using a team of autonomous small unmanned aerial systems (sUAS)*, Robotics **11**, 89 (2022).
- [94] T. Kobayashi, *t -vMF Similarity for regularizing intra-class feature distribution*, IEEE (2021), in press.
- [95] T. Kobayashi and R. Watanuki, *Sparse representation learning with modified q -VAE towards minimal realization of world model*, preprint (2022), 2208.03936 [cs.LG].
- [96] C. Xu, Y.C. Huang, J.Y.C. Hu, W. Li, A. Gilani, H.S. Goan and H. Liu, *BISHOP: Bi-directional cellular learning for tabular data with generalized sparse modern Hopfield model*, preprint (2024), 2404.03830 [cs.LG].
- [97] R. Wedemann, A.R. Plastino, C. Tsallis and E.M.F. Curado, *Estimate of the storage capacity of q -correlated patterns in Hopfield neural networks*, ICANN Conference, Lecture Notes in Computer Science **15019**, 137-150 (Springer, 2024).
- [98] H.H. Chou, J. Maly, C.M. Verdun, B.F.P. Costa and H. Mirandola, *Get rid of your constraints and reparametrize: A study in NNLS and implicit bias*, Proceedings of the 28th International Conference on Artificial Intelligence and Statistics (AISTATS) **258** (Mai Khao, Thailand, 2025).
- [99] K. Akiyama, *Designing a linearized potential function in neural network optimization using Csiszar type of Tsallis entropy*, preprint (2024), 2411.03611 [stat.ML].
- [100] K. Akiyama, *Neural network optimization problems based on Tsallis entropy*, Doctor Thesis (Tohoku University, Sendai, Japan, 2024).
- [101] M. Aguilera, P.A. Morales, F.E. Rosas and H. Shimazaki, *Explosive neural networks via higher-order interactions in curved statistical manifolds*, preprint (2024), 2408.02326 [cond-mat.dis-nn].
- [102] B. La Rosa, *Explaining deep neural networks by leveraging intrinsic methods*, Doctor Thesis, (Sapienza University of Rome, Department of Computer, Control and Management Engineering, 2024).
- [103] G. Xu, X. Xu and X. Wang, *Tsallis entropy based uncertainty relations on sparse representation for vector and matrix signals*, Information Sciences **617**, 359-372 (2022).
- [104] H. Bao and S. Sakaue, *Sparse regularized optimal transport with deformed q -entropy*, Entropy **24**, 1634 (2022).
- [105] A.M. Kowalski and A. Plastino, *Relative entropies and Jensen divergences in the classical limit*, preprint (2015).
- [106] A.M. Kowalski and A. Plastino, *Deformed Tsallis-statistics analysis of a complex nonlinear matter-field system*, Physica A **519**, 267-274 (2019).
- [107] A.M. Kowalski and A. Plastino, *A nonlinear matter-field Hamiltonian analyzed with Renyi and Tsallis statistics*, Physica A **535**, 122387 (2019).
- [108] A.J.M. Garrett, *Yet another derivation of the principle of maximum entropy*, in *Maximum entropy and Bayesian methods*, eds. W. von der Linden, V. Dose, R. Fischer and R. Preuss (Kluwer, Dordrecht, Netherlands, 1999), p.271; communicated at MaxEnt 1998 (Garching, Germany).
- [109] M. EL-Morshedy, F.S. Alshammari, A. Tyagi, I. Elbatal, Y.S. Hamed and M.S. Eliwa, *Bayesian and frequentist inferences on a type I half-logistic odd Weibull generator with applications in engineering*, Entropy **23**, 446 (2021), doi: 10.3390/e23040446
- [110] U.K. Tyagi, S. Haridasu and S. Basak, *Holographic and gravity-thermodynamic approaches in entropic cosmology: Bayesian assessment using late-time data*, Phys. Rev. D **110**, 063503 (2024).
- [111] U.K. Tyagi, S. Haridasu and S. Basak, *Constraints on generalized gravity-thermodynamic cosmology from DESI DR2*, preprint (2025), 2504.11308 [astro-ph.CO].

- [112] S.M. Alghamdi, M. Shrahili, A.S. Hassan, A.M. Gemeay, I. Elbatal and M. Elgarhy, *Statistical inference of the half logistic modified Kies exponential model with modeling to engineering data*, Symmetry **15**, 586 (2023).
- [113] I.E. Ragab, N. Alsadat, O.S. Balogun and M. Elgarhy, *Unit extended exponential distribution with applications*, Journal of Radiation Research and Applied Sciences **17**, 101118 (2024).
- [114] I.E. Ragab and M. Elgarhy, *Type II half-logistic Ailamujia distribution with numerical illustrations to medical data*, Computational Journal of Mathematical and Statistical Sciences **4** (2), 379-406 (2025).
- [115] S.O. Bashiru, M. Kayid, R. Mahmoud, O.S. Balogun, M.M. Abd El-Raouf and A.M. Gemeay, *Introducing the unit Zeghdoudi distribution as a novel statistical model for analyzing proportional data*, Journal of Radiation Research and Applied Sciences **18**, 101204 (2025).
- [116] A.M.A. El-latif, O.A. Alqasem, J.K. Okutu, C. Tanis, L.P. Sapkota and N.A. Noori, *A flexible extension of the unit upper truncated Weibull distribution: Statistical analysis with applications on geology, engineering, and radiation data*, Journal of Radiation Research and Applied Sciences **18**, 101434 (2025).
- [117] C. Sinner, Y. Dominicy, J. Trufin, W. Waterschoot, P. Weber and C. Ley, *From Pareto to Weibull– A constructive review of distributions on R^+* , International Statistical Review (2022), doi: 10.1111/insr.12508
- [118] H. Okasha and M. Nassar, *Product of spacing estimation of entropy for inverse Weibull distribution under progressive type-II censored data with applications*, J. Taibah University for Science **16** (1), 259-269 (2022), doi: 10.1080/16583655.2022.2046945
- [119] A.R. Plastino and C. Anteneodo, *A dynamical thermostatting approach to non-extensive canonical ensembles*, Ann. Phys. **255**, 250 (1997).
- [120] I. Fukuda and H. Nakamura, *Tsallis dynamics using the Nose-Hoover approach*, Phys. Rev. E **65**, 026105 (2002).
- [121] I. Fukuda and H. Nakamura, *Molecular dynamics equation designed for realizing arbitrary density: application to sampling method utilizing the Tsallis generalized distribution*, J. Phys. C Series **201**, 012011 (2010) (8 pages).
- [122] I. Fukuda and K. Moritsugu, *Coupled Nosé-Hoover equations of motion to implement a fluctuating heat-bath temperature*, Phys. Rev. E **93**, 033306 (2016) (18 pages).
- [123] I. Fukuda and K. Moritsugu, *Coupled Nose-Hoover equations of motions without time scaling*, J. Phys. A: Math. Theor. **50**, 015002 (2017) (29 pages).
- [124] I.H. Naeim, J. Batle, S. Kadry and O. Tarawneh, *Molecular dynamics simulations and the Landauer's principle*, Open Systems and Information Dynamics **25** (2), 1850006 (2018) (15 pages), doi: 10.1142/S1230161218500063
- [125] J.S. Andrade Jr., M.P. Almeida, A.A. Moreira and G.A. Farias, *Extended phase-space dynamics for the generalized nonextensive thermostats*, Phys. Rev. E **65**, 036121 (2002).
- [126] J.S. Andrade Jr., M.P. Almeida, A.A. Moreira, A.B. Adib and G.A. Farias, *A Hamiltonian approach for Tsallis thermostats*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [127] A. Bravetti and D. Tapias, *A thermostat algorithm generating target ensembles*, preprint (2015), 1510.03942 [cond-mat.stat-mech].
- [128] G.B. Roston, A.R. Plastino, M. Casas, A. Plastino and L.R. da Silva, *Dynamical thermostatting and statistical ensembles*, Eur. Phys. J. b **48**, 87-93 (2005).
- [129] A. Plastino and A.R. Plastino, *On the universality of Thermodynamics' Legendre transform structure*, Phys. Lett. A **226**, 257 (1997).
- [130] R.S. Mendes, *Some general relations in arbitrary thermostats*, Physica A **242**, 299 (1997).
- [131] A.R.R. Papa, *On one-parameter-dependent generalizations of Boltzmann-Gibbs statistical mechanics*, J. Phys. A **31**, 5271 (1998).
- [132] E.P. Borges and I. Roditi, *A family of non-extensive entropies*, Phys. Lett. A **246**, 399 (1998).
- [133] J.W. Kang, B.W. Zhang and K. Shen, *A note on the connection between nonextensive entropy and h-derivative*, preprint (2019), 1905.07706 [cond-mat.stat-mech].
- [134] A. Lavagno and P.N. Swamy, *Generalized symmetric nonextensive thermostats and q-modified structures*, Mod. Phys. Lett. B **13**, 961 (1999).
- [135] A. Lavagno and P.N. Swamy, *Thermostats of deformed bosons and fermions*, Found. Phys. **40**, 814-828 (2010).
- [136] E.M.F. Curado, *Condicoes para a existencia de estatisticas generalizadas*, communicated at the XX Encontro Nacional de Fisica da Materia Condensada (10-14 June 1997, Caxambu, Brazil).
- [137] A.R. Plastino, H.G. Miller, A. Plastino and G.D. Yen, *The role of information measures in the determination of the maximum entropy - minimum norm solution of the generalized inverse problem*, J. Math. Phys. **38**, 6675 (1997).

- [138] A. Marti, F. de Cabrera and J. Riba, *On the estimation of Tsallis entropy and a novel information measure based on its properties*, Signal Processing Letters IEEE **30**, 818-822 (2023).
- [139] J.V.T. de Lima, *Abordagens robustas para problemas inversos baseados nas estatísticas generalizadas de Renyi, Tsallis e de Kaniadakis*, Master Thesis (2022, Universidade Federal do Rio Grande do Norte).
- [140] L. Borland, A.R. Plastino and C. Tsallis, *Information gain within nonextensive thermostatics*, J. Math. Phys. **39**, 6490 (1998); [Errata: J. Math. Phys. **40**, 2196 (1999)].
- [141] L. Rebollo-Neira, A. Plastino and J. Fernandez-Rubio, *On the $q = 1/2$ non-extensive maximum entropy distribution*, Physica A **258**, 458 (1998).
- [142] C. Anteneodo and A.R. Plastino, *Maximum entropy approach to stretched exponential probability distributions*, J. Phys. A **32**, 1089 (1999).
- [143] F. Pennini, A.R. Plastino and A. Plastino, *Renyi entropies and Fisher informations as measures of nonextensivity in a Tsallis setting*, Physica A **258**, 446 (1998).
- [144] L. Rebollo-Neira, J. Fernandez-Rubio and A. Plastino, *A non-extensive maximum entropy based regularization method for bad conditioned inverse problems*, Physica A **261**, 555 (1998).
- [145] C. Tsallis, R.S. Mendes and A.R. Plastino, *The role of constraints within generalized nonextensive statistics*, Physica A **261**, 534-554 (1998).
- [146] G.B. Bagci, A. Arda and R. Sever, *Quantum mechanical treatment of the problem of constraints in nonextensive formalism revisited*, preprint (2007) [cond-mat/0701745].
- [147] P.T. Landsberg and V. Vedral, *Distributions and channel capacities in generalized statistical mechanics*, Phys. Lett. A **247**, 211 (1998).
- [148] P.T. Landsberg, *Entropies galore!*, in *Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 46 (1999).
- [149] P.T. Landsberg, *Fragmentations, mergings and order: Aspects of entropy*, Physica A **305**, 32 (2002).
- [150] A.S. Parvan, *Nonextensive statistics based on Landsberg-Vedral entropy*, EPJ Web of Conferences **204**, 03005 (2019).
- [151] E.D. Malaza, H.G. Miller, A.R. Plastino and F. Solms, *Approximate time dependent solutions of partial differential equations: The MaxEnt-minimum norm approach*, Physica A **265**, 224 (1999).
- [152] A. Plastino and M.C. Rocca, *MaxEnt, second variation, and generalized statistics*, Physica A **436**, 572-581 (2015).
- [153] A. Plastino and M. C. Rocca, *Analysis of Tsallis' classical partition function' s poles*, Physica A **487**, 196-204 (2017).
- [154] A. Plastino and A.R. Plastino, *Tsallis entropy and Jaynes' information theory formalism in Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 50 (1999).
- [155] E.M.F. Curado, *General aspects of the thermodynamical formalism*, in *Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 36 (1999).
- [156] A.R. Lima and T.J.P. Penna, *Tsallis statistics with normalized q -expectation values is thermodynamically stable: Illustrations*, Phys. Lett. A **256**, 221 (1999).
- [157] Di Sisto, S. Martinez, A.R. Plastino and A. Plastino, *Thermostatistical formalisms, invariance under uniform spectrum translations and Tsallis q -additivity*, Physica A **265**, 590 (1999).
- [158] A.K. Rajagopal and S. Abe, *Implications of form invariance to the structure of nonextensive entropies*, Phys. Rev. Lett. **83**, 1711 (1999).
- [159] S. Abe and A.K. Rajagopal, *Quantum entanglement inferred by the principle of maximum nonadditive entropy*, Phys. Rev. A **60**, 3461 (1999).
- [160] A. Bernal, J.A. Casas and J.M. Moreno, *Entanglement and entropy in multipartite systems: a useful approach*, Quantum Information Processing **23**, 56 (2024).
- [161] J.M. Yang, *Spin theory based on the extended least action principle and information metrics: Quantization, entanglement, and Bell test with time delay*, preprint (2024), 2404.13783 [physics.gen-ph].
- [162] J.M. Yang, *Quantum theory of electron spin based on the extended least action principle and information metrics of spin orientations*, International Journal of Theoretical Physics **64**, 16 (2025).
- [163] H. Li, T. Gao and F. Yan, *Parametrized multipartite entanglement measures*, Phys. Rev. A **109**, 012213 (2024).
- [164] X. Yang, M.X. Luo, Y.H. Yang and S.M. Fei, *Parametrized entanglement monotone*, Phys. Rev. A **103**, 052423 (2021).
- [165] T.Y. Simmacher, *The interplay between quantum entanglement, coherence, and convex optimization*, Doctor Thesis (Universitat Siegen, 2021).

- [166] A. Cervera Lierta, *Maximal Entanglement - Applications in Quantum Information and Particle Physics*, Doctor Thesis (Universitat de Barcelona, Departament de Física Quàntica i Astrofísica, 2019), 1906.12099 [quant-ph].
- [167] M. Fatehi, *Physical layer security over Tsallis statistics for wireless communications with hardware impairments in the presence of some eavesdroppers*, Internat. J. Theoretical Physics **62**, 147 (2023).
- [168] S. Zhang and J. Li, *A bound on expectation values and variances of quantum observable via Renyi entropy and Tsallis entropy*, International Journal of Quantum Information (2021), doi: 10.1142/S0219749921500192
- [169] P. Jizba, J. Dunningham and M. Proks, *From Renyi entropy power to information scan of quantum states*, Entropy **23**, 334 (2021), doi: 10.3390/e23030334
- [170] J.L. Bonilla Mendez, *Metodos de analisis de conglomerados difusos con entropia relativa de Renyi*, Doctor Thesis (Facultad de Ciencias Matematicas, Universidad Complutense de Madrid, 2024).
- [171] P. Jizba, G. Lambiase, G.G. Luciano and L. Petruzzello, *Coherent states for generalized uncertainty relations and their cosmological implications*, J. Phys.: Conference Series **2533**, 012043 (2023).
- [172] G. Lambiase, G.G. Luciano and A. Sheykhi, *Slow-roll inflation and growth of perturbations in Kaniadakis modification of Friedmann cosmology*, Eur. Phys. J. C **83**, 936 (2023).
- [173] G.G. Luciano, *Kaniadakis entropy in extreme gravitational and cosmological environments: a review on the state-of-the-art and future prospects*, Eur. Phys. J. B **97**, 80 (2024).
- [174] H. Lange and M. Hauhs, *Complexity analysis of environmental time series*, Entropy **27**, 381 (2025).
- [175] R. D'Agostino and G.G. Luciano, *Lagrangian formulation of the Tsallis entropy*, Phys. Lett. B **857**, 138987 (2024).
- [176] G.G. Luciano, *Quantum entropy-driven modifications to holographic dark energy in $f(G, T)$ gravity*, preprint (2025), 2503.22609 [gr-qc].
- [177] G.G. Luciano, A. Paliathanasis and E.N. Saridakis, *Barrow and Tsallis entropies after the DESI DR2 BAO data*, preprint (2025), 2504.12205 [gr-qc].
- [178] M.F. Karabat, *The inflationary with inverse power-law potential in Tsallis entropy*, International Journal of Thermodynamics **27** (2), 37-42 (2024).
- [179] M.F. Karabat, *Barrow entropic cosmology with exponential potential field*, Modern Physics Letters A **39**, 2450109 (2024).
- [180] D.P. Pires, K. Modi and L.C. Celeri, *Bounding generalized relative entropies: non-asymptotic quantum speed limits*, Phys. Rev. E **103**, 032105 (2021).
- [181] D.P. Pires, *Unified entropies and quantum speed limits for nonunitary dynamics*, preprint (2022),
- [182] N.K. Kollas, *Generalized entanglement in quantum information theory - Optimization free measures and faithful extraction protocols*, Doctor Thesis (Physics Department, University of Patras, Greece, 2020).
- [183] S. Mondal, A. Sadhukhan, K. Sen and J.K. Saha, *Stability of two-electron system under pressure confinement: Structural and quantum information theoretical analysis*, J. Phys. B: At. Mol. Opt. Phys. (2023), in press.
- [184] A. Riccardi, *Uncertainty relations, quantum correlations and applications*, Doctor Thesis, (Universita degli Studi di Pavia, Dipartimento di Fisica, 2019).
- [185] V. Vilasini and R. Colbeck, *Analyzing causal structures using Tsallis entropies*, Phys. Rev. A **100**, 062108 (2019).
- [186] V. Vilasini and R. Colbeck, *Limitations of entropic inequalities for detecting nonclassicality in the postselected Bell causal structure*, Phys. Rev. Research **2**, 033096 (2020).
- [187] K. Ourabah and M. Tribeche, *Entanglement in a superstatistical system*, Phys. Lett. A **381**, 2659-2664 (2017).
- [188] E. Sanchez, *Testing the scope of superstatistical time series analysis: Application to the SYM-H geomagnetic index*, Physica A **654**, 130147 (2024).
- [189] A.K. Rajagopal, *Tsallis distribution and Tsallis entropy: Information theory context*, communicated at the Air Force Research Laboratory Workshop (4-5 October 2004, Rome, New York).
- [190] S. Abe, *Generalized nonadditive information theory and quantum entanglement*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [191] A.K. Rajagopal and R.W. Rendell, *Dissipative quantum theory: Implications for quantum entanglement*, Physica A **305**, 297 (2002).
- [192] L.M.M. Durao and A.O. Caldeira, *Statistical entropy of open quantum systems*, Phys. Rev. E **94**, 062147 (2016) (8 pages).
- [193] Z. Rahdar and B. Lari, *Open quantum systems and thermal non-equilibrium processes*, Mod. Phys. Lett. B **2050194** (2020) (15 pages).

- [194] X. Yang, Y.H. Yang, M. Alimuddin, R. Salvia, S.M. Fei, L.M. Zhao, S. Nimmrichter and M.X. Luo, *The battery capacity of energy-storing quantum systems*, preprint (2023), 2302.09905 [quant-ph].
- [195] X. Yang, Y.H. Yang, X.Z. Liu, J.L. Jiang, X.Z. Zheng, S.M. Fei and M.X. Luo, *Experimental verification of quantum battery capacity with an optical platform*, Cell Reports Physical Science **5**, 102300 (2024).
- [196] A.K. Rajagopal, R.W. Rendell and S. Abe, *Aspects of the second law of thermodynamics from quantum statistical mechanics to quantum information theory*, in *Quantum Limits to the Second Law: First International Conference*, ed. D.P. Sheehan (American Institute of Physics, 2002), p. 47, [cond-mat/0207606].
- [197] S. Abe and A.K. Rajagopal, *Towards nonadditive quantum information theory*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13**, Number 3, 431 (Pergamon-Elsevier, Amsterdam, 2002).
- [198] Y. Liu, *Complexity-theoretic perspectives on quantum state testing*, Doctor Thesis (Graduate School of Mathematics, Nagoya University, 2025).
- [199] S. Abe, *Nonadditive entropies and quantum entanglement*, Physica A **306**, 316 (2002).
- [200] J. Batle, M. Casas, A. Plastino and A.R. Plastino, *On the correlations between quantum entanglement and q-information measures*, Phys. Lett. A **318**, 506 (2003).
- [201] J. Batle, M. Casas, A. Plastino and A.R. Plastino, *Some statistical features of the entanglement changes associated with quantum logical gates*, Physica A **356**, 385-402 (2005).
- [202] J. Cirici, J. Salvado and J. Taron, *Characterization of quantum entanglement via a hypercube of Segre embeddings*, preprint (2020), 2008.09583 [quant-ph].
- [203] M. Casas, P.W. Lamberti, A. Plastino, A.R. Plastino and G. Roston, *Wave functions' discernibility and the role of fluctuations*, N. Cimento B **120**, 521-532 (2005).
- [204] J. Batle, M. Casas, A. Plastino and A.R. Plastino, *Maximally entangled mixed states and conditional entropies*, Phys. Rev. A **71**, 024301 (2005).
- [205] J.J. Pulikkottil, A. Lakshminarayan, S.C.L. Srivastava, A. Backer and S. Tomsovic, *Entanglement production by interaction quenches of quantum chaotic subsystems*, Phys. Rev. E **101**, 032212 (2020).
- [206] P.J. Coles, Li Yu, V. Gheorghiu and R.B. Griffiths, *Information theoretic treatment of tripartite systems and quantum channels*, preprint (2010), 1006.4859 [quant-ph].
- [207] Y. Lao, P. Wang and S. Liao, *Local channels under decomposition of quantum gates in bipartite systems*, Journal of Mathematics 2130374 (2023).
- [208] K. Chen, Q. Wang and Z. Zhang, *Local test for unitarily invariant properties of bipartite quantum states*, preprint (2024), 2404.04599 [quant-ph].
- [209] B. Lari, W.S. Chung and H. Hassanabadi, *Quantum gates based on two strongly coupled harmonic oscillators in thermal non-equilibrium conditions*, Physica A **637**, 129561 (2024).
- [210] W.S. Chung, G. Junker, L.M. Nieto and H. Hassanabadi, *A new time-dependent quantum theory based on Tsallis' distribution*, preprint (2025), 2505.05419 [quant-ph].
- [211] W.S. Chung, S.H. Dong and H. Hassanabadi, *The q-deformed Schrodinger equation based on the q-map: one dimensional case*, Eur. Phys. J. Plus **139**, 207 (2024).
- [212] Y. Liu, S. Luo and Y. Sun, *Total, classical and quantum uncertainties generated by channels*, Theoretical and Mathematical Physics **213** (2), 1613-1631 (2022).
- [213] S. Abdel-Khalek and T.A. Nofal, *Correlation and entanglement of a three-level atom inside a dissipative cavity*, Physica A **390**, 2626-2635 (2011).
- [214] V.I. Manko and L.A. Markovich, *Separability and entanglement of the qudit X-state with $j = 3/2$* , J. Russian Laser Research **35** (5), 518-524 (2014), doi: 10.1007/s10946-014-9455-y
- [215] M.A. Manko and V.I. Manko, *Hidden correlations and entanglement in single-qudit states*, preprint (2017), 1712.08090 [quant-ph].
- [216] M.A. Manko and V.I. Manko, *New entropic inequalities and hidden correlations in quantum suprematism picture of qudit states*, Entropy **20**, 692 (2018).
- [217] X. Yang, Y.H. Yang and M.X. Luo, *Entanglement polygon inequality in qudit systems*, preprint (2022), 2205.08801 [quant-ph].
- [218] V. Vilasini and R. Colbeck, *On the sufficiency of entropic inequalities for detecting non-classicality in the Bell causal structure*, preprint (2019), 1912.01031 [quant-ph].
- [219] P.J. Coles, *Non-negative discord strengthens the subadditivity of quantum entropy functions*, preprint (2011), 1101.1717 [quant-ph].
- [220] K. Kumar and N. Ganguly, *Quantum conditional entropies and steerability of states with maximally mixed marginals*, preprint (2023), 2301.09326 [quant-ph].

- [221] K. Kumar, I. Chakrabarty and N. Ganguly, *On fully entangled fraction and quantum conditional entropies for states with maximally mixed marginals*, Quantum Information Processing **24**, 79 (2025).
- [222] G. Pastor and J.O. Woo, *Verifying measures of quantum entropy*, Applied. Math. **2**, 312-325 (2022).
- [223] Y. Lao and J. Yang, *Maps on quantum states preserving Tsallis entropy of convex combinations*, Journal of Tongji University (Natural Science) **47** (5), 720-722 (2019).
- [224] A.P. Majtey, A.R. Plastino and A. Plastino, *New features of quantum discord uncovered by q -entropies*, Physica A **391** (7), 2491-2499 (2012).
- [225] A.P. Majtey, A. Valdes-Hernandez, C.G. Maglione and A.R. Plastino, *Entropic characterization of quantum states with maximal evolution under given energy constraints*, Entropy **21**, 770 (2019), doi: 10.3390/e21080770
- [226] S. Mazumdar, S. Dutta and P. Guha, *Sharma-Mittal quantum discord*, Quantum Information Processing, **18** (6), 169 (2019).
- [227] H. Dashtianeh and J. Sadeghi, *Generalized Hawking radiation power corresponding to Sharma-Mittal entropy*, Chinese Journal of Physics **93**, 430-436 (2025).
- [228] S. Dutta and P. Guha, *Elements of generalized Tsallis relative entropy in classical information theory*, preprint (2019), 1908.01696 [math-ph].
- [229] S. Dutta, S. Furuichi and P. Guha, *A two-parameter entropy and its fundamental properties*, Reviews in Mathematical Physics (2020), in press, doi: 10.1142/S0129055X2130003X
- [230] A. El Aroui, R. Ben Hammou, N. Habiballah, and M. Nassik, *Sharma-Mittal quantum discord in a two-qubit Heisenberg XXX spin-1/2 chain under DM and KSEA interactions*, Russian Physics Journal **67** (2) (2024).
- [231] J. Jurkowski, *Discord derived from Tsallis entropy*, Internat. J. Quantum Information **11** (1), 1350013 (2013) (16 pages).
- [232] A. Carmi and E. Cohen, *On the significance of the quantum mechanical covariance matrix*, Entropy **20**, 500 (2018), doi:10.3390/e20070500
- [233] A. Lopez Martin, *Quantum information measures: Properties and analysis of structure and dynamics of multi-electronic systems*, Docotr Thesis (University of Granada, 2017).
- [234] A. Saboia, F. Toscano, S.P. Walborn, *A family of continuous variable entanglement criteria using general entropy functions*, preprint (2010), 1005.1045 [quant-ph].
- [235] A.K. Rajagopal and R.W. Rendell, *Separability and correlations in composite states based on entropy methods*, Phys. Rev. A **66**, 022104 (2002).
- [236] A.S. Nayak, Sudha, A.K. Rajagopal and A.R. Usha Devi, *Bipartite separability of symmetric N -qubit noisy states using conditional quantum relative Tsallis entropy*, Physica A **443**, 286-295 (2016), doi: <http://dx.doi.org/10.1016/j.physa.2015.09.086>
- [237] A.S. Nayak, Sudha, A.R. Usha Devi and A.K. Rajagopal, *One parameter families of noisy N -qubit states: Biseparability using conditional quantum relative Tsallis entropy*, preprint (2016), 1609.07611 [quant-ph].
- [238] A.S. Nayak, Sudha, A.R. Usha Devi and A.K. Rajagopal, *Biseparability of noisy pseudopure, W and GHZ states using conditional quantum relative Tsallis entropy*, Quantum Inf. Process **16** (2), 51 (2017) (12 pages), doi: 10.1007/s11128-016-1491-9
- [239] A.S. Nayak, *Conditional sandwiched Renyi relative entropy and its application in separability of single parameter families of 3, 4 qubit W and GHZ density functions*, JNNCE Journal of Engineering and Management **7** (1), (2023).
- [240] J.S. Kim, *Generalized entanglement constraints in multi-qubit systems in terms of Tsallis entropy*, Annals Phys. **373**, 197-206 (2016), doi: 10.1016/j.aop.2016.07.021
- [241] A. Hamadou-Ibrahim, A.R. Plastino and A. Plastino, *q -entropies and the entanglement dynamics of two-Qbits interacting with an environment*, Braz. J. Phys. **39**, 408-412 (2009).
- [242] A. Vidiella-Barranco, *Entanglement and nonextensive statistics*, Phys. Lett. A **260**, 335 (1999). [quant-ph/9909057].
- [243] A. Vidiella-Barranco and H. Moya-Cessa, *Nonextensive approach to decoherence in quantum mechanics*, Phys. Lett. A **279**, 56 (2001).
- [244] O. Lopez-Cruz, F. Soto-Eguibar, A. Zuniga-Segundo and H.M. Moya-Cessa, *Entropy-growth in the universe: Some plausible scenarios*, Int. J. Theor. Phys. **56**, 1558-1564 (2017), doi: 10.1007/s10773-017-3295-9
- [245] G. Gour and N.R. Wallach, *All maximally entangled four qubits states*, preprint (2010), 1006.0036 [quant-ph].
- [246] A. Avanesov and V.I. Manko, *Statistical properties of qutrit in probability representation of quantum mechanics*, Physica A **533**, 121898 (2019).
- [247] A.H. Tzemos, *Epidrassi klassikou thoribou se anikta sistimata sizevgmenon qubits*, Doctor Thesis (University of Patras, Greece, September 2013).

- [248] J. Naudts, *Dual description of nonextensive ensembles*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13** (3), 445-450 (Pergamon-Elsevier, Amsterdam, 2002).
- [249] J. Naudts and M. Czachor, *Dynamic and thermodynamic stability of non-extensive systems*, in *Nonextensive Statistical Mechanics and Its Applications*, eds. S. Abe and Y. Okamoto, Series *Lecture Notes in Physics* (Springer-Verlag, Heidelberg, 2001) [ISBN 3-540-41208-5].
- [250] M.B. Pintarelli, A.M. Meson and F. Vericat, *The Burg problem and Tsallis entropy*, Phys. Lett. A **257**, 145 (1999).
- [251] M.B. Pintarelli and F. Vericat, *Generalized Hausdorff inverse moment problem*, Physica A **324**, 568 (2003).
- [252] E.K. Lenzi, R.S. Mendes and L.R. da Silva, *Statistical mechanics based on Renyi entropy*, Physica A **280**, 337 (2000).
- [253] E.K. Lenzi, R.S. Mendes and L.R. da Silva, *Normalized Tsallis entropy and its implications for the nonextensive thermostatics*, Physica A **295**, 230 (2001) [Proc. IUPAP Workshop on New Trends on Fractal Aspects of Complex Systems (16-20 October 2000, Maceio-AL, Brazil), ed. M.L. Lyra (Elsevier, Amsterdam, 2001)].
- [254] M. Hotta and I. Joichi, *Composability and generalized entropy*, Phys. Lett. A **262**, 302 (1999).
- [255] M. Hotta, *Bi-composability and generalized entropy composition with different q indices*, preprint (1999) [cond-mat/9908236].
- [256] K. Sasaki and M. Hotta, *H-theorem and generalized entropy composition with different q indices*, preprint (1999) [cond-mat/9912454].
- [257] K. Sasaki and M. Hotta, *Toward generalized entropy composition with different q -indices and H-theorem*, J. Phys. Soc. Japan **69**, 3830 (2000).
- [258] K. Sasaki and M. Hotta, *Generalized entropy composition with different q indices: A trial*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13**, Number 3, 513 (Pergamon-Elsevier, Amsterdam, 2002).
- [259] L.R. da Silva, E.K. Lenzi, J.S. Andrade and J. Mendes Filho, *Tsallis nonextensive statistics with normalized q -expectation values: Thermodynamical stability and simple illustrations*, Physica A **275**, 396 (2000).
- [260] R.S. Johal, *Inferring degree of nonextensivity for generalized entropies*, preprint (1999) [cond-mat/9909185].
- [261] J. Lukkarinen, *On the use of non-canonical quantum statistics*, preprint (1999) [cond-mat/9911027].
- [262] S. Abe and A.K. Rajagopal, *Nonuniqueness of canonical ensemble theory arising from microcanonical basis*, Phys. Lett. A **272**, 341 (2000).
- [263] M.P. Almeida, *Generalized entropies from first principles*, Physica A **300**, 424 (2001).
- [264] B.R. La Cour and W.C. Schieve, *Tsallis maximum entropy principle and the law of large numbers*, Phys. Rev. E **62**, 7494 (2000).
- [265] M. Jauregui and C. Tsallis, *Convergence of the probability of large deviations in a model of correlated random variables having compact-support Q -Gaussians as limiting distributions*, J. Math. Phys. **56**, 023303 (2015) (11 pages).
- [266] M. Jauregui, *Grandes desvios e independencia assintotica em sistemas fortemente correlacionados*, Doctor Thesis (Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro, 2015).
- [267] S. Abe and A.K. Rajagopal, *Microcanonical foundation for systems with power-law distributions*, J. Phys. A **33**, 8733 (2000).
- [268] S. Abe and A.K. Rajagopal, *Justification of power-law canonical distributions based on generalized central limit theorem*, Europhys. Lett. **52**, 610 (2000).
- [269] D. Kouri, N. Pandya, C.L. Williams, B.G. Bodmann and J. Yao, *Point transformations and relationships among linear anomalous diffusion, normal diffusion and the central limit theorem*, Applied Mathematics **9**, 178-197 (2018), doi: <http://www.scirp.org/journal/am>
- [270] S. Abe and A.K. Rajagopal, *Rates of convergence of nonextensive statistical distributions to Lévy distributions in full and half spaces*, J. Phys. A **33**, 8723 (2000).
- [271] S. Abe and A.K. Rajagopal, *Macroscopic thermodynamics of equilibrium characterized by power law canonical distributions*, Europhys. Lett. **55**, 6 (2001).
- [272] S. Abe and A.K. Rajagopal, *Reexamination of Gibbs' theorem and nonuniqueness of canonical ensemble theory*, Physica A **295**, 172 (2001) [Proc. IUPAP Workshop on New Trends on Fractal Aspects of Complex Systems (16-20 October 2000, Maceio-AL, Brazil), ed. M.L. Lyra (Elsevier, Amsterdam, 2001)].
- [273] K.M. Shen, B.W. Zhang and E. Wang, *Generalized ensemble theory with non-extensive statistics*, Physica A **487**, 215-224 (2017).
- [274] G. Wilk and Z. Włodarczyk, *On possible origins of power-law distributions*, AIP Conference Proceedings **1558**, 893-896 (2013), doi: 10.1063/1.4825641

- [275] T. Yamano, *N-body classical systems with r^α interparticle potential and two-particle correlation function using Tsallis statistics*, Phys. Lett. A **264**, 276 (1999).
- [276] G. Manfredi and M.R. Feix, *Entropy and Wigner functions*, Phys. Rev. E **62**, 4665 (2000).
- [277] A. Plastino and M.C. Rocca, *q-Gamow states as continuous linear functionals on analytical test functions*, preprint (2015), 1511.04010 [math.CA].
- [278] A. Plastino, M.C. Rocca and D.J. Zamora, *q-Gamow states for intermediate energies*, preprint (2016), 1604.06910 [cond-mat.stat-mech].
- [279] S. Abe and A.K. Rajagopal, *Nonadditive conditional entropy and its significance for local realism*, Physica A **289**, 157 (2001).
- [280] C. Tsallis, S. Lloyd and M. Baranger, *Peres criterion for separability through nonextensive entropy*, Phys. Rev. A **63**, 042104 (2001).
- [281] L. Lai and S. Luo, *Detecting Einstein-Podolsky-Rosen steering via correlation matrices*, Phys. Rev. A **106**, 042402 (2022).
- [282] Y. Li and G. Lan, *Policy mirror descent inherently explores action space*, preprint (2023), 2303.04386 [cs.LG].
- [283] V. Venkatesh, *Approaches to causality and multi-agent paradoxes in non-classical theories*, Doctor Thesis (Mathematics, University of York, 2021), 2102.02393 [quant-ph].
- [284] L. Marris, P. Muller, M. Lanctot, K. Tuyls and T. Grapael, *Multi-agent training beyond zero-sum with correlated equilibrium meta-solvers*, preprint (2021), 2106.09435 [cs.MA].
- [285] Z. Wang, A.D. Saravanos, H. Almubarak, O. So and E.A. Theodorou, *Sampling-based optimization for multi-agent model predictive control*, preprint (2022), 2211.11878 [math.OC].
- [286] J. Yi and M. Vojnovic, *On regret-optimal cooperative nonstochastic multi-armed bandits*, preprint (2022), 2211.17154 [stat.ML].
- [287] Y. Luo, T. Tian, L.H. Shao and Y. Li, *General monogamy of Tsallis-q entropy entanglement in multiqubit systems*, Phys. Rev. A **93** (6), 062340 (2016).
- [288] T. Li, J.Y. Zhou, Q. Sun, Z.X. Jin, D.F. Liang and T. Luo, *Complementary monogamy and polygamy properties among multipartite systems*, Chinese Physics B (2024), in press. doi: 10.1088/1674-1056/ad1748
- [289] F.I. Jpelaar, *Entropy in physics: An overview of definitions and applications in quantum mechanics*, Master Thesis (Rijksuniversiteit Groningen, 2021).
- [290] X. Yang and M.X. Luo, *Unified monogamy relation of entanglement measures*, Quantum Information Processing **20**, 108 (2021), doi: 10.1007/s11128-021-03041-z
- [291] X. Shi, *A genuine multipartite entanglement measure generated by the parametrized entanglement measure*, preprint (2022), 2206.02232 [quant-ph].
- [292] L. Liu, X. Ge and S. Cheng, *Polygon relations and subadditivity of entropic measures for discrete and continuous multipartite entanglement*, Physica Scripta **99** (9), (2024).
- [293] Y. Guo and G. Gour, *Monogamy of the entanglement of formation*, Phys. Rev. A **99**, 042305 (2019).
- [294] Y. Guo and L. Zhang, *Multipartite entanglement measure and complete monogamy relation*, Phys. Rev. A **101**, 032301 (2020).
- [295] Z.X. Jin and C.F. Qiao, *Monogamy and polygamy relations of multiqubit entanglement based on unified entropy*, Chin. Phys. B **29** (2), 020305 (2020) .
- [296] J.B. Zhang, Z.X. Jin, S.M. Fei and Z.X. Wang, *Optimized monogamy and polygamy inequalities for multipartite qubit entanglement*, Chin. Phys. B **30**, 100310 (2021).
- [297] R. Jiang, P. Shang and B. Zhang, *Dispersion complexity-entropy curves: an effective method to detect the structures of complex systems*, preprint (2023), doi: 10.21203/rs.3.rs-2766562/v1
- [298] J.S. Kim, *Tsallis entropy, q-expectation and constraints on three-party quantum correlations*, preprint (2019), 1907.13313 [quant-ph].
- [299] J. Zhang, Z. Jin, S.M. Fei and Z.X. Wang, *Enhanced monogamy relations in multiqubit systems*, Internat. J. of Theoretical Physics (2020), doi: 10.1007/s10773-020-04603-0
- [300] I.V. Dudinets and V.I. Manko, *Characterization of the nonlinear qubit map using the probability parametrization*, EPL **123**, 50004 (2018).
- [301] V. Perinova and A. Luks, *States of maximum polarization for a quantum light field and states of a maximum sensitivity in quantum interferometry*, Phys. Scr. **90**, 074056 (2015) (14 pages), doi:10.1088/0031-8949/90/7/074056
- [302] G. Jaeger, *Quantum Information - An Overview*, (Springer, 2007).
- [303] W.S. Nascimento, *Sobre uma adjuncao entre a Teoria Matematica da Comunicacao e a Teoria Quantica*, communicated at Seminarios de Pesquisa (PPGF, Instituto de Fisica, Universidade Federal da Bahia, 2017).

- [304] S. Wollmann, R. Uola and A.C.S. Costa, *Experimental demonstration of robust quantum steering*, Phys. Rev. Lett. **125**, 020404 (2020); Supplemental Material (4 pages).
- [305] L. Maquedano and A.C.S. Costa, *Analysis of quantum steering measures*, Entropy **26**, 257 (2024).
- [306] A.C.S. Costa, M.W. Beims and R.M. Angelo, *Generalized discord, entanglement, Einstein-Podolsky-Rosen steering, and Bell nonlocality in two-qubit systems under (non-)Markovian channels: Hierarchy of quantum resources and chronology of deaths and births*, Physica A **461**, 469-479 (2016).
- [307] K. Ourabah, A.H. Hamici-Bendimerad and M. Tribeche, *Quantum entanglement and Kaniadakis entropy*, Phys. Scr. **90**, 045101 (2015) (5 pages), doi:10.1088/0031-8949/90/4/045101
- [308] T.S. Biro, *Kaniadakis entropy leads to particle-hole symmetric distribution*, Entropy **24**, 1217 (2022).
- [309] J.D. Castano-Yepes and C.F. Ramirez-Gutierrez, *Superstatistics and quantum entanglement in the isotropic Heisenberg XY model from a non-additive thermodynamics perspective*, preprint (2021), 2105.05376 [quant-ph].
- [310] J.D. Castano-Yepes and C.F. Ramirez-Gutierrez, *Superstatistics and quantum entanglement in the isotropic spin-1/2 XX dimer from a nonadditive thermodynamics perspective*, Phys. Rev. E **104**, 024139 (2021).
- [311] K. Ourabah and M. Tribeche, *Quantum entanglement and temperature fluctuations*, Phys. Rev. E **95**, 042111 (2017) (7 pages).
- [312] K. Ourabah, A.H. Hamici-Bendimerad and M. Tribeche, *Quantum Kaniadakis entropy under projective measurement*, Phys. Rev. E **92**, 032114 (2015) (3 pages).
- [313] Y.J. Wu and K. Wu, *Tighter weighted relations of the Tsallis- q entanglement*, Internat. J. Theoretical Physics (2019), doi: doi.org/10.1007/s10773-019-04297-z
- [314] G.M. Bosyk, S. Zozor, F. Holik, M. Portesi and P.W. Lambertini, *Comment on “Quantum Kaniadakis entropy under projective measurement”*, Phys. Rev. E **94** (2), 026103 (2016).
- [315] M. Portesi, J.M. Pujol and Federico Holik, *Reciprocity relations for quantum systems based on Fisher information*, Phys. Sci. Forum **5**, 44 (2022).
- [316] R. Augusiak, J. Stasinska and P. Horodecki, *Beyond the standard entropic inequalities: Stronger scalar separability criteria and their applications*, Phys. Rev. A **77**, 012333 (2008) (14 pages).
- [317] R. Augusiak and J. Stasinska, *Positive maps, majorization, entropic inequalities and detection of entanglement*, New J. Phys. **11**, 053018 (2009) (25 pages).
- [318] E.P. Hanson and N. Datta, *Universal proofs of entropic continuity bounds via majorization flow*, preprint (2019), 1909.06981 [quant-ph].
- [319] M.L. Liang, B. Yuan and J.N. Zhang, *Tsallis entropies and entanglement of superposed trio coherent states*, Chinese J. Phys. **47**, 827-837 (2009).
- [320] A. Bendjefal, A. Smida, J. Messamah and M. Hachemane, *A class of nonlinear coherent states attached to Tsallis q -exponential*, Eur. Phys. J. Plus **134**, 330 (2019), doi: 10.1140/epjp/i2019-12865-9
- [321] J.R. Choi, *The effects of nonextensivity for a general driven dissipative oscillator in the coherent states*, Annalen der Physik (2021), doi: 10.1002/andp.202100084
- [322] J.R. Choi, *Quantum behavior of a nonextensive oscillatory dissipative system in the coherent state*, Symmetry **13**, 1178 (2021).
- [323] J.R. Choi, *Analysis of the effects of nonextensivity for a generalized dissipative system in the $SU(1, 1)$ coherent states*, Scientific Reports **12**, 1622 (2022).
- [324] F. Pennini, A. Plastino and M.C. Rocca, *Tsallis’ q -coherent states*, preprint (2015), 1511.08720 [quant-ph].
- [325] D.G. Medranda and A. Luis, *Sub-Poissonian and anti-bunching criteria via majorization of statistics*, J. Phys. A: Math. Theor. **48**, 255302 (2015) (14 pages), doi: 10.1088/1751-8113/48/25/255302
- [326] A.M. Kowalski and A. Plastino, *Bandt-Pompe-Tsallis quantifier and quantum-classical transition*, Physica A **388**, 4061-4067 (2009).
- [327] F. Pennini and A. Plastino, *Fluctuations, entropic quantifiers and classical-quantum transition*, Entropy **16**, 1178-1190 (2014), doi:10.3390/e16031178
- [328] R. Prabhu, A.R. Usha Devi and G. Padmanabha, *Separability of a family of one parameter W and Greenberger-Horne-Zeilinger multiqubit states using Abe-Rajagopal q -conditional entropy approach*, Phys. Rev. A **76**, 042337 (2007).
- [329] N. Li, S. Luo and Y. Sun, *Bruckner-Zeilinger invariant information in the presence of conjugate symmetry*, Phys. Rev. A **106**, 032404 (2022).
- [330] Sudha, A.R. Usha Devi and A.K. Rajagopal, *Entropic characterization of separability in Gaussian states*, Phys. Rev. A **81**, 024303 (2010) (4 pages).
- [331] A.S. Nayak, Sudha, A.K. Rajagopa and A.R. Usha Devi, *Separability of symmetric one parameter families of noisy states using conditional quantum relative Tsallis entropy*, preprint (2014), 1407.4386 [quant-ph].

- [332] M.V. Jankovic, *Quantum Tsallis entropy and projective measurement*, preprint (2009), 0904.3794 [physics.data-an].
- [333] A.E. Rastegin, *Uncertainty and certainty relations for successive projective measurements of a qubit in terms of Tsallis' entropies*, Comm. Theor. Phys. **63** (6), 687-694 (2015).
- [334] A.E. Rastegin, *Uncertainty relations for coherence quantifiers based on the Tsallis relative 1/2-entropies*, Phys. Scr. **98**, 015107 (2023).
- [335] A.E. Rastegin, *Notes on use of generalized entropies in counting*, Graphs and Combinatorics **32** (6), 2625-2641 (2016).
- [336] K. Okamura, *Emergent family of Tsallis entropies from the q-deformed combinatorics*, Physics Letters A **525**, 129912 (2024).
- [337] P. Leleux, *Entropy-regularized biased random walks on a graph: Applications to data network analysis*, Doctor Thesis (Louvain Research Institute in Management and Organizations Universite catholique de Louvain, Belgium, 2023).
- [338] A.E. Rastegin, *Renyi formulation of entanglement criteria for continuous variables*, Phys. Rev. A - Atomic, Molecular, and Optical Physics **95** (4), 042334 (2016).
- [339] A.E. Rastegin, *On entropic uncertainty relations for measurements of energy and its "complement"*, Ann. Phys. (Berlin) 1800466 (2019) (9 pages).
- [340] F. Huang, L. Tang and M.Q. Bai, *Entropic uncertainty relations for (N, M) -POVMs*, Internat. J. Theoretical Physics **62**, 126 (2023).
- [341] F. Huang, Y. Li and M.Q. Bai, *Uncertainty relations for quantum measurements assigned to the conical 2-designs*, Chinese Journal of Physics (2025), in press.
- [342] A.E. Rastegin, *On flavor-mass majorization uncertainty relations and their links to the mixing matrix*, preprint (2018), 1812.10973 [quant-ph].
- [343] A.E. Rastegin and A.M. Shemet, *Flavor-mass majorization uncertainty relations and their links to the mixing matrix*, Modern Phys. Lett. A **36** (29), 2150211 (2021).
- [344] A.E. Rastegin, *Entropic uncertainty relations from equiangular tight frames*, Physica Scripta **99**, (11) (2024).
- [345] A.E. Rastegin, *On Kirkwood-Dirac quasiprobabilities and unravelings of quantum channel assigned to a tight frame*, Physica A **629**, 129208 (2023).
- [346] A.E. Rastegin, *Entropic uncertainty relations for measurements assigned to a projective two-design*, APL Quantum **1**, 026111 (2024), doi: 10.1063/5.0185239
- [347] A.E. Rastegin, *Kirkwood-Dirac quasiprobabilities for measurements related to mutually unbiased equiangular tight frames*, APL Quantum **2**, 026108 (2025).
- [348] Q. Wang and F.H. Liu, *Excitation function of initial temperature of heavy flavor quarkonium emission source in high energy collisions*, Advances in High Energy Physics, ID 5031494 (2020) (31 pages), doi: 10.1155/2020/5031494
- [349] M. Rybczynski and Z. Wlodarczyk, *Unreasonable effectiveness of statistical approaches to high-energy collisions*, comm. at the 18th Joint European Thermodynamics Conference (Belgrade, May 26-30, 2025).
- [350] A. Hassanin, *Tsallis thermodynamic variables and their applications in high-energy collision physics*, Project (2021, Bogoliubov Laboratory of Theoretical Physics, Joint Institute for Nuclear Research, Dubna)
- [351] I. Low and Z. Yin, *Elastic cross section is entanglement entropy*, Phys. Rev. D **111**, 065027 (2025).
- [352] Q. Wang, F.H. Liu and K.K. Olimov, *Initial- and final-state temperatures of emission source from differential cross-section in squared momentum transfer in high-energy collisions*, Advances in High Energy Physics, ID 6677885 (2021) (18 pages), doi: 10.1155/2021/6677885
- [353] J.Y. Chen, M.Y. Duan, F.H. Liu and K.K. Olimov, *Multi-source thermal model describing multi-region structure of transverse momentum spectra of identified particles and parameter dynamics of system evolution in relativistic collisions*, Indian J. Phys. **98** (7), 2493-2505 (2024).
- [354] J.Y. Chen, M.Y. Duan, F.H. Liu and K.K. Olimov, *Extracting kinetic freeze-out properties in high-energy collisions using a multisource thermal model*, Advances in High Energy Physics, 9938669 (2024).
- [355] P.P. Yang, F.H. Liu and K.K. Olimov, *Rapidity and energy dependences of temperatures and volume extracted from identified charged hadron spectra in proton-proton collisions at a Super Proton Synchrotron (SPS)*, preprint (2023), 2311.11585 [hep-ph].
- [356] T.T. Duan, S. Buriechin, H.L. Lao, F.H. Liu and K.K. Olimov, *On extracting thermal parameters and scenario in high-energy collisions*, Advances in High Energy Physics, 7766862 (2025).
- [357] P.C. Zhang, P.P. Yang, T.T. Duan, H. Zhu, F.H. Liu and K.K. Olimov, *Comparing effective temperatures in standard and Tsallis distributions from transverse momentum spectra in small collision systems*, preprint (2025), 2506.00339 [hep-ph].

- [358] W.L. Qian, K. Lin, R.H. Yue, Y. Hama and T. Kodama, *On partition temperature of massless particles in high-energy collisions*, Symmetry **15**, 2035 (2023).
- [359] Q. Wang, F.H. Liu and K.K. Olimov, *Initial-state temperature of light meson emission source from squared momentum transfer spectra in high-energy collisions*, preprint (2021), 2111.04486 [hep-ph].
- [360] Q. Wang, F.H. Liu and K.K. Olimov, *Excitation functions of related temperatures of η and η^0 emission sources from squared momentum transfer spectra in high-energy collisions*, preprint (2023), 2303.03184 [nucl-th].
- [361] K.K. Olimov, F.H. Liu, K.A. Musaev, K. Olimov, B.J. Tukhtaev, B.S. Yuldashev, N.S. Saidkhanov, K.I. Umarov and K.G. Gulamov, *Multiplicity dependencies of midrapidity transverse momentum spectra of identified charged particles in $p + p$ collisions at $\sqrt{s} = 13 \text{ TeV}$ at LHC*, Internat. J. Modern Physics A, 2150149 (2021) (19 pages).
- [362] K.K. Olimov, I.A. Lebedev, A.I. Fedosimova, F.H. Liu, S.Z. Kanokova, M.Z. Shodmonov and B.J. Tukhtaev, *Simultaneous analysis of midrapidity spectra of identified particle species in Pb+Pb collisions at $\sqrt{s_{nn}} = 2.76 \text{ TeV}$ using Tsallis distribution with transverse flow*, Universe **8**, 655 (2022).
- [363] K. Olimov, *Analysis of midrapidity p_t distributions of identified charged particles in Xe + Xe collisions at $\sqrt{s_{nn}} = 5.44 \text{ TeV}$ using non-extensive Tsallis statistics with included transverse flow*, communication at QNP2022, The 9th International Conference on Quarks and Nuclear Physics (2022).
- [364] K.K. Olimov, F.H. Liu, K.A. Musaev and M.Z. Shodmonov, *Analysis of multiplicity dependencies of midrapidity pt distributions of identified charged particles in $p+p$ collisions at $\sqrt{s} = 7 \text{ TeV}$ at the LHC*, preprint (2021), arxiv 2109.00203
- [365] D. Singh? and A. Kumar, *Impact of nonextensivity on the transport coefficients of strongly interacting QCD matter*, preprint (2024), 2412.00444 [hep-ph].
- [366] X.H. Zhang, Y.Q. Gao, F.H. Liu and K.K. Olimov, *Thermal freeze-out parameters and pseudo-entropy from charged hadron spectra in high energy collisions*, preprint (2021), 2112.09473 [hep-ph].
- [367] L. Liu, Z.B. Yin and L. Zheng, *Universal scaling of kinetic freeze-out parameters across different collision systems at LHC energies*, Chinese Physics C **47** (2), 024103 (2023).
- [368] T. Csorgo, S. Hegyi and I. Szanyi, *Simple Levy α -stable model analysis of elastic pp and $p\bar{p}$ low- $|t|$ data from SPS to LHC energies*, Universe **10**, 127 (2024).
- [369] R. Sharma, K. Gopal, S.R. Sharma and C. Jena, *System size dependence of thermodynamic variables at kinetic freeze-out in high-energy collisions using the Tsallis distribution*, preprint (2024), 2401.13629 [hep-ph].
- [370] B.S. Abdiev, E.K. Bozorov, K.K. Olimov and B.S. Yuldashev, *Analysis of transverse-momentum distributions of charged particles in proton-proton collisions at energies in the range of $\sqrt{s_{nn}} = 2.76 - 7 \text{ TeV}$ at the LHC*, Physics of Atomic Nuclei **84** (6), 874-888 (2021).
- [371] Q. Zhang, Y.Q. Gao, F.H. Liu and K.K. Olimov, *An energy independent scaling of transverse momentum spectra of direct (prompt) photons from two-body processes in high-energy proton-proton collisions*, preprint (2021), 2112.14083 [hep-ph].
- [372] K.K. Olimov, F.H. Liu, K.A. Musaev, K. Olimov, M.Z. Shodmonov, A.I. Fedosimova, I.A. Lebedev, S.Z. Kanokova, B.J. Tukhtaev and B.S. Yuldashev, *Study of midrapidity pt distributions of identified charged particles in Xe + Xe collisions at $\sqrt{s_{NN}} = 5.44 \text{ TeV}$ using non-extensive Tsallis statistics with transverse flow*, Mod. Phys. Lett. A **37** (15), 2250095 (2022).
- [373] K.K. Olimov, F.H. Liu, A.I. Fedosimova, I.A. Lebedev, A. Deppman, K.A. Musaev, M.Z. Shodmonov and B.J. Tukhtaev, *Analysis of midrapidity p_T distributions of identified charged particles in Pb+Pb collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$ using Tsallis distribution with embedded transverse flow*, Universe **8**, 401 (2022).
- [374] P. Kumar, P.K. Khandai, K. Saraswat and V. Singh, *Medium effects of charged particles in Xe + Xe collisions at $\sqrt{s_{NN}} = 5.44 \text{ TeV}$ using modified Tsallis distribution*, Internat. J. Modern Physics A **36** (7), 2150059 (2021).
- [375] P. Kumar, P.K. Khandai and K. Saraswat, *Theoretical analysis of p_T spectra of light-flavor hadrons in $p + p$ collisions at $\sqrt{s} = 7 \text{ TeV}$ under differential and single freeze-out scenarios*, Internat. J. Modern Physics A 2150160 (2021) (11 pages), doi: 10.1142/S0217751X21501608
- [376] K. Saraswat, P.K. Khandai and V. Singh, *Medium effects of charged-hadron production in $p+Pb$ and $Pb+Pb$ collisions at LHC energies using modified Tsallis distribution*, preprint (2024), 2405.12231 [hep-ph].
- [377] M.V. Jankovic and N. Georgijevic, *Applications of probabilistic model based on joystick probability selector*, 2014 International Joint Conference on Neural Networks, 1028-1035 (Beijing, China, July 6-11, 2014).
- [378] R. Khordad and H.R. Rastegar Sedehi, *Application of different entropy formalisms in a neural network for novel word learning*, Eur. Phys. J. Plus **130**, 246 (2015) (10 pages), doi: 10.1140/epjp/i2015-15246-6
- [379] Z. Ramezani and A. Pourdarvish, *Transfer learning using Tsallis entropy: An application to Gravity Spy*, Physica A **561**, 125273 (2021).

- [380] W. Zhan, Y. Chen, S. Cen, J.D. Lee, B. Huang and Y. Chi, *Policy mirror descent for regularized reinforcement learning: A generalized framework with linear convergence*, preprint (2021), 2105.11066 [cs.LG].
- [381] L. Zhu, Z. Chen, E. Uchibe and T. Matsubara, *q-Munchausen reinforcement learning*, preprint (2022), 2205.07467 [cs.LG].
- [382] L. Zhu, Z. Chen, E. Uchibe and T. Matsubara, *Enforcing KL regularization in general Tsallis entropy reinforcement learning via advantage learning*, preprint (2022), 2205.07885 [cs.LG].
- [383] K. Gajowniczek, A. Orłowski and T. Zabkowski, *Insolvency modeling with generalized entropy cost function in neural networks*, Physica A **526**, 120730 (2019).
- [384] H. Kamberaj, *Random walks in a free energy landscape combining augmented molecular dynamics simulations with a dynamic graph neural network model*, J. Molecular Graphics and Modelling **114**, 108199 (2022).
- [385] Q. Cheng, H.L. Li, Q. Wu, L. Ma, N.N. King, *Parametric deformable exponential linear units for deep neural networks*, Neural Networks (2020), in press.
- [386] L. Zeng, N. Xing, S. Cai, G. Chen, B.C. Ooi, J. Pei and Y. Wu, *Powering in-database dynamic model slicing for structured data analytics*, preprint (2024), 2405.00568 [cs.DB].
- [387] A. Dewan and N. Neligh, *Estimating information cost functions in models of rational inattention*, Journal of Economic Theory **187**, 105011 (2020).
- [388] J. Miao and H. Xing, *Dynamic discrete choice under rational inattention*, preprint (2020).
- [389] R. Khordad and H.R. Rastegar Sedehi, *Application of non-extensive entropy to study of decoherence of RbCl quantum dot qubit: Tsallis entropy*, Superlattices and Microstructures **101**, 559-566 (2017), doi: 10.1016/j.spmi.2016.10.041
- [390] R. Khordad and H.R.R. Sedehi, *Quantum Stirling heat engine in Tsallis formalism under KSEA interaction*, International Journal of Theoretical Physics **64**, 103 (2025).
- [391] H.R.R. Sedehi and R. Khordad, *Quantum Stirling heat engine in Tsallis formalism*, Eur. Phys. J. D **79**, 65 (2025).
- [392] H.R. Rastegar Sedehi, *Control of magnetocaloric effect in quantum dots using electrical field at low temperatures*, J. Low Temperature Physics (2022), doi: 10.1007/s10909-022-02718-8
- [393] W. Xin, *Influence of electromagnetic field on Gaussian entropy and ground-state lifetime in impurity-center quantum dot with spherical Gaussian confining potential*, Indian J. Phys. (2023).
- [394] B. Bhakti, S. Datta and M. Ghosh, *Modulation of Tsallis entropy and corresponding thermodynamic properties of impurity doped GaAs quantum dot in presence of noise*, Next Nanotechnology **6**, 100072 (2024).
- [395] B. Bhakti, S. Datta and M. Ghosh, *Tuning the noise-driven magnetocaloric effect in doped GaAs quantum dot in view of Tsallis entropy*, Chemistry Select **9** (38), (2024).
- [396] A. Arda, H.R. Rastegar Sedehi and R. Sever, *Relativistic thermostistical analysis for a combined potential within spatially dependent mass scheme*, Eur. Phys. J. Plus **137**, 452 (2022).
- [397] H.R.R. Sedehi and R. Khordad, *Study of RbCl quantum pseudodot qubits by using of non-extensive entropies*, Indian J. Phys. (2019), doi: doi.org/10.1007/s12648-019-01482-y
- [398] M. Servatkhah, R. Khordad, A. Firoozi, H.R.R. Sedehi and A. Mohammadi, *Low temperature behavior of entropy and specific heat of a three dimensional quantum wire: Shannon and Tsallis entropies*, Eur. Phys. J. B **93**, 111 (2020), doi: 10.1140/ep_jb/e2020-10034-5
- [399] R. Khordad, A. Firoozi and H.R. Rastegar Sedehi, *Simultaneous effects of temperature and pressure on the entropy and the specific heat of a three-dimensional quantum wire: Tsallis formalism*, Journal of Low Temperature Physics (2020), doi: 10.1007/s10909-020-02536-w
- [400] R. Khordad, H.R. Rastegar Sedehi and H. Bahramiyan, *Simultaneous effects of impurity and electric field on entropy behavior in double cone-like quantum dot*, Commun. Theor. Phys. **69** (1), 95-100 (2018).
- [401] M. Rahmani, M. Servatkhah and V. Setoodeh, *Effect of external magnetic field on the entropy and internal energy of T-shaped quantum wires by non-extensive formalism*, Pramana-J. Phys. **99**, 84 (2025).
- [402] J.D. Castano-Yepes and D.A. Amor-Quiroz, *Super-statistical description of thermo-magnetic properties of a system of 2D GaAs quantum dots with gaussian confinement and Rashba spin-orbit interaction*, Physica A (2020), in press, 1910.08183 [cond-mat.mtrl-sci].
- [403] H. Bahramiyan, R. Khordad and H.R.R. Sedehi, *Non-extensive entropy of modified Gaussian quantum dot under polaron effects*, Indian J. Phys. (2018) (5 pages), doi: 10.1007/s12648-018-1168-6
- [404] D.B. Fonseca, L.F.C. Pereira and A.L.R. Barbosa, *A Levy flight for electrons in graphene: superdiffusive-to-diffusive transport transition*, preprint (2023), 2302.02197 [cond-mat.mes-hall].
- [405] R. Khordad, H.R. Rastegar Sedehi, *Study of non-extensive entropy of bound polaron in monolayer graphene*, Indian J. Phys. **92** (8), 979-984 (2018), doi: 10.1007/s12648-018-1192-6

- [406] H.R.R. Sedehi and R. Khordad, *Investigation of specific heat in the monolayer graphene*, Iranian J. Physics Research **20** (2), 363-355 (2020).
- [407] R. Khordad, H.R.R. Sedehi and M. Sharifzadeh, *Susceptibility, entropy and specific heat of quantum rings in monolayer graphene: comparison between different entropy formalisms*, J. Computational Electronics (2022), doi: 10.1007/s10825-022-01857-1
- [408] H.R.R. Sedehi, A. Bazrafshan and R. Khordad, *Thermal properties of quantum rings in monolayer and bilayer graphene*, Solid State Communications **353**, 114853 (2022).
- [409] C. Hu and J. Zhang, *Study of Magnetic and Thermal Properties of Graphene by Tsallis Formalism: Deformed of the Heisenberg Model*, Journal of Low Temperature Physics (2025).
- [410] C. Kenfack-Sadem, S. Mounbou, S.I. Fewo, M.F.C. Fobasso and A.J. Fotue and L.C. Fai, *Optical absorption and Tsallis entropy of polaron in monolayer graphene*, J. Low Temperature Physics (2020), doi 10.1007/s10909-020-02478-3
- [411] D.B.S. Fongang, A.J. Fotue and M.F.C. Fobasso, *Spin-orbit interaction and laser field radiation frequency effects on optical absorption coefficient and thermodynamics properties of doped graphene*, Eur. Phys. J. Plus **137**, 1019 (2022).
- [412] D.B.S. Fongang, T.V. Diffo and A.J. Fotue, *Cumulated effects of magnetic field, electron-phonon and spin-orbit interaction on thermodynamics properties of mono layer graphene*, Int. J. Theor. Phys. **63**, 255 (2024).
- [413] C. Kenfack-Sadem, F.C. Fobasso Mbognou, A.J. Fotue, M.N. Hounkonnou, D. Akay and L.C. Fai, *Thermodynamic properties and optical absorption of polaron in monolayer graphene under laser field*, J. Low Temperature Physics (2021), doi: 10.1007/s10909-021-02586-8
- [414] W.A. Nganfo, C. Kenfack-Sadem, A.J. Fotue, M.C. Ekosso, S.N. Wopunghwo and L.C. Fai, *Dynamics of exciton polaron in microtubule*, Heliyon **8**, e08897 (2022).
- [415] C. Kenfack-Sadem, A.K. Teguinifouet, A. Kenfack-Jiotsa and R.M.K. Tsiaze, *Dynamics and decoherence of exciton polaron in monolayer transition metal dichalcogenides*, Journal of Electronic Materials (2021), doi: 10.1007/s11664-021-08808-9
- [416] F.C.F. Mbognou, C. Kenfack-Sadem, A.J. Fotue, M.N. Hounkonnou, D. Akay and L.C. Fai, *Thermodynamics properties and optical conductivity of bipolaron in graphene nanoribbon under laser irradiation*, J. Low Temperature Physics (2021), doi: 10.1007/s10909-021-02573-z
- [417] R. Khordad and H.R. Rastegar Sedehi, *Magnetic susceptibility of graphene in non-commutative phase-space: Extensive and non-extensive entropy*, Eur. Phys. J. Plus **134**, 133 (2019), doi: 10.1140/epjp/i2019-12558-5
- [418] H.R. Rastegar-Sedehi, *Thermodynamics properties of Bernal stacking multilayer graphene*, Eur. Phys. J. B **93**, 14 (2020).
- [419] H.R. Rastegar Sedehi and R. Khordad, *Entropy and specific heat of graphene at low and high temperatures under an external magnetic field*, Solid State Communications **313**, 113911 (2020).
- [420] D. Najafi, B. Vaseghi, G. Rezaei, and R. Khordad, *Thermodynamics of mono-layer quantum wires with spin-orbit interaction*, Eur. Phys. J. Plus **133**, 302 (2018), doi: 10.1140/epjp/i2018-1210
- [421] D. Najafi, B. Vaseghi, G. Rezaei, and R. Khordad, *Combinations of tunneling and spin-orbit interaction effects on the thermodynamics and entropy of coaxial quantum wires*, Eur. Phys. J. Plus **134**, 17 (2019), doi: 10.1140/epjp/i2019-12388-5
- [422] H. Rezaei, S. Abdolrahimi, G.R. Pazuki and A.A. Rohani, *A nonextensive electrolyte UNIQUAC model for prediction of mean activity coefficients of binary electrolyte solutions*, Phys. Chem. Res. **6** (4), 773-784 (2018), doi: 10.22036/pcr.2018.136748.1499
- [423] M. Tiotsop, A.J. Fotue, H.B. Fotsin and L.C. Fai, *Tsallis entropy and decoherence of CsI quantum pseudo dot qubit*, Superlattices and Microstructures **105**, 163-171 (2017).
- [424] M. Tiotsop, A.J. Fotue, H.B. Fotsin and L.C. Fai, *Compared study of Shannon, Tsallis and Gaussian entropy of bound magnetopolaron in nanostructures*, preprint (2017), arxiv 1703.09158
- [425] M. Tiotsop, A.J. Fotue, H.B. Fotsin and L.C. Fai, *Non-extensive entropy and properties of polaron in RbCl delta quantum dot under an applied electric field and Coulombic impurity*, Physica B **518**, 61-67 (2017), doi: <http://dx.doi.org/10.1016/j.physb.2017.05.013>
- [426] M. Tiotsop, A.J. Fotue, H.B. Fotsin and L.C. Fai, *Application of entropies to the study of the decoherence of magnetopolaron in 0-D nanosystem*, Optical and Quantum Electronics **50**, 365 (2018), doi: 10.1007/s11082-018-1630-x
- [427] M Tiotsop, G.K. Fautso, A.J. Fotue, H.B. Fotsin and L.C. Fai, *Gaussian, Shannon, and Tsallis entropies of bound magnetopolaron in Gaussian and asymmetric quantum qubit*, Indian J. Phys. (2019), doi: [doi.org/10.1007/s12648-019-01463-1](http://dx.doi.org/10.1007/s12648-019-01463-1)

- [428] D. Petz and D. Virostek, *Some inequalities for quantum Tsallis entropy related to the strong subadditivity*, preprint (2014), 1403.7062 [math-ph].
- [429] F.A. Bovino, *Nonlinear inequalities and entropy-concurrence plane*, Int. J. Theor. Phys. **47**, 2148-2157 (2008).
- [430] V.N. Chernega and V.I. Man'ko, *Entropy and information characteristics of qubit states*, J. Russian Laser Res. **29**, 505-519 (2008).
- [431] V.N. Chernega, O.V. Man'ko and V.I. Man'ko, *Generalized qutrit portrait of the qutrit-state density matrix*, J. Russian Laser Res. **34** (4), 383-387 (2013).
- [432] V.N. Chernega, O.V. Man'ko and V.I. Man'ko, *Deformed entropy and information relations for composite and noncomposite systems*, preprint (2014), 1412.6771 [quant-ph].
- [433] V.N. Chernega and O.V. Man'ko, *No signaling and strong subadditivity condition for tomographic q-entropy of single qudit states*, preprint (2015), 1504.03858 [quant-ph].
- [434] M.A. Manko and V.I. Manko, *Subadditivity and strong subadditivity conditions for the density matrix of the five-level atom*, J. Russian Laser Research **37** (3), 207-218 (2016), doi: 10.1007/s10946-016-9562-z
- [435] J.A. Lopez-Saldivara, O. Castanosa, M.A. Man'ko and V.I. Man'ko, *New entropic inequalities for qubit and unimodal Gaussian states*, Physica A **491**, 64-70 (2018).
- [436] E. Glushkov, A. Glushkova and V.I. Manko, *Entropic inequalities for two coupled superconducting circuits*, J. Russian Laser Research **37** (3), 236-243 (2016), doi: 10.1007/s10946-016-9565-9
- [437] V.N. Chernega, O.V. Manko, V.I. Manko and Z. Seilov, *New information inequality for Clebsch-Gordan coefficients*, Teoreticheskaya i matematicheskaya fizika **193** (2), 356-366 (2017).
- [438] V.N. Chernega, O.V. Manko and V.I. Manko, *Probability representation as a renaissance of hidden variables – God plays coins*, J. Russian Laser Research **40** (2), 107-120 (2019), doi: 10.1007/s10946-019-09778-4
- [439] V.N. Chernega, O.V. Manko, V.I. Manko and Z. Seilov, *New information-entropic relations for Clebsch-Gordan coefficients*, Theoretical and Mathematical Physics **193** (2), 1715-1724 (2017).
- [440] V.I. Manko and Z. Seilov, *Weighted information and weighted entropic inequalities for qutrit states*, J. Russian Laser Research **37** (6), 591-597 (2016).
- [441] M.A. Manko, *Entropic and information inequalities for indivisible qudit systems*, J. Russian Laser Research **37** (6), 533-543 (2016).
- [442] M.A. Manko and V.I. Man'ko, *Hidden correlations in indivisible qudits as a resource for quantum technologies on examples of superconducting circuits*, preprint (2015), 1512.08368 [quant-ph].
- [443] J. Chen and D. Cory, *Engineering precise and robust effective hamiltonians*, preprint (2025), 2506.20730 [quant-ph].
- [444] S.P. Kruchinin, R.I. Eglitis, V.E. Novikov, A.M. Oles and S. Wirth, *Control of strongly nonequilibrium coherently correlated states and superconducting transition temperature*, Symmetry **15**, 1732 (2023).
- [445] S.P. Kruchinin, R.I. Eglitis, D.S. Kruchinin, I.V. Krak, V.P. Babak, V.E. Novikov and A.P. Polishchuk, *Modeling of mechanical and electrical systems with fractal structure under impulse action and coherent acceleration*, Symmetry **16**, 1700 (2024).
- [446] V.I. Manko and L.A. Markovich, *Entropic inequalities for matrix elements of rotation group irreducible representations*, Lobachevskii Journal of Mathematics, **38** (4), 699-708 (2017).
- [447] F. Caruso and C. Tsallis, *Nonadditive entropy reconciles the area law in quantum systems with classical thermodynamics*, Phys. Rev. E **78**, 021102 (2008) (6 pages).
- [448] A. Roy, T. Ali and V. Venkatraman, *The area law of molecular entropy: Moving beyond harmonic approximation*, Entropy **26**, 688 (2024).
- [449] S.M. Soares, L. Squillante, H.S. Lima, C. Tsallis and M. de Souza, *Universally non-diverging Gruneisen parameter at critical points*, Phys. Rev. B / Letter **111**, L060409 (2025).
- [450] A.S. Alves and F.A. Farias, *A proposal of an Isothermal q-EoS for solids at high pressures*, Sitientibus - Ciencias Fisicas (2024).
- [451] I. Low and Z. Yin, *An area law for entanglement entropy in particle scattering*, preprint (2024), 2405.08056 [hep-th].
- [452] A.M.C. Souza, P. Rapcan and C. Tsallis, *Area-law-like systems with entangled states can preserve ergodicity*, European Physical Journal Special Topics **229** (5), 759-772 (2020).
- [453] M. Jauregui and C. Tsallis, *Paradoxical probabilistic behavior for strongly correlated many-body classical systems*, Phys. Lett. A **379**, 1816-1820 (2015).
- [454] N. Kalogeropoulos, *Extensive limit of a non-extensive entanglement entropy*, Eur. Phys. J. B **87**, 138 (2014) (6 pages), doi: 10.1140/epjb/e2014-50191-4
- [455] L. Wei, *On the exact variance of Tsallis entanglement entropy in a random pure state*, Entropy **21**, 539 (2019), doi: 10.3390/e21050539

- [456] F. Caruso and C. Tsallis, *Extensive nonadditive entropy in quantum spin chains*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 51 (New York, 2007).
- [457] V. Popkov and M. Salerno, *Reduced density matrix and entanglement entropy of permutationally invariant quantum many-body systems*, Internat. J. Mod. Phys. B **26** (27-28), 1243009 (2012) (22 pages).
- [458] H. Matsueda, *Embedding quantum information into classical spacetime: Perspective to Tsallis statistics and AdS/CFT correspondence*, preprint (2012), 1208.5103 [hep-th].
- [459] R. Boudjema, A.H. Hamici, M. Hachemane and A. Smida, *Generalized asymmetric phase-covariant quantum cloning within a nonextensive approach*, Quantum Inf. Process **15**, 551-563 (2016), doi: 10.1007/s11128-015-1179-6
- [460] J.S. Kim, *Unification of multiqubit polygamy inequalities*, Phys. Rev. A **85**, 032335 (2012) (7 pages).
- [461] J.S. Kim, *Tsallis entropy and general polygamy of multi-party quantum entanglement in arbitrary dimensions*, Phys. Rev. A **94**, 062338 (2016) (10 pages).
- [462] J.S. Kim, *Polygamy of multiparty q -expected quantum entanglement*, Phys. Rev. A **100**, 062332 (2019).
- [463] J.S. Kim, *Strong polygamy of multi-party q -expected quantum correlations*, Quantum Information Processing **20**, 34 (2021), doi: 10.1007/s11128-020-0297
- [464] J. Ma, H. Wu and B. Li, *Weighted polygamy inequalities of multiparty q -expected quantum entanglement*, Laser Phys. Lett. **19**, 075201 (2022).
- [465] J.S. Kim, *Tsallis entropy, q -expectation value, and constraints on three-party quantum correlations*, Phys. Rev. A **100**, 032327 (2019).
- [466] J.S. Kim, *Strong polygamy of multi-party q -expected quantum correlations*, preprint (2021), 2101.05416 [quant-ph].
- [467] Y. Luo and Y.M. Li, *Hierarchical polygamy inequality for entanglement of Tsallis q -entropy*, Commun. Theor. Phys. **69** (5), 532-536 (2018).
- [468] A. Saguia and M.S. Sarandy, *Nonadditive entropy for random quantum spin- S chains*, Phys. Lett. A **374**, 3384-3388 (2010).
- [469] C. Tsallis and L.J.L. Cirto, *Black hole thermodynamical entropy*, Eur. Phys. J. C **73**, 2487 (2013) (7 pages), DOI 10.1140/epjc/s10052-013-2487-6
- [470] C. Tsallis, *Black hole entropy: a closer look*, in Special Issue *Entropy and Gravitation*, ed. A. Plastino, Entropy **22**, 17 (2020), doi: 10.3390/e22010017
- [471] G.E. Volovik, *Tsallis-Cirto entropy of black hole and black hole atom*, JETP Letters (2025).
- [472] G.E. Volovik, *Extended Tsallis-Cirto entropy for black and white holes*, preprint (2025), 2505.05178 [gr-qc].
- [473] G.E. Volovik, *Black hole thermodynamics and topology*, preprint (2025), 2505.20194 [gr-qc].
- [474] G.E. Volovik, *Thermodynamics of black and white holes in ensemble of Planckons*, preprint (2025), 2506.13145 [gr-qc].
- [475] P. Chunaksorn, R. Nakarachinda and P. Wongjun, *Black hole thermodynamics via Tsallis statistical mechanics*, Eur. Phys. J. C **85**, 532 (2025).
- [476] A. Anand and S.N. Gashti, *Universal relations with the non-extensive entropy perspective*, preprint (2024), 2411.02875 [gr-qc].
- [477] A. Anand, D. Kumar and A. Singh, *Effect of non-extensive parameter on Page curve*, preprint (2025), 2502.00723 [hep-th].
- [478] A. Anand and S.N. Gashti, *Universality relation and thermodynamic topology with three-parameter entropy model*, Physics of the Dark Universe **48**, 101916 (2025).
- [479] C.C. Perelman, *Nonextensive black hole entropies from truly point mass sources*, preprint (2024).
- [480] M.T. Manoharan and N. Shaji, *Reconciling fractional entropy and black hole entropy compositions*, preprint (2025), 2501.18151 [gr-qc].
- [481] A. Ashraf, A. Ditta, A. Bouzenada, A. Abd-Elmonem, N.S.E. Abdalla and F. Atamurotov, *Thermal fluctuations, particle collision, QPOs, and emission energy around a Schwarzschild black hole immersed in Dehnen-type dark matter halo*, Physics of the Dark Universe **46**, 101683 (2024).
- [482] A. Ashraf, A. Ditta, T. Naseer, S.K. Maurya, S. Ray, P. Channuie and F. Atamurotov, *Testing of QPOs, particle dynamics, emission energy and thermal fluctuation around a regular hairy black hole*, Eur. Phys. J. C **85**, 633 (2025).
- [483] T.S. Ray and S. Sarkar, *Constraints on dark matter self-interaction from velocity distribution function in isolated halos*, preprint (2025), 2505.10451 [hep-ph].

- [484] S. Rani, A. Siddiqa, A. Mir, M.M. Alam, H. Raza and S. Shaymatov, *Probing thermodynamics of Einstein-Maxwell scalar black hole through exponential corrected entropy*, Physics of the Dark Universe **48**, 101875 (2025).
- [485] C. Tsallis and H.J. Jensen, *Extensive composable entropy for the analysis of cosmological data*, Phys. Lett. B **861**, 139238 (2025).
- [486] R.H. Alsaedi, T. Azizi and J. Sadeghi, *Nonextensive statistical mechanics and black hole thermodynamics: Tsallis and Kaniadakis entropies*, Journal of Holography Applications in Physics **4** (3) (2024).
- [487] A. Alonso-Serrano, L.J. Garay and M. Liska, *Black hole thermodynamics probes the equivalence principle*, preprint (2025), 2505.10934 [gr-qc].
- [488] F. Barzi, H. El Moumni and K. Masmar, *Riemann surfaces and winding numbers of Renyi phase structure of charged-flat black holes*, Eur. Phys. J. C **84**, 1141 (2024).
- [489] F. Barzi, H. El Moumni and K. Masmar, *Nonextensive black hole thermodynamics from generalized Euclidean path integral and Wick's rotation*, Eur. Phys. J. C **85**, 61 (2025).
- [490] H. Lu and Y.C. Ong, *Do black holes with generalized entropy violate Bekenstein bound?*, preprint (2025), 2505.03907 [gr-qc].
- [491] A. Bhattacharjee and P. Phukon, *Charged rotating BTZ black hole in the non-extensive generalizations of Gibbs entropy*, Prog. Theor. Exp. Phys. 023E01 (2025).
- [492] A. Baruah and P. Phukon, *Restricted phase space thermodynamics of dyonic AdS black holes: comparative analysis using different entropy models*, General Relativity and Gravitation **57**, 77 (2025).
- [493] K. Sansuk, P. Boonserm and S. Phalungsoongsathit, *Temperature of perfect fluid black holes in various coordinates and entropy composition of black hole systems*, East-West J. of Mathematics **25** (2), 172-181 (2024).
- [494] S.N. Gashti, B. Pourhassan, I. Sakalli and A.B. Brzo, *Thermodynamic topology and photon spheres of dirty black holes within nonextensive entropy*, Physics of the Dark Universe 101833 (2025), in press.
- [495] R. Saleem, S. Ali and M.I. Aslam, *A study of interacting NTADE and SMHDE models via cosmological parameters within rastall gravity*, General Relativity and Gravitation **56**, 78 (2024).
- [496] R. Saleem, A. Ijaz and S. Waheed, *Anisotropic cosmic expansion inspired by some novel holographic dark energy models in $f(Q)$ theory*, Fortschritte der Physik (2024).
- [497] S.D. Odintsov, S. D'Onofrio and T. Paul, *Entropic inflation in presence of scalar field*, Universe **10**, 4 (2024).
- [498] S.D. Odintsov, S. D'Onofrio and T. Paul, *Generalized entropic dark energy with spatial curvature*, preprint (2025), 2504.03470 [gr-qc].
- [499] Z. Wang, H. Ren, J. Chen and Y. Wang, *Thermodynamics and phase transition of Bardeen black hole via Renyi statistics in grand canonical ensemble and canonical ensemble*, Eur. Phys. J. C **83**, 527 (2023).
- [500] C.W. Tong, B.H. Wang and J.R. Sun, *Topology of black hole thermodynamics via Renyi statistics*, preprint (2023), 2310.09602 [gr-qc].
- [501] K. Ourabah, *The other way around: From alternative gravity to entropy*, preprint (2023), 2306.09540 [gr-qc].
- [502] I. Cimdiker, M.P. Dabrowski and H. Gohar, *Generalized uncertainty principle impact on nonextensive black hole thermodynamics*, preprint (2023), 2301.00609 [gr-qc].
- [503] M. Naeem, J. Ahmed and A. Bibi, *Entropic cosmology for Renyi entropy*, Eur. Phys. J. Plus **137**, 962 (2022).
- [504] M. Naeem and A. Bibi, *Accelerating universe via entropic models*, Eur. Phys. J. Plus **138**, 442 (2023).
- [505] M. Naeem and A. Bibi, *Agegraphic dark energy with fractional entropy: Implications for cosmological evolution*, General Relativity and Gravitation **57**, 69 (2025).
- [506] H. Lu, S. Di Gennaro and Y.C. Ong, *Generalized entropy implies varying-G: Horizon area dependent field equations and black hole-cosmology coupling*, Annals of Physics **474**, 169914 (2025).
- [507] R.A.A. Khan, R.K. Tiwari, J. Bharali, A. Bouali, G.D.A. Yildiz and E. Gudekli, *Hyperbolic scenario of accelerating universe in modified gravity*, Symmetry **15**, 1238 (2023).
- [508] R. Nakarachinda, C. Promsiri, L. Tannukij and P. Wongjun, *Thermodynamics of black holes with Renyi entropy from classical gravity*, Nuclear Physics B **1011**, 116796 (2025).
- [509] P. Chunaksorn, R. Nakarachinda and P. Wongjun, *q -Equilibrium of gas in spacetime of multi-horizon black holes*, Nucl. Phys. B **1016**, 116922 (2025).
- [510] T. Anusonthi, P. Wongjun and R. Nakarachinda, *Thermodynamic stability of Schwarzschild-de Sitter black holes with Renyi entropy*, J. Phys.: Conf. Ser. **2934**, 012011 (2025).
- [511] S. Nojiri, S.D. Odintsov and V. Faraoni, *Area-law versus Renyi and Tsallis black hole entropies*, Phys. Rev. D **104**, 084030 (2021).
- [512] S. Nojiri, S.D. Odintsov and V. Faraoni, *How fundamental is entropy? From non-extensive statistics and black hole physics to the holographic dark universe*, preprint (2022), 2201.02424 [gr-qc].

- [513] S. Nojiri, S.D. Odintsov and V. Faraoni, *From nonextensive statistics and black hole entropy to the holographic dark universe*, Phys. Rev. D **105**, 044042 (2022).
- [514] S. Nojiri, S.D. Odintsov and T. Paul, *Early and late universe holographic cosmology from a new generalized entropy*, Physics Letters B **831**, 137189 (2022).
- [515] S.D. Odintsov and T. Paul, *A non-singular generalized entropy and its implications on bounce cosmology*, preprint (2022), 2212.05531 [gr-qc].
- [516] S.D. Odintsov and T. Paul, *Generalised (non-singular) entropy functions with applications to cosmology and black holes*, preprint (2023), 2301.01013 [gr-qc].
- [517] S. Nojiri, S.D. Odintsov and V. Faraoni, *Alternative entropies and consistent black hole thermodynamics*, preprint (2022), 2207.07905 [gr-qc].
- [518] S. Nojiri, S.D. Odintsov and V. Faraoni, *New entropies, black holes, and holographic dark energy*, Astrophysics (2023), doi: 10.1007/s10511-023-09759-1
- [519] S. Nojiri, S.D. Odintsov and V. Faraoni, *Generalized black hole entropy in two dimensions*, preprint (2023), 2303.02663 [hep-th].
- [520] S. Nojiri and S.D. Odintsov, *Micro-canonical and canonical description for generalised entropy*, Phys. Lett. B **845**, 138130 (2023).
- [521] S. Nojiri and S.D. Odintsov, *The correspondence of generalised entropic cosmology theory with $F(T)$ and $F(Q)$ modified gravity and gravitational waves*, Physics of the Dark Universe **48**, 101899 (2025).
- [522] H.P. de Oliveira, *Distorted black holes: nonextensivity in the gravitational wave emission*, preprint (2025), 2505.10067 [gr-qc].
- [523] U. Ualikhanova, A. Altaibayeva and S. Chattopadhyay, *Holographic reconstruction of k -essence model with Tsallis and the most generalized Nojiri-Odintsov version of holographic dark energy*, Indian J. Phys. (2025).
- [524] S.D. Odintsov, S. D’Onofrio and T. Paul, *Holographic realization from inflation to reheating in generalized entropic cosmology*, preprint (2023), 2306.15225 [gr-qc].
- [525] J.X. Li and S. Wang, *A comprehensive numerical study on four categories of holographic dark energy models*, preprint (2024), 2412.09064 [astro-ph.CO].
- [526] A. Sardar, S. Maity, U. Debnath and A. Pradhan, *Different horizon cut-offs for Tsallis, Renyi and Sharma-Mittal holographic dark energies in Horava-Lifshitz gravity*, Annals of Physics **473**, 169891 (2025).
- [527] M.A. Memet, *$f(R, T)$ teoride Tsallis holografik karanlık enerjin in incelenmesi I*, Thesis (Canakkale Universitesi, 2023).
- [528] P. Pessoa and B.A. Costa, *Comment on “Black hole entropy: A closer look”*, Entropy **22**, 1110 (2020), doi: 10.3390/e22101110
- [529] C. Tsallis, *Reply to Pessoa, P.; Arderucio Costa, B., Comment on “Tsallis, C. Black Hole Entropy: A Closer Look. Entropy 2020, 22, 17”*, Entropy **23**, 630 (2021), doi: 10.3390/e23050630 (2021).
- [530] P. Pessoa, B.A. Costa and S. Presse, *Revisiting Claims in “Black Hole Entropy: A Closer Look”*, preprint (2022), 2210.00324 [gr-qc].
- [531] A. Alonso-Serrano, M.P. Dabrowski and H. Gohar, *Nonextensive black hole entropy and quantum gravity effects at the last stages of evaporation*, Phys. Rev. D **103**, 026021 (2021).
- [532] J. Chen and G. Chen, *Emergence of cosmic space and horizon thermodynamics in the context of the quantum-deformed entropy*, Eur. Phys. J. C **84**, 1178 (2024).
- [533] S. Jalalzadeh, F.R. Silva and P.V. Moniz, *Prospecting black hole thermodynamics with fractional quantum mechanics*, preprint (2021), 2107.04789 [gr-qc].
- [534] H. Gohar and V. Salzano, *Cosmological constraints on entropic cosmology with matter creation*, Eur. Phys. J. C **81**, 338 (2021), doi: 10.1140/epjc/s10052-021-09086-9
- [535] H. Gohar and V. Salzano, *On the foundations of entropic cosmologies: Inconsistencies, possible solutions and dead end signs*, Phys. Lett. B **855**, 138781 (2024).
- [536] I. Cimdiker, M.P. Dabrowski and V. Salzano, *Generalized Nonextensive Entropy Holographic Dark Energy Models Verified by Cosmological Data*, preprint (2025), 2503.18230 [astro-ph.CO].
- [537] R. Saleem and A. Saleem, *Baryogenesis inspired by some modified entropies*, Phys. Scr. (2023), in press.
- [538] Y. Liu, *Dilatonic effect in double field theory cosmology*, preprint (2022), 2112.15082 [hep-th].
- [539] E.M.C. Abreu and J. Ananias Neto, *Barrow black hole corrected-entropy model and Tsallis nonextensivity*, Phys. Lett. B: Nuclear, Elementary Particle and High-Energy Physics **810**, 135805 (2020).
- [540] E.M.C. Abreu and M.J. Neves, *Thermal aspects of central supermassive black holes in a fractal framework*, Physics Letters B (2025), in press.
- [541] K.K. Chokyi, S. Chattopadhyay and A.N. Tawfik, *Barrow holographic dark energy: Reconstruction within Saez-Ballester theory in Kantowski-Sachs universe*, Physica Scripta **99**, 111501 (2024).

- [542] E.M.C. Abreu and J. Ananias Neto, *Black holes thermodynamics from a dual Kaniadakis entropy*, EPL **133**, 49001 (2021), doi: 10.1209/0295-5075/133/49001
- [543] E.M.C. Abreu and J. Ananias Neto, *On the nature of modified Renyi entropy and the incomplete statistics approach in black holes thermodynamics*, EPL **135**, 10001 (2021), doi: 10.1209/0295-5075/135/10001
- [544] Y. Li and X. Yong, *The characteristics of linear filament system is studied based on incomplete statistics*, Advances in Engineering Technology Research **12** (2024).
- [545] E.M.C. Abreu and J. Ananias Neto, *Some statistical approaches in the apparent horizon entropy and the generalized second law of thermodynamics*, preprint (2021), 2107.04869 [gr-qc].
- [546] E.M.C. Abreu and J. Ananias Neto, *Statistical approaches on the apparent horizon entropy and the generalized second law of thermodynamics*, Physics Letters B **824**, 136803 (2022).
- [547] E. Hirunsirisawat, R. Nakarachinda and C. Promsiri, *Emergent phase, thermodynamic geometry and criticality of charged black holes from Renyi statistics*, preprint (2022), 2204.13023 [hep-th].
- [548] S. Srivastava and U.K. Sharma, *Barrow holographic dark energy with Hubble horizon as IR cutoff*, International Journal of Geometric Methods in Modern Physics **18**, (2021), doi: 10.1142/S0219887821500146
- [549] A.Z. Kaczmarek, Y. Sekhmani, D. Szczesniak and J. Rayimbaev, *The thermodynamics of the Van Der Waals black hole within Kaniadakis entropy*, Entropy **26**, 1027 (2024).
- [550] A.S. Mohamed, M.U. Shahzad, A. Mehmood and E.E. Zotos, *Impact of Barrow's entropy on topological classification of higher-dimensional black holes*, Modern Physics Letters A 2450134 (2024).
- [551] U.K. Sharma, Pankaj, N.M. Ali and K.K. Mishra, *New Tsallis holographic dark energy with Granda-Oliveros as IR cutoff*, Canadian Journal of Physics (2024).
- [552] N. Goyal, M. Kumar, A.S. Ghreera, U.K. Sharma, A.K. Yadav and S. Srivastava, *Barrow's holographic dark energy model in axially symmetric spacetime*, International Journal of Geometric Methods in Modern Physics 2450215 (2024).
- [553] M. Yarahmadi, *Barrow interacting holographic dark energy cosmology with Hubble horizon as IR cutoff: A model alleviating the Hubble and S8 tension*, Physics of the Dark Universe (2024), in press.
- [554] R. Nakarachinda, C. Pongkitivanichkul, D. Samart, L. Tannukij and P. Wongjun, *Renyi holographic dark energy*, Fortschritte der Physik - Progress of Physics (2024).
- [555] A. Sheykhi and B. Farsi, *Growth of perturbations in Tsallis and Barrow cosmology*, Eur. Phys. J. C **82**, 1111 (2022).
- [556] M. Sharif, M.Z. Gul and I. Hashim, *Cosmic evolution of Tsallis holographic dark energy model in $f(R, T^2)$ gravity*, Physics of the Dark Universe (2024), in press.
- [557] R. Saleem, M.H. Rasool, M.I. Aslam and I. Shahid, *Warm inflation triggered by entropies of some recent dark energy models within $f(Q)$ gravity*, Chinese Physics C **48** (12), 125102 (2024).
- [558] M.V. Santhi and T. Chinnappalanaidu, *Renyi holographic dark energy model in a scalar-tensor theory*, New Astronomy (2021), in press, doi: 10.1016/j.newast.2021.101725
- [559] M.V. Santhi and T. Chinnappalanaidu, *Tsallis holographic dark energy in Bianchi type-II, VIII and IX universes*, Astrophysics and Space Science **368**, 32 (2023).
- [560] A. Narasimharao and D. Neelima, *Bianchi Type-V space time with Tsallis holographic dark energy*, International Journal of Geometric Methods in Modern Physics 2450063 (2023).
- [561] U.K. Sharma, N.M. Ali, A.A. Mamon and Pankaj, *Interacting new Tsallis holographic dark energy*, Chinese Journal of Physics **89**, 657-666(2024).
- [562] O. Trivedi, M. Khlopov and A.V. Timoshkin, *Tsallis holographic dark energy with power law ansatz approach*, Symmetry **16**, 446 (2024).
- [563] O. Trivedi, A. Bidlan and P. Moniz, *Fractional holographic dark energy*, Phys. Lett. B **858**, 139074 (2024).
- [564] A. Saha, A. Chanda, S. Dey, B.C. Paul and S. Ghose, *Renyi holographic dark energy models in multidimensional universe*, preprint, 2111.13935 [gr-qc].
- [565] A. Saha, A. Chanda, S. Dey, S. Ghose and B.C. Paul, *Interacting and non-interacting Renyi holographic dark energy models in DGP braneworld*, preprint (2022), 2202.06813 [gr-qc].
- [566] A. Saha, B. Pradhan and H. Natiq, *Multiperiodic and chaotic wave phenomena of collective ion dynamics under KP-type equation in a magnetised nonextensive plasma*, Phys. Scr. **97**, 095604 (2022).
- [567] M. Kumar, V.C. Dubey and U.K. Sharma, *Comparing entropy inspired holographic dark energy models through statefinder hierarchy and growth rate of perturbations*, International J. Geometric Methods in Modern Physics, 2150195 (2021).
- [568] V.C. Dubey, *Barrow holographic dark energy with Granda-Oliveros cut-o? in Chern-Simons gravity*, International Journal of Geometric Methods in Modern Physics 2550024 (2025).

- [569] V.C. Dubey, M. Kumar, L.K. Sharma and U.K. Sharma, *Some features of Kaniadakis holographic dark energy model*, International J. Geometric Methods in Modern Physics, 2350036 (2023).
- [570] A.V. Prasanthi, G. Suryanarayana, Y. Aditya and U.Y.D. Prasanthi, *Cosmological dynamics of anisotropic Kaniadakis holographic dark energy model in Brans-Dicke gravity*, East European Journal of Physics **2** 10-20 (2024).
- [571] Y. Sobhanbabu, G. Satyanarayana, N.V.S.S. Chinamilli, P.V. Rambabu, *Anisotropic Barrow holographic dark energy models in scalar-tensor theory of gravitation*, East European Journal of Physics **2**, 48-63 (2024).
- [572] B.D. Pandey, P.S. Kumar, Pankaj and U.K. Sharma, *New Tsallis holographic dark energy*, Eur. Phys. J. C **82**, 233 (2022).
- [573] U.K. Sharma, *Reconstructing Tsallis holographic phantom*, Pramana - J. Phys. **96**, 210 (2022).
- [574] N. Boulkaboul, *Interacting Tsallis holographic dark energy in q-modified DGP braneworld*, preprint (2022), 2208.02754 [gr-qc].
- [575] N. Boulkaboul, *Baryogenesis triggered by Barrow holographic dark energy coupling*, Physics of the Dark Universe **40**, 101205 (2023).
- [576] S. Nojiri, S.D. Odintsov and T. Paul, *Different faces of generalized holographic dark energy*, Symmetry **13**, 928 (2021).
- [577] A.A. Mamon, A. Paliathanasis and S. Saha, *Dynamics of an interacting Barrow holographic dark energy model and its thermodynamic implications*, Eur. Phys. J. Plus (2021) **136**, 134 (2021), doi: 10.1140/epjp/s13360-021-01130-7
- [578] S. Saha, E. Gudekli and S. Chattopadhyay, *Thermodynamics of the most generalized form of holographic dark energy and some particular cases with corrected entropies*, preprint (2024), 2405.20783 [physics.gen-ph].
- [579] M. Ghosh, S. Chattopadhyay and E. Gudekli, *An insight into holographic inflation under different cosmological settings through rigorous analysis of EoS parameter*, Annals of Physics **476**, 169982 (2025).
- [580] U.K. Sharma, G. Varshney and V.C. Dubey, *Barrow agegraphic dark energy*, Internat. J. Mod. Phys. D, 2150021 (2021) (16 pages), doi: 10.1142/S0218271821500218
- [581] Pankaj, B.D. Pandey, P.S. Kumar, U.K. Sharma, *New Tsallis agegraphic dark energy*, preprint (2022), 2205.01095 [gr-qc].
- [582] H. Huang, Q. Huang and R. Zhang, *Phase space analysis of Barrow agegraphic dark energy*, Universe **8**, 467 (2022).
- [583] G. Varshney and U.K. Sharma, *Tsallis holographic dark energy in Bianchi type-III universe with GO horizon cut off*, Iran J. Sci. Technol. Trans. Sci. (2021), in press, doi: 10.1007/s40995-021-01233-x(0123456789
- [584] Y. Sobhanbabu and M.V. Santhi, *Bianchi type-III Renyi holographic dark energy models a in scalar tensor theory*, General Relativity and Gravitation **54**, 95 (2022).
- [585] M.P. Das and C.R. Mahanta, *Bianchi type V Tsallis holographic dark energy model with hybrid expansion law*, East European Journal of Physics **3**, 97-103 (2022).
- [586] S. Srivastava, U. Sharma and V. Dubey, *Exploring the new Tsallis agegraphic dark energy with interaction through statefinder*, General Relativity and Gravitation **53**, 47 (2021), doi: 10.1007/s10714-021-02818-y
- [587] H. Huang, Q. Huang and R. Zhang, *Phase space analysis of Tsallis agegraphic dark energy*, General Relativity and Gravitation **53**, 63 (2021), doi: 10.1007/s10714-021-02823-1
- [588] Z.F. Mangoudehi, *Interacting Tsallis agegraphic dark energy in DGP braneworld cosmology*, Astrophysics and Space Science **367**, 31 (2022).
- [589] M. Koussour and M. Bennai, *Interacting Tsallis holographic dark energy and tachyon scalar field dark energy model in Bianchi type-II universe*, Internat. J. Modern Physics A 2250027 (2022) (16 pages), doi: 10.1142/S0217751X22500270
- [590] S. Gupta, A. Dixit and A. Pradhan, *Tsallis holographic dark energy scenario in viscous $f(Q)$ gravity with tachyon field*, Internat. J. Geometric Methods in Modern Physics 2350021 (2023).
- [591] A. Pradhan, A. Dixit and V.K. Bhardwaj, *Barrow HDE model for Statefinder diagnostic in FLRW Universe*, preprint (2021), 2101.00176 [gr-qc].
- [592] A. Khodam-Mohammadi and M. Monshizadeh, *Exploring modifications to FLRW cosmology with general entropy and thermodynamics: A new approach*, Phys. Lett. B **843**, 138066 (2023).
- [593] A. Dixit, P. Garg and A. Pradhan, *THDE models with specific cutoffs and correspondence with quintessence field*, International Journal of Geometric Methods in Modern Physics 2350126 (2023).
- [594] A. Dixit, S. Gupta and A. Pradhan, *Reconstruction of $F(T, T_G)$ gravity model with scalar fields*, International Journal of Geometric Methods in Modern Physics 2450183 (2024).
- [595] U.K. Sharma, B.D. Pandey, P.S. Kumar and Pankaj, *Quintessence reconstruction through new Tsallis holographic dark energy model*, Modern Physics Letters A, 2350120 (2023).

- [596] G. Varshney, A. Pradhan and U.K. Sharma, *Bianchi type-III THDE quintessence model with hybrid scale factor*, Canadian Journal of Physics (2023).
- [597] A.I. Keskin, L. Canpolat and K. Kurt, *Slow-rolling and quintessence inflation with the D-brane KKL^T potential in Barrow entropy*, Eur. Phys. J. C **85**, 634 (2025).
- [598] E.N. Saridakis and S. Basilakos, *The generalized second law of thermodynamics with Barrow entropy*, Eur. Phys. J. C **81**, 644 (2021).
- [599] E.N. Saridakis, *Modified cosmology through spacetime thermodynamics and Barrow horizon entropy*, Journal of Cosmology and Astroparticle Physics, 031 (2020).
- [600] E.N. Saridakis, *Barrow holographic dark energy*, Phys. Rev. D **102**, 123525 (2020).
- [601] G.G. Luciano and E.N. Saridakis, *Baryon asymmetry from Barrow entropy: theoretical predictions and observational constraints*, preprint (2022), 2203.12010 [gr-qc].
- [602] G.G. Luciano, A. Paliathanasis and E.N. Saridakis, *Constraints on Barrow and Tsallis holographic dark energy from DESI DR2 BAO data*, preprint (2025), 2506.03019 [gr-qc].
- [603] S. Capozziello and M. Shokri, *Barrow entropies in black hole thermodynamics*, preprint (2025), 2501.12987 [gr-qc].
- [604] G.G. Luciano and A. Sheykhi, *Black hole geometrothermodynamics and critical phenomena: a look from Tsallis entropy-based perspective*, Physics of the Dark Universe (2023), in press, 2304.11006 [hep-th].
- [605] G.G. Luciano and E.N. Saridakis, *$P - v$ criticalities, phase transitions and geometrothermodynamics of charged AdS black holes from Kaniadakis statistics*, J. High Energy Physics **12**, 114 (2023).
- [606] S.N. Gashti, B. Pourhassan and I. Sakalli, *Thermodynamic topology and phase space analysis of AdS black holes through non-extensive entropy perspectives*, preprint (2024), 2412.12137 [hep-th].
- [607] A. Jawad, M. Shahid, S. Chaudhary and S. Shaymatov, *Geometrothermodynamics study of specific black holes in extended Einstein-Gauss-Bonnet theory using Tsallis entropy*, International Journal of Geometric Methods in Modern Physics 2550049 (29 pages) (2025).
- [608] H. Tariq, U. Zafar, S. Chaudhary, K. Bamba, A. Jawad and S. Shaymatov, *Exploring the effects of generalized entropy onto Bardeen black hole surrounded by cloud of strings*, Nucl. Phys. B **1016**, 116906 (2025).
- [609] S.N. Gashti and B. Pourhassan, *Non-extensive entropy and holographic thermodynamics: Topological Insights*, preprint (2024), 2412.12132 [hep-th].
- [610] P.N. Krishnan and T.K. Mathew, *Emergence of cosmic space with Barrow entropy, in non-equilibrium thermodynamic conditions*, Physics of the Dark Universe **42**, 101283 (2023).
- [611] S.D. Odintsov, T. Paul and S. SenGupta, *Second law of horizon thermodynamics during cosmic evolution*, preprint (2024), 2404.05312 [gr-qc].
- [612] G.G. Luciano and Y. Liu, *Inflation and tachyon model of Barrow holographic dark energy*, preprint (2022), 2205.13458 [hep-th].
- [613] G.G. Luciano and Y. Liu, *Lagrangian reconstruction of Barrow holographic dark energy in interacting tachyon model*, Symmetry **15**, 1129 (2023).
- [614] G.G. Luciano, *Cosmic evolution and thermal stability of Barrow holographic dark energy in a nonflat Friedmann-Robertson-Walker Universe*, Phys. Rev. D **106**, 083530 (2022).
- [615] M. Naeem and A. Bibi, *Correction to the Friedmann equation with Sharma-Mittal entropy: A new perspective on cosmology*, Annals of Physics **462** (2024).
- [616] S. Mandal, A. Singh and R. Chaubey, *Cosmic evolution of holographic dark energy in $f(Q, T)$ gravity*, International Journal of Geometric Methods in Modern Physics, 2350084 (2023) (19 pages).
- [617] G.G. Luciano, *From the emergence of cosmic space to horizon thermodynamics in Barrow entropy-based cosmology*, Phys. Lett. B **838**, 137721 (2023).
- [618] Q.M. Feng, Z.W. Feng, X. Zhou and Q.Q. Jiang, *Barrow entropy and stochastic gravitational wave background generated from cosmological QCD phase transition*, Phys. Lett. B (2023), in press.
- [619] G.G. Luciano, *Constraining Barrow entropy-based cosmology with power-law inflation*, preprint (2023), 2301.12509 [gr-qc].
- [620] A.I. Keskin and K. Kurt, *Constant-roll inflation field with Tsallis entropic proposal*, Eur. Phys. J. C **83**, 72 (2023).
- [621] A.R. Khoriyah, *Studi energi gelap holografik menggunakan model perumumam entropi Tsallis dan Renyi*, Thesis 18640039 (Universitas Islam Negeri Maulana Malik Ibrahim Malang, 2022).
- [622] S. Di Gennaro, H. Xu and Y.C. Ong, *How Barrow entropy modifies gravity: with comments on Tsallis entropy*, Eur. Phys. J. C **82**, 1066 (2022).
- [623] A. Sheykhi, *Modified Friedmann equations from Tsallis entropy*, Phys. Lett. B **785**, 118-126 (2018).
- [624] A. Sheykhi, *Barrow entropy corrections to Friedmann equations*, Phys. Rev. D **103**, 123503 (2021).

- [625] G.G. Luciano, *Modified Friedmann equations from Kaniadakis entropy and cosmological implications on baryogenesis and $7 L$ i-abundance*, Eur. Phys. J. C **82**, 314 (2022).
- [626] G.G. Luciano, *Gravity and cosmology in Kaniadakis statistics: Current status and future challenges*, Entropy **24**, 1712 (2022).
- [627] G.R. Chen, *Emergence of cosmic space and horizon entropy maximization from Tsallis and Cirto entropy*, Eur. Phys. J. C **82**, 532 (2022).
- [628] M. Asghari and A. Sheykhi, *Observational constraints of the modified cosmology through Barrow entropy*, preprint (2021), 2110.00059 [gr-qc].
- [629] M. Asghari, A. Allahyari and D.F. Mota, *Gravitational wave probes of Barrow cosmology with LISA standard sirens*, J. Cosmology and Astroparticle Physics (6) (2024).
- [630] A. Sheykhi, *Modified cosmology through Barrow entropy*, preprint (2022), 2210.12525 [gr-qc].
- [631] U.K. Sharma and A. Pradhan, *Diagnosing Tsallis holographic dark energy models with statefinder and $\omega - \omega'$ pair*, Mod. Phys. Lett. A **34**, 1950101 (2019) (11 pages), doi: 10.1142/S0217732319501013
- [632] N.M. Ali, Pankaj, U.K. Sharma, S. Kumar and S. Srivastava, *New Tsallis holographic dark energy with apparent horizon as IR-cutoff in non-flat Universe*, preprint (2021), 2110.07021 [physics.gen-ph].
- [633] M. Dheepika and T.K. Mathew, *Tsallis holographic dark energy reconsidered*, preprint (2021), 2110.04031 [gr-qc].
- [634] N. Sarma, *Bianchi type-I cosmological model with Tsallis holographic dark energy in $f(R, T)$ theory of gravity*, Indian Journal of Science and Technology **14** (18), 1468-1476 (2021).
- [635] S. Taghavi, Kh. Saaidi, and Z. Ossouljian, *Holographic inflation in $f(R, T)$ gravity*, preprint (2023), 2301.02631 [gr-qc].
- [636] W.J.C. da Silva and R. Silva, *Cosmological perturbations in the Tsallis holographic dark energy scenarios*, Eur. Phys. J. Plus **136**, 543 (2021).
- [637] D.J. Zamora and C. Tsallis, *Thermodynamically consistent entropic-force cosmology*, Phys. Lett. B **827**, 136967 (2022), doi: 10.1016/j.physletb.2022.136967
- [638] D.J. Zamora and C. Tsallis, *Thermodynamically consistent entropic late-time cosmological acceleration*, European Physical Journal C **82**, 689 (2022).
- [639] F. Abaca and D.J. Zamora, *Multicomponent entropic cosmology model with generalized entropy*, Physics of the Dark Universe **45**, 101504 (2024).
- [640] M.K. Zangeneh and A. Sheykhi, *Modified cosmology through Kaniadakis entropy*, preprint (2023), 2311.01969 [gr-qc].
- [641] S. Wang and M. Li, *Theoretical aspects of holographic dark energy*, Commun. Theor. Phys. (2023), in press.
- [642] H. Gohar and V. Salzano, *A generalized mass-to-horizon relation: a new global approach to entropic cosmologies and its connection to Λ CDM*, Phys. Rev. D **109**, 084075 (2024).
- [643] I. Cimdiker, M.P. Dabrowski and H. Gohar, *Equilibrium temperature for black holes with nonextensive entropy*, Eur. Phys. J. C **83**, 169 (2023).
- [644] M.P. Dabrowski, *Look beyond additivity and extensivity of entropy for black hole and cosmological horizons*, Entropy **26**, 814 (2024).
- [645] A.Y. Shaikh, *Diagnosing Renyi and Tsallis holographic dark energy models with Hubble's horizon cutoff*, Indian J. Phys. (2023).
- [646] A.Y. Shaikh, *Tsallis, Renyi, and Sharma-Mittal holographic dark energy models bouncing cosmology*, preprint (2023).
- [647] A.Y. Shaikh, *Late time cosmic acceleration with observational constraints in symmetric teleparallel gravity*, Indian J. Phys. **98** (13), 4623-4633 (2024).
- [648] A. Mohammadi, T. Golanbari, K. Bamba and I.P. Lobo, *Tsallis holographic dark energy for inflation*, Phys. Rev. D **103**, 083505 (2021).
- [649] H. Mohammadi and A. Salehi, *Friedmann equations with the generalized logarithmic modification of Barrow entropy and Tsallis entropy*, Phys. Lett. B **839**, 137794 (2023).
- [650] A. Salehi, M. Pourali and Y. Abedini, *Search for neutrino masses in the Barrow holographic dark energy cosmology with Hubble horizon as IR cutoff*, General Relativity and Gravitation **55**, 57 (2023).
- [651] M. Yarahmadi and A. Salehi, *Generalized logarithmic modification of Barrow-Tsallis entropy can alleviate the Hubble tension*, Physics of the Dark Universe **48** (2025).
- [652] M. Yarahmadi and A. Salehi, *A Bayesian PINN framework for Barrow-Tsallis holographic dark energy with neutrinos: Toward a resolution of the Hubble tension*, preprint (2025), 2506.02235 [astro-ph.CO].
- [653] A. Cichocki, *Mirror descent using the Tempesta generalized multi-parametric logarithms*, preprint (2025), 2506.13984 [stat.ML].

- [654] M.T. Manoharan, N. Shaji and T.K. Mathew, *Holographic dark energy from the laws of thermodynamics with Renyi entropy*, Eur. Phys. J. C **83**, 19 (2023).
- [655] M.V. Santhi and Y. Sobhanbabu, *Bianchi type-III Tsallis holographic dark energy model in Saez-Ballester theory of gravitation*, Eur. Phys. J. C **80**, 1198 (2020), doi: 10.1140/epjc/s10052-020-08743-9
- [656] T. Vinutha and K.V. Vasavi, *The study of accelerating DE models in Saez-Ballester theory of gravitation*, Eur. Phys. J. Plus **137**, 1294 (2022).
- [657] T. Vinutha, K.V. Vasavi and K.S. Kavya, *The study of hypersurface-homogeneous space-time in Renyi holographic dark energy*, Internat. J. Geometric Methods in Modern Physics, 2350119 (2023).
- [658] M.V. Santhi, T. Chinnappalanaidu and M. Tripathy, *Renyi holographic dark energy model with two IR cutoffs in Marder type universe*, Indian J. Phys. (2024).
- [659] A. Kumar, V. Srivastava, V.C. Dubey and U.K. Sharma, *Statefinder diagnosis for Barrow agegraphic dark energy*, Internat. J. Geometric Methods in Modern Physics, 2350112 (2023).
- [660] M.V. Santhi and Y. Sobhanbabu, *Tsallis holographic dark energy models in Bianchi type space time*, New Astronomy (2021), in press, doi: 10.1016/j.newast.2021.101648
- [661] M. Zubair and L.R. Durrani, *Exploring Tsallis holographic dark energy scenario in $f(R;T)$ gravity*, Chinese J. Physics **69**, 153-171 (2021), doi: 10.1016/j.cjph.2020.11.024
- [662] M. Zubair, L.R. Durrani and S. Waheed, *Reconciling Tsallis holographic dark energy models in modified $f(T, B)$ gravitational framework*, Eur. Phys. J. Plus **136**, 943 (2021), doi: 10.1140/epjp/s13360-021-01905-y
- [663] S. Waheed, M. Zubair, I. Shafiq and L.R. Durrani, *Tsallis HDE-based reconstruction via correspondence scheme in a generalized torsion scalar theory*, Eur. Phys. J. Plus **137**, 1108 (2022).
- [664] S.A. Doaa, M.A. Soliman, Hegazy, R. Gannat, AL-Dayian and A.A. EL-Helbawy, *Statistical properties and applications of a new truncated Zubair-generalized family of distributions*, Computational Journal of Mathematical and Statistical Sciences **4** (1), 222-257 (2025).
- [665] G. Chakraborty and S. Chattopadhyay, *Cosmology of Tsallis holographic scalar field models in Chern-Simons modified gravity and optimization of model parameters through χ^2 minimization*, Zeitschrift fur Naturforschung A 000010151520200228, eISSN 1865-7109, ISSN 0932-0784, DOI: <https://doi.org/10.1515/zna-2020-0228> (2020).
- [666] V.T.H. Basari, P.B. Krishna and T.K. Mathew, *Unified formalism for the law of emergence from the first law of thermodynamics*, Phys. Rev. D **107**, 063511 (2023).
- [667] C. Ranjit, S. Islam, S. Chattopadhyay and E. Gudekli, *Analysis of different scenarios with new Tsallis holographic dark energies and bulk viscous fluid in the framework of Chern Simons modified gravity*, Internat. J. Modern Physics A 2150151 (2021).
- [668] U.K. Sharma and V. Srivastava, *Tsallis HDE with an IR cutoff as Ricci horizon in a flat FLRW Universe*, New Astronomy (2020), in press, doi: 10.1016/j.newast.2020.101519
- [669] Z.F. Mangoudehi, *Observational constraints on Tsallis holographic dark energy with Ricci horizon cutoff*, Astrophysics and SpaceScience **367**, 115 (2022).
- [670] S. Sultana, G. Chakraborty and S. Chattopadhyay, *Study of the effect of thermal radiation on singularities in presence of viscous holographic Ricci dark energy and modified Chaplygin gas*, International J. Geometric Methods in Modern Physics, 2250179 (2022).
- [671] S. Bhattacharjee, *Growth rate and configurational entropy in Tsallis holographic dark energy*, Eur. Phys. J. C **81**, 217 (2021), doi: 10.1140/epjc/s10052-021-09003-0
- [672] S. Chunlen and P. Rangdee, *Exploring the Renyi holographic dark energy model with the future and the particle horizons as the infrared cut-off*, preprint (2020), 2008.13730 [gr-qc].
- [673] G. Varshney, U.K. Sharma and A. Pradhan, *Reconstructing the k-essence and the dilation field models of the THDE in $f(R, T)$ gravity*, Eur. Phys. J. Plus **135**, 541 (2020), doi: 10.1140/epjp/s13360-020-00548-9
- [674] S. Bhattacharjee, *Interacting Tsallis and Renyi holographic dark energy with hybrid expansion law*, preprint (2020), 2006.04339 [gr-qc].
- [675] U.K. Sharma, V.C. Dubey and A. Pradhan, *Diagnosing interacting Tsallis holographic dark energy in the non-flat universe*, Int. J. Geom. Method Mod. Phys. (2020), in press, doi: 10.1142/S0219887820500322
- [676] S. Ali and M.H. Waheed, *Analysis of Sharma-Mittal holographic dark energy model in Chern-Simons modified gravity*, preprint (2020).
- [677] S. Korunur, *Sharma-Mittal holographic dark energy and scalar field in Bianchi type-I cosmology*, General Relativity and Gravitation **56**, 2 (2024).
- [678] U.K. Sharma and V.C. Dubey, *Interacting Renyi holographic dark energy with parametrization on the interaction term*, Internat. J. Geometric Methods Modern Physics 2250010 (2021) (25 pages).

- [679] U.K. Sharma, *Reconstruction of quintessence field for the THDE with swampland correspondence in $f(R, T)$ gravity*, Internat. J. of Geometric Methods in Modern Physics, 2150031 (2021).
- [680] U.K. Sharma and V. Srivastava, *Reconstructing Tsallis holographic quintessence*, Modern Physics Letters A **36** (31), 2150221 (2021), doi: 10.1142/S0217732321502217
- [681] S.P. Kumar, Pankaj, U.K. Sharma, *Quintessence model of Tsallis holographic dark energy*, New Astronomy (2022), in press, doi: 10.1016/j.newast.2022.101829
- [682] N.M. Ali, Pankaj and U.K. Sharma, *Quintessence behavior of new Tsallis holographic dark energy in FRW universe*, Gravitation and Cosmology **28** (3), 308-317 (2022).
- [683] M.P. Das, R. Roy, L. Rathour and V.N. Mishra, *Tsallis holographic dark energy model in FRW universe*, AIP Conf. Proc. **3005**, 020023 (2024).
- [684] J. Sadeghi, S.N. Gashti and T. Azizi, *Complex quintessence theory, Tsallis and Kaniadakis holographic dark energy and Brans-Dicke cosmology*, Mod. Phys. Lett. A 2350076 (2023).
- [685] U.Y.D. Prasanthi and Y. Aditya, *Anisotropic Renyi holographic dark energy models in general relativity*, Results in Physics **17**, 103101 (2020).
- [686] U.Y.D. Prasanthi and Y. Aditya, *Observational constraints on Renyi holographic dark energy in Kantowski-Sachs universe*, Physics of the Dark Universe **31**, 100782 (2021).
- [687] Y. Aditya, *Dynamics of anisotropic Renyi holographic dark energy model*, Bulgarian Astronomical Journal **40** (2024).
- [688] V. Srivastava and U.K. Sharma, *Statefinder hierarchy for Tsallis holographic dark energy*, New Astronomy **78**, 101380 (2020).
- [689] A. Saha and S. Ghose, *Interacting Tsallis holographic dark energy in higher dimensional cosmology*, preprint (2020), 2006.01618 [gr-qc].
- [690] A. Saha, S. Ghose, A. Chanda and B.C. Paul, *Renyi holographic dark energy in higher dimension cosmology*, preprint (2021), 2101.04060 [gr-qc].
- [691] U.K. Sharma and V.C. Dubey, *Statefinder diagnostic for the Renyi holographic dark energy*, New Astronomy **80**, 101419 (2020).
- [692] S. Srivastava, V.C. Dubey and U.K. Sharma, *Statefinder diagnosis for Tsallis agegraphic dark energy model with $\omega - \omega'$ pair*, Internat. J. Modern Physics A **35**, 2050027 (2020).
- [693] U.K. Sharma and S. Srivastava, *The cosmological behavior and the statefinder diagnosis for the New Tsallis agegraphic dark energy*, Mod. Phys. Lett. A 2050318 (2020) (15 pages), doi: 10.1142/S0217732320503186
- [694] S. Upadhyay and V.C. Dubey, *Diagnosing the Sharma-Mittal holographic dark energy model through the statefinder*, Gravitation and Cosmology **27** (3), 281-291 (2021).
- [695] M.A. Memet and C. Aktas, *Statefinder diagnosis of Tsallis holographic dark energy model in $f(R, T)$ theory*, Phys. Scr. **98**, 015217 (2023).
- [696] C. Aktas, *Behavior of Tsallis holographic dark energy for Marder universe*, Modern Physics Letters A **39** (19), 2450104 (2024).
- [697] A.O. Dhore and M.R. Ugale, *Analysis of Marder's space-time Tsallis holographic dark anergy cosmological model in $f(R, T)$ theory of gravity*, East European Journal of Physics **2**, 36-47 (2024).
- [698] A.O. Dhore and M.R. Ugale, *Dark energy dynamics in teleparallel gravity with hyperbolic scale factor*, Astrophysics and Space Science **370**, 41 (2025).
- [699] U.K. Sharma and V.C. Dubey, *Exploring the Sharma-Mittal HDE models with different diagnostic tools*, Eur. Phys. J. Plus **135**, 391 (2020).
- [700] T. Golanbari, K. Saaidi, and P. Karimi, *Renyi entropy and the holographic dark energy in flat space time*, preprint (2020), 2002.04097 [astro-ph.CO].
- [701] N. Zhang, Y.B. Wu, J.N. Chi, Z. Yu and D.F. Xu, *Diagnosing Tsallis holographic dark energy models with interactions*, Mod. Phys. Lett. A 2050044 (2019) (15 pages), doi: 10.1142/S0217732320500443
- [702] S. Waheed, *Reconstruction paradigm in a class of extended teleparallel theories using Tsallis holographic dark energy*, Eur. Phys. J. Plus **135**, 11 (2020), doi: doi.org/10.1140/epjp/s13360-019-00028-9
- [703] M. Korunur, *Tsallis holographic dark energy in Bianchi type-III spacetime with scalar fields*, Mod. Phys. Lett. A **34**, 1950310 (2019) (12 pages), doi: 10.1142/S0217732319503103
- [704] U.K. Sharma, V.C. Dubey and A. Pradhan, *Interacting Tsallis holographic dark energy: Cosmic behaviour, statefinder analysis and $\omega_D - \omega'_D$ pair in the non-flat universe*, preprint (2019), 1906.08051 [physics.gen-ph].
- [705] V.C. Dubey, S. Srivastava, U.K. Sharma and A. Pradhan, *Tsallis holographic dark energy in Bianchi-I Universe using hybrid expansion law with k-essence*, Pramana - J. Phys. **93**, 78 (2019).

- [706] U.K. Sharma, S. Srivastava and A. Beesham, *Swampland criteria and cosmological behavior of Tsallis holographic dark energy in Bianchi-III universe*, Internat. J. Geometric Methods in Modern Physics **17** (7), 2050098 (2020).
- [707] C.R. Mahanta, K. Pandit and M.P. Das, *Tsallis holographic dark energy in Bianchi type I universe in the framework of $f(R)$ theory of gravity*, Gravitation and Cosmology **29** (3), 305-314 (2023).
- [708] A.A. Mamon, A.H. Ziaie and K. Bamba, *A Generalized interacting Tsallis holographic dark energy model and its thermodynamic implications*, preprint (2020), 2004.01593 [gr-qc].
- [709] N. Zhang, Y.B. Wu, J.N. Chi, Z. Yu and D.F. Xu, *Diagnosing the interacting Tsallis holographic dark energy models*, preprint (2019), 1905.04299 [gr-qc].
- [710] Q. Huang, H. Huang, J. Chen, L. Zhang and F. Tu, *Stability analysis of the Tsallis holographic dark energy model*, Class. Quantum Grav. **36**, 175001 (2019).
- [711] C.Q. Geng, Y.T. Hsu, J.R. Lu and L. Yin, *Modified cosmology models from thermodynamical approach*, Eur. Phys. J. C **80**, 21 (2020).
- [712] Y. Aditya, S. Mandal, P.K. Sahoo, and D.R.K. Reddy, *Observational constraint on interacting Tsallis holographic dark energy in logarithmic Brans-Dicke theory*, preprint (2019), 1910.12456 [gr-qc].
- [713] S. Ghaffari, G.G. Luciano and S. Capozziello, *Barrow holographic dark energy in the Brans-Dicke cosmology*, preprint (2022), 2209.00903 [gr-qc].
- [714] S.H. Shekh, P.H.R.S. Moraes and P.K. Sahoo, *Physical acceptability of the Renyi, Tsallis and Sharma-Mittal holographic dark energy models in the $f(T, B)$ gravity under Hubble's cutoff*, Universe **7**, 67 (2021), doi: 10.3390/universe7030067
- [715] V.C. Dubey, U.K. Sharma and A.A. Mamon, *Interacting Renyi holographic dark energy in the Brans-Dicke theory*, Advances in High Energy Physics, Article ID 6658862 (2021) (17 pages), doi: 10.1155/2021/6658862
- [716] A. Jawad, S. Rani and M.H. Hussain, *Cosmological implications and thermodynamics of some reconstructed modified gravity models*, Physics of the Dark Universe **27**, 100409 (2020).
- [717] N. Sadeghnezhad, *Tsallis and Renyi statistics based on H_0 controversy*, Nucl. Phys. B, **1014**, 116862 (2025).
- [718] B. Hazarika, M.B. Awal and P. Phukon, *The interconnection of cosmological constant and Renyi entropy in Kalb-Ramond black holes : Insights from thermodynamic topology*, preprint (2024), 2412.09494 [gr-qc].
- [719] A. Maleki and A. Sheykhi, *Horizon entropy refined: Quantum contributions and cosmological insights*, preprint (2024), 2412.16610 [hep-th].
- [720] A. Jawad and A.M. Sultan, *Cosmic consequences of Kaniadakis and generalized Tsallis holographic dark energy models in the fractal universe*, Advances High Energy Physics, 5519028 (2021) (12 pages), doi:10.1155/2021/5519028
- [721] A.M. Sultan and A. Jawad, *Cosmic and thermodynamic study of non-canonical scalar field in parameterized modified gravity*, Phys. Scr. (2022), in press, doi: 10.1088/1402-4896/ac6d84
- [722] A. Jawad, S. Saleem and S. Qummer, *Cosmological consequences of modified Friedmann equations according to holographic equipartition law*, Internat. J. Mod. Physics A (2021), doi: 10.1142/S0217751X2150069X
- [723] A. Jawad, M. Shad and K. Bamba, *Cosmic and growth matter analysis of deformed Horava-Lifshitz gravity*, Internat. J. Modern Physics D, 2250063 (2022).
- [724] A. Jawad, M. Hussain and S. Rani, *Applications of thermodynamic geometries to conformal regular black holes: A comparative study*, Universe **9**, 87 (2023).
- [725] A. Jawad, H. Tariq, S. Chaudhary and Q. Wu, *Stability and thermodynamic geometry of black hole in generalized entropy framework*, Annals of Physics **473**, 169875 (2025).
- [726] R. Saleem, I. Shahid and M. Sabir, *An exact solution approach to warm inflation using Tsallis and Barrow holographic dark energy entropy within Rastall gravity*, Eur. Phys. J. Plus **137**, 279 (2022), doi: 10.1140/epjp/s13360-022-02494-0
- [727] M. Srivastava, M. Kumar and S. Srivastava, *Barrow holographic dark energy with hybrid expansion law*, Gravitation and Cosmology **28** (1), 70-80 (2022).
- [728] N. Boukhaboul, *Can Gibbons-Hawking radiation and inflation arise due to spacetime quanta?*, Physics of the Dark Universe (2020), in press.
- [729] O. Trivedi, *The exact solution approach to warm inflation*, Astroparticle Physics **158**, 102951 (2024).
- [730] A. Lymperis and E.N. Saridakis, *Modified cosmology through nonextensive horizon thermodynamics*, Eur. Phys. J. C **78**, 993 (2018), doi: 10.1140/epjc/s10052-018-6480-y
- [731] A. Lymperis, *Cosmological aspects of unified theories*, Doctor Thesis (School of Natural Sciences Department of Physics, University of Patras, 2021).
- [732] A. Lymperis, *Holographic dark energy through Loop Quantum Gravity inspired entropy*, preprint (2023), 2310.01050 [gr-qc].

- [733] A. Lympiris, G. Nugmanova and A. Sergazina, *Correspondence between Myrzakulov $F(R, Q)$ gravity and Tsallis cosmology*, preprint (2025), 2502.04462 [gr-qc].
- [734] S. Basilakos, A. Lympiris, M. Petronikolou and N. Saridakis, *Barrow holographic dark energy with varying exponent*, preprint (2023), 2312.15767 [gr-qc].
- [735] S. Nojiri, S.D. Odintsov, E.N. Saridakis and R. Myrzakulov, *Correspondence of cosmology from non-extensive thermodynamics with fluids of generalized equation of state*, Nuclear Physics B **950**, 114850 (2020).
- [736] N. Drepanou, A. Lympiris, E.N. Saridakis and K. Yesmakhanova, *Kaniadakis holographic dark energy and cosmology*, Eur. Phys. J. C **82**, 449 (2022).
- [737] J.I. Kapusta, *Perspective on Tsallis statistics for nuclear and particle physics*, International Journal of Modern Physics E **30** (8), 2130006 (2021), doi: 10.1142/S021830132130006X
- [738] A. Majhi, *Non-extensive statistical mechanics and black hole entropy from quantum geometry*, Phys. Lett. B **775**, 32-36 (2017).
- [739] E.M.C. Abreu, J. Ananias Neto and E.M. Barboza, *Barrow's black hole entropy and the equipartition theorem*, preprint (2020), 2005.11609 [gr-qc].
- [740] S. Bian and P. Shang, *Refined two-index entropy and multiscale analysis for complex system*, Communications in Nonlinear Science and Numerical Simulation **39**, 233-247 (2016), doi: 10.1016/j.cnsns.2016.03.007
- [741] V.G. Czinner and H. Iguchi, *Renyi entropy and the thermodynamic stability of black holes*, Physics Letters B **752**, 306-310 (2016), doi: 1511.06963 [gr-qc].
- [742] V.G. Czinner and H. Iguchi, *A zeroth law compatible model to Kerr black hole thermodynamics*, Universe **3**,14 (2017) (13 pages), doi: 10.3390/universe3010014
- [743] V.G. Czinner and H. Iguchi, *Thermodynamics, stability and Hawking-Page transition of Kerr black holes from Renyi statistics*, Eur. Phys. J. C **77**, 892 (2017).
- [744] V.G. Czinner and H. Iguchi, *Hawking-Renyi black hole thermodynamics, Kiselev solution, and cosmic censorship*, Eur. Phys. J. C **85**, 443 (2025).
- [745] S. Ghaffari, G.G. Luciano and A. Sheykhi, *Nonextensive entropies impact onto thermodynamics and phase structure of Kerr-Newman black holes*, preprint (2023), 312.13407 [hep-th].
- [746] F. Barzi, H. El Moumni and K. Masmarr, *On some phase equilibrium features of charged black holes in flat spacetime via Renyi statistics*, General Relativity and Gravitation **55** (10), 109 (2023).
- [747] F. Barzi, H. El Moumni and K. Masmarr, *Thermal chaos of charged-flat black hole via Renyi formalism*, Nucl. Phys. B **1005**, 116606 (2024).
- [748] V.G. Czinner and F.C. Mena, *Relative information entropy in cosmology: The problem of information entanglement*, Phys. Lett. B **758**, 9-13 (2016).
- [749] K. Mejrhit and S-E. Ennadifi, *Thermodynamics, stability and Hawking-Page transition of black holes from non-extensive statistical mechanics in quantum geometry*, Physics Letters B **794**, 45-49 (2019).
- [750] K. Mejrhit and R. Hajji, *A semi-classical estimate for the q -parameter and decay time with Tsallis entropy of black holes in quantum geometry*, Eur. Phys. J. C **80**, 1060 (2020), doi: 10.1140/epjc/s10052-020-08632-1
- [751] Z. Li, X. Tang and Z. Hong, *Collective attention dynamic induced by novelty decay*, Eur. Phys. J. B **95**, 132 (2022).
- [752] C. Promsiri, E. Hirunsirisawat and W. Liewrian, *Thermodynamics and van der Waals phase transition of charged black holes in flat space via Renyi statistics*, Phys. Rev. D **102**, 064014 (2020).
- [753] H. Moradpour, *Implications, consequences and interpretations of generalized entropy in the cosmological setups*, preprint (2016), 1601.05014 [gr-qc].
- [754] H. Moradpour, A. Sheykhi, C. Corda and I.G. Salako, *Theoretical origin of MOND theory from non-extensive aspects of spacetime*, preprint (2017), 1711.10336 [physics.gen-ph].
- [755] J. Lehmann, *A Note on and Generalization of "Exploring Modified Kaniadakis Entropy: MOND Theory and the Bekenstein Bound Conjecture"*, preprint (2024), 2406.02367 [gr-qc].
- [756] E.M.C. Abreu and J. A. Neto, *From modified Tsallis-Renyi entropy to a MOND-like force law, Bekenstein bound, and Landauer principle for black holes*, Phys. Lett.B **866**, 139579 (2025).
- [757] M. Shokri, *Bekenstein bound on black hole entropy in non-Gaussian statistics*, Phys. Lett. B **860**, 139193 (2025).
- [758] H. Moradpour, A. Sheykhi, C. Corda and I.G. Salako, *Implications of the generalized entropy formalisms on the Newtonian gravity and dynamics*, Phys. Lett. B (2018), in press, doi: 10.1016/j.physletb.2018.06.040
- [759] H. Moradpour, C. Corda, A.H. Ziaie and S. Ghaffari, *The extended uncertainty principle inspires the Renyi entropy*, EPL **127**, 60006 (2019).
- [760] N.C. Bizet, O. Obregon and W. Yupanqui, *Modified entropies as the origin of generalized uncertainty principles*, Physics Letters B **836**, 137636 (2023).

- [761] H. Moradpour, A.H. Ziaie, I.P. Lobo, J.P.M. Graca, U.K. Sharma and A.S. Jahromi, *The third law of thermodynamics, non-extensivity and energy definition in black hole physics*, Mod. Phys. Lett. A **2250076** (2022).
- [762] H. Moradpour, M. Javaherian, E. Namvar and A.H. Ziaie, *Implications of non-extensivity on Gamow theory*, preprint (2022), 2205.04316 [cond-mat.stat-mech].
- [763] H. Moradpour, S. Jalalzadeh and U.K. Sharma, *On the thermodynamics of reconciling quantum and gravity*, European Physical Journal Plus **139** (2), 170 (2024).
- [764] E.M.C. Abreu, J. Ananias Neto, A.C.R. Mendes and D.O. Souza, *MOND and cosmological issues from entropic gravity and nonextensive thermostatistics correspondence*, EPL **120** (2), 20003 (2017).
- [765] G.V. Ambrosio, M.S. Andrade and P.R.F. Alves, *Exploring modified Kaniadakis entropy: MOND theory and the Bekenstein bound conjecture*, preprint (2024), 2405.14799 [gr-qc].
- [766] H. Moradpour, M. Javaherian, E. Namvar and A.H. Ziaie, *Gamow temperature in Tsallis and Kaniadakis statistics*, Entropy **24**, 797 (2022).
- [767] E.M.C. Abreu, J. Ananias Neto, A.C.R. Mendes and R.M. de Paula, *Loop quantum gravity Immirzi parameter and the Kaniadakis statistics*, Chaos, Solitons and Fractals **118**, 307-310 (2019).
- [768] E.M.C. Abreu, J. Ananias Neto, E.M. Barboza and B.B. Soares, *On incomplete statistics and the loop quantum gravity Immirzi parameter*, EPL **127**, 10006 (2019), doi: 10.1209/0295-5075/127/10006
- [769] E.M.C. Abreu and J. Ananias Neto, *The incomplete statistics and black holes thermodynamics*, preprint (2020), 2009.05012 [gr-qc].
- [770] E.M.C. Abreu, J. Ananias Neto, E.M. Barboza Jr. and B.B. Soares, *Black holes quasinormal modes, loop quantum gravity Immirzi parameter and nonextensive statistics*, Phys. Lett. B **798**, 135011 (2019).
- [771] E.M.C. Abreu and J. Ananias Neto, *On the role of Barrow fractal entropy in the loop quantum gravity Barbero-Immirzi parameter*, EPL (2021), in press, doi: 10.1209/0295-5075/ac3291
- [772] H. Shababi and P. Pedram, *The minimal length uncertainty and the nonextensive thermodynamics*, preprint (2015), 1512.08733 [hep-th]. Internat. J. Theor. Phys. **55** (6), 2813-2823 (2016), doi: 10.1007/s10773-015-2914-6
- [773] H. Shababi and K. Ourabah, *Non-Gaussian statistics from the generalized uncertainty principle*, Eur. Phys. J. Plus **135**, 697 (2020), doi: 10.1140/epjp/s13360-020-00726-9
- [774] K. Ourabah, *Fingerprints of nonequilibrium stationary distributions in dispersion relations*, Scientific Reports **11**, 12103 (2021).
- [775] A.E. Rastegin, *On entropic uncertainty relations in the presence of a minimal length*, Annals Physics **382**, 170-180 (2017).
- [776] A.E. Rastegin, *Entropic uncertainty relations for successive measurements in the presence of a minimal length*, Entropy **20**, 354 (2018), doi:10.3390/e20050354
- [777] D. Kurzyk, L. Pawela and Z. Puchala, *Conditional entropic uncertainty relations for Tsallis entropies*, Quantum Information Processing (2018), doi: 10.1007/s11128-018-1955-1
- [778] A.C.S. Costa, R. Uola and O. Guhne, *Steering criteria from general entropic uncertainty relations*, Phys. Rev. A **98**, 050104(R) (2018).
- [779] M.P. Dabrowski and H. Gohar, *Abolishing the maximum tension principle*, Phys. Lett. B **748**, 428-431 (2015).
- [780] H. Ghaforyan, S. Shoorvazi, A. Sepehri and M. Ebrahimzadeh, *Tsallis δ -entropy in accelerating BIon*, Eur. Phys. J. C **78**, 672 (2018).
- [781] A. Beesham and A. Sepehri, *Tachyonic δ -Tsallis entropy of a thermal tachyonic BIon*, preprint (2019), 1902.10732 [hep-ph].
- [782] Y. Liu, *Tachyon model of Tsallis holographic dark energy*, Eur. Phys. J. Plus **136**, 579 (2021), doi:10.1140/epjp/s13360-021-01573-y
- [783] G. Varshney, U.K. Sharma, A. Pradhan and N. Kumar, *Reconstruction of tachyon, Dirac-Born-Infeld-essence and phantom model for Tsallis holographic dark energy in $f(R;T)$ gravity*, Chinese J. Physics **73**, 56-73 (2021), doi: 10.1016/j.cjph.2021.04.014
- [784] A.S. Mohamed, M.U. Shahzad, A. Mehmood and E.E. Zotos, *Thermodynamic topology of Phantom AdS black holes in massive gravity via non-extensive entropies*, Astronomy and Computing **51**, 100909 (2025).
- [785] C.R. Mahanta and D. Das, *Tsallis holographic dark energy model in an anisotropic universe with linearly varying deceleration parameter and its correspondence with phantom*, Physics of the Dark Universe **47**, 101755 (2024).
- [786] A. Sepehri, *Tsallis δ -entropy of a rotating DNA in a thermal system: A black hole model for DNA*, preprint (2018).
- [787] A. Sepehri, M. Fioranelli, M.G. Rocca and S. Shoorvazi, *The relation between Tsallis δ -entropy of DNA-Branes exterior and interior of shell*, Physica A **524**, 73-88 (2019).

- [788] M.O. Costa, R. Silva, M.M.F. de Lima and D.H.A.L. Anselmo, *Superstatistics applied to Cucurbitaceae DNA sequences*, Entropy **26**, 819 (2024).
- [789] M. Papapetrou and D. Kugiumtzis, *Tsallis conditional mutual information in investigating long range correlation in symbol sequences*, Physica A **540**, 123016 (2020).
- [790] S. Behera, J.E. Contreras-Reyes and S. Kayal, *Mutual information matrix and global measure based on Tsallis entropy*, preprint (2024).
- [791] A. Gupta and R. Levin, *Fully-dynamic submodular cover with bounded recourse*, 6st IEEE Annual Symposium on Foundations of Computer Science, FOCS 2020, 9317928, Pages 1147-1157 (2021).
- [792] N. Komatsu and S. Kimura, *Entropic cosmology for a generalized black-hole entropy*, Phys. Rev. D **88**, 083534 (2013) (16 pages).
- [793] N. Komatsu, *Entropic cosmology from a thermodynamics viewpoint*, JPS Conf. Proc. **1**, 013112 (2014) (4 pages).
- [794] N. Komatsu and S. Kimura, *Evolution of the universe in entropic cosmologies via different formulations*, Phys. Rev. D **89**, 123501 (2014).
- [795] N. Komatsu, *Cosmological model from the holographic equipartition law with a modified Renyi entropy*, Eur. Phys. J. C **77**, 229 (2017) (12 pages), doi: 10.1140/epjc/s10052-017-4800-2
- [796] M.S. Ribeiro, C. Tsallis and F.D. Nobre, *Probability distributions extremizing the nonadditive entropy S_δ and stationary states of the corresponding nonlinear Fokker-Planck equation*, Phys. Rev. E **88**, 052107 (2013) (9 pages), doi: 10.1103/PhysRevE.88.052107
- [797] M.S. Ribeiro, F.D. Nobre and C. Tsallis, *Probability distributions and associated nonlinear Fokker-Planck equation for the two-index entropic form $S_{q,s}$* , Phys. Rev. E **89**, 052135 (2014).
- [798] H. Kang, X.F. Zhang and G.B. Zhang, *Generalized phase permutation entropy algorithm based on two-index entropy* [in Chinese], Sci. Sin. Inform. **49**, 1205-1216 (2019), doi: 10.1360/N112018-00197
- [799] G. Bravo-Hermesdorff, R. Busa-Fekete, M. Ghavamzadeh, A.M. Medina and U. Syed, *Private and communication-efficient algorithms for entropy estimation*, communication at 36th Conference on Neural Information Processing Systems (NeurIPS 2022).
- [800] K. Ropotenko, *Contradictory implications of the nonadditive entropy*, preprint (2012), 1206.0698 [gr-qc].
- [801] M.A. Yurishchev, *Entanglement entropy fluctuations in quantum Ising chains*, J. Exp. Theor. Phys. **111** (4), 525-533 (2010).
- [802] M. Caraglio and F. Gliozzi, *Entanglement entropy and twist fields*, J. High Energy Phys. **11**, 076 (2008) (22 pages).
- [803] F. Gliozzi and L. Tagliacozzo, *Entanglement entropy and the complex plane of replicas*, J. Stat. Mech. P01002 (2010) (21 pages).
- [804] C. Tsallis, P.W. Lamberti and D. Prato, *A nonextensive critical phenomenon scenario for quantum entanglement*, Physica A **295**, 158 (2001) [Proc. IUPAP Workshop on New Trends on Fractal Aspects of Complex Systems (16-20 October 2000, Maceio-AL, Brazil), ed. M.L. Lyra (Elsevier, Amsterdam, 2001)].
- [805] F.C. Alcaraz and C. Tsallis, *Frontier between separability and quantum entanglement in a many spin system*, Phys. Lett. A **301**, 105 (2002).
- [806] C. Tsallis, D. Prato and C. Anteneodo, *Separable-entangled frontier in a bipartite harmonic system*, Eur. Phys. J. B **29**, 605 (2002).
- [807] A.R. Plastino and A. Daffertshofer, *Liouville dynamics and the conservation of classical information*, Phys. Rev. Lett. **93**, 138701 (2004) (4 pages).
- [808] B.-Q. Jin and V.E. Korepin, *Fisher-Hartwig conjecture*, preprint (2003) [quant-ph/0304108].
- [809] P. Calabrese and J. Cardy, *Entanglement entropy and quantum field theory*, J. Stat. Mech.-Theory and Experiment, P06002 (June 2004).
- [810] M. Rahaman, T. Bhattacharyya and J. Alam, *Thermal field theory of the Tsallis statistics*, preprint (2019), 1906.02893 [hep-ph].
- [811] M. Rahaman, T. Bhattacharyya and J. Alam, *Phenomenological Tsallis distribution from thermal field theory*, Internat. J. Modern Physics A, 2150154 (2021) (26 pages).
- [812] P. Zhang, W.D. Li, T. Liu and W.S. Dai, *Probability thermodynamics and probability quantum field*, J. Math. Phys. **64**, 103302 (2023).
- [813] M.A. Man'ko, V.I. Man'ko and R.V. Mendes, *A probabilistic operator symbol framework for quantum information*, J. Russian Laser Research. **27**, 507-532 (2006).
- [814] M.A. Man'ko, *Information and entropic characteristics of photon and qudit quantum states*, Physica Scripta T **140**, 01427 (2010) (7 pages).

- [815] M.A. Man'ko and V.I. Man'ko, *Inequalities for nonnegative numbers and information properties of qudit tomograms*, J. Russian Laser Research **34** (3), 203-218 (2013).
- [816] M.A. Man'ko, V.I. Man'ko, G. Marmo, A. Simoni and F. Ventriglia, *Probability vectors within the classical and quantum frameworks*, J. Russian Laser Res. **35** (1), (2014).
- [817] M.A. Man'ko and V.I. Man'ko, *Quantum correlations expressed as information and entropic inequalities for composite and noncomposite systems*, preprint (2014), 1403.1490 [quant-ph].
- [818] V.I. Man'ko and L.A. Markovich, *Deformed entropic and information inequalities for x -states of two-bit and single qudit states*, Advances Mathematical Physics ID 717621 (2015) (4 pages), <http://dx.doi.org/10.1155/2015/717621>
- [819] M.A. Man'ko, V.I. Man'ko and G. Marmo, *Entropies and correlations in classical and quantum systems*, Nuovo Cimento **38** C, 167 (2015), doi: 10.1393/ncc/i2015-15167-1
- [820] X. Hu and Z. Ye, *Generalized quantum entropy*, J. Math. Phys. **46**, 023502 (2006) (7 pages).
- [821] E.J. Jang, J. Cha, Y.K. Lee and W.S. Chung, *On the q -tunable quantum mechanics based on the Tsallis entropy formula*, Advanced Studies in Theoretical Physics **10** (3), 99-112 (2016).
- [822] J. Batle, A.R. Plastino, M. Casas and A. Plastino, *Conditional q -entropies and quantum separability: A numerical exploration*, J. Phys. A **35**, 10311 (2002).
- [823] M. Consiglio, T.J.G. Apollaro and M. Wiesniak, *A variational approach to the quantum separability problem*, Phys. Rev. A **106**, 062413 (2022).
- [824] M. Consiglio, *Variational Quantum Algorithms for Many-Body Systems-A prelude to fault-tolerant quantum computation*, Doctor Thesis (2025).
- [825] E. Boukobza and D.J. Tannor, *Entropy exchange and entanglement in the Jaynes-Cummings model*, Phys. Rev. A **71**, 063821 (2005).
- [826] J. Martinez-Manso and J. Martinez-Linares, *Purity swapping in the Jaynes-Cummings model: Obtaining perfect interference patterns from totally unpolarized qubits*, preprint (2009), 0903.4792 [quant-ph].
- [827] B. Diaz, D. Gonzalez, M.J. Hernandez and J.D. Vergara, *Classical analogs of generalized purities, entropies, and logarithmic negativity*, Phys. Rev. A **108**, 012411 (2023).
- [828] J.D. Castano-Yepes, *Entropy exchange and thermal fluctuations in Jaynes-Cummings model*, Eur. Phys. J. Plus **137**, 155 (2022).
- [829] M.L. Liang, B. Yuan and J.N. Zhang, *Tsallis entropies of superposition states of two photon-subtracted $SU(1,1)$ coherent states and entanglement transfer to qubits*, Acta Physica Polonica A **116**, 1006-1010 (2009).
- [830] J.I. de Vicente and J. Sanchez-Ruiz, *Separability conditions from the Landau-Pollak uncertainty relation*, Phys. Rev. A **71**, 052325 (2005).
- [831] P. Horodecki, *From limits of quantum operations to multicopy entanglement witnesses and state-spectrum estimation*, Phys. Rev. A **68**, 052101 (2003).
- [832] A.E. Rastegin and K. Zyczkowski, *Majorization entropic uncertainty relations for quantum operations*, J. Phys. A: Math. Theor. **49**, 355301 (2016) (19 pages), doi:10.1088/1751-8113/49/35/355301
- [833] J. Batle, M. Casas, A.R. Plastino and A. Plastino, *Entanglement, mixedness, and q -entropies*, Phys. Lett. A **296**, 251 (2002).
- [834] X. Liu, J. Knorz, Z.J. Wang and J. Tura, *Generalized concentratable entanglement via parallelized permutation tests*, preprint (2024), 2406.18517 [quant-ph].
- [835] K.G.H. Vollbrecht and M.M. Wolf, *Conditional entropies and their relation to entanglement criteria*, J. Math. Phys. **43**, 4299 (2002).
- [836] K.G.H. Vollbrecht and M.M. Wolf, *Can spectral and local information decide separability?*, preprint (2001) [quant-ph/0107014].
- [837] K.G.H. Vollbrecht and M.M. Wolf, *Conditional entropies and their relation to entanglement*, preprint (2001) [quant-ph/0202058].
- [838] A.K. Rajagopal and R.W. Rendel, *Robust and fragile entanglement of three qubits: Relation to permutation symmetry*, Phys. Rev. A **65**, 032328 (2002).
- [839] S. Abe, *Nonadditive information measure and quantum entanglement in a class of mixed states of N^n -system*, Phys. Rev. A **65**, 052323 (2002).
- [840] A.K. Rajagopal, Sudha, A.S. Nayak and A.R. Usha Devi, *From the quantum relative Tsallis entropy to its conditional form: Separability criterion beyond local and global spectra*, Phys. Rev. A **89**, 012331 (2014) (5 pages).
- [841] F. Giraldi and P. Grigolini, *Quantum entanglement and entropy*, Phys. Rev. A **64**, 032310 (2001).
- [842] G. Adesso, A. Serafini and F. Illuminati, *Extremal entanglement and mixedness in continuously variable systems*, Phys. Rev. A **70**, 022318 (2004).

- [843] X. Zheng and G.F. Zhang, *The effects of mixedness and entanglement on the properties of the entropic uncertainty in Heisenberg model with Dzyaloshinski-Moriya interaction*, Quantum Inf Process (2016) (14 pages), doi: 10.1007/s11128-016-1481-y
- [844] R. Khordad, H.R.R. Sedehi and A. Ghaffaripour, *Study of quantum Stirling heat engine in Tsallis formalism under Dzyaloshinski-Moriya interaction*, International Journal of Modern Physics C 2550088 (2025).
- [845] S. Martinez, F. Nicolas, F. Pennini and A. Plastino, *Tsallis' entropy maximization procedure revisited*, Physica A **286**, 489 (2000).
- [846] A.K. Rajagopal and S. Abe, *Statistical mechanical foundations for systems with nonexponential distributions*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13** (3), 529 (Pergamon-Elsevier, Amsterdam, 2002).
- [847] D.H.E. Gross, *Micro-canonical statistical mechanics of some non-extensive systems*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13**, Number 3, 417 (Pergamon-Elsevier, Amsterdam, 2002).
- [848] I. Rojdestvenski and M.G. Cottam, *Time rescaling and generalized entropy in relation to the internal measurement concept*, Physica A **278**, 150 (2000).
- [849] L.P. Chimento, F. Pennini and A. Plastino, *Naudts-like duality and the extreme Fisher information principle*, Phys. Rev. E **62**, 7462 (2000).
- [850] I.V. Karlin, M. Grmela and A.N. Gorban, *Duality in nonextensive statistical mechanics*, Phys. Rev. E **65**, 036128 (2002).
- [851] R. Salazar, A.R. Plastino and R. Toral, *Weakly nonextensive thermostatistics and the Ising model with long-range interactions*, Eur. Phys. J. B **17**, 679 (2000).
- [852] S. Abe, *Remark on the escort distribution representation of nonextensive statistical mechanics*, Phys. Lett. A **275**, 250 (2000).
- [853] S. Abe, S. Martinez, F. Pennini and A. Plastino, *Classical gas in nonextensive optimal Lagrange multipliers formalism*, Phys. Lett. A **278**, 249-254 (2001).
- [854] K. Surwuttinack, S. Supanyo and S. Yoo-Kong, *The emergence of the relativistic Lagrangian from the non-relativistic multiplicative Lagrangian*, preprint (2025), 2505.04224 [gr-qc].
- [855] S. Martinez, F. Pennini and A. Plastino, *Equipartition and virial theorems in a nonextensive optimal Lagrange multipliers scenario*, Phys. Lett. A (2001) [cond-mat/0006139].
- [856] S.K. Rama, *Tsallis Statistics: Averages and a physical interpretation of the Lagrange multiplier β* , Phys. Lett. A **276**, 103 (2000).
- [857] C. Brukner and A. Zeilinger, *Conceptual inadequacy of the Shannon information in quantum measurements*, Phys. Rev. A **63**, 022113 (2001).
- [858] A.E. Rastegin, *On the Brukner-Zeilinger approach to information in quantum measurements*, Proc. R. Soc. A **471**, 20150435 (2015), doi: <http://dx.doi.org/10.1098/rspa.2015.0435>
- [859] S. Luo, *Brukner-Zeilinger invariant information*, Theor. Math. Phys. **151**, 693-699 (2007).
- [860] C. Brukner and A. Zeilinger, *Information invariance and quantum probabilities*, Found. Phys. **39**, 677-689 (2009).
- [861] Y. Zhang and S. Luo, *Spin nonclassicality via variance*, Theoretical and Mathematical Physics **208** (1), 916-925 (2021).
- [862] Q.A. Wang, *Incomplete statistics: Nonextensive generalizations of statistical mechanics*, Chaos, Solitons and Fractals **12**, 1431 (2001).
- [863] M. Pezeril, A. Le Mehaute and Q.A. Wang, *About "On certain incomplete statistics" by Lima et al*, preprint (2003) [cond-mat/0311277].
- [864] Q.A. Wang, *Chaos and incomplete information*, preprint (2002) [cond-mat/0207647].
- [865] Q.A. Wang, *Incomplete information and fractal phase space*, Chaos, Solitons and Fractals **19**, 639 (2004).
- [866] C. Ou, J. Chen and Q.A. Wang, *Temperature definition and fundamental thermodynamic relations in incomplete statistics*, Chaos, Solitons and Fractals **28**, 518-521 (2006).
- [867] H.L. Li, B. Yang, T. Yang and Y. Xiong, *Statistical distribution of a completely open system based on incomplete Shannon entropy*, J. Phys.: Conference Series **410**, 012061 (2013) (5 pages).
- [868] B. Yang, H.L. Li and Y. Xiong, *Non-extensive statistical mechanics and statistical distribution for completely open systems*, in *Series Communications in Computer and Information Science*, Information Computing and Applications, Pt 2 **308**, 262-271 (2012).
- [869] Z.F. Huang, B.H. Lin and J.C. Chen, *A new expression of the probability distribution in incomplete statistics and fundamental thermodynamic relations*, Chaos, Solitons and Fractals **40**, 1277-1281 (2009).

- [870] J.A.S. Lima, J.R. Bezerra and R. Silva, *On certain incomplete statistics*, Chaos, Solitons and Fractals **19**, 1095 (2004).
- [871] A.R. Plastino, *Tsallis theory, the maximum entropy principle, and evolution equations*, in *Nonextensive Statistical Mechanics and Its Applications*, eds. S. Abe and Y. Okamoto, Series *Lecture Notes in Physics* (Springer-Verlag, Heidelberg, 2001) [ISBN 3-540-41208-5].
- [872] M. Gherardi and A. Nigro, *q-deformed Loewner evolution*, J. Stat. Phys. **152**, 452-472 (2013), doi: 10.1007/s10955-013-0771-3
- [873] S. Abe, *Correlation induced by nonextensivity and the zeroth law of thermodynamics*, in *Nonextensive Statistical Mechanics and Its Applications*, eds. S. Abe and Y. Okamoto, Series *Lecture Notes in Physics* (Springer-Verlag, Heidelberg, 2001) [ISBN 3-540-41208-5].
- [874] Q.A. Wang, *Generalizations of statistical mechanics on the basis of an incomplete information theory*, preprint (2000) [cond-mat/0009354].
- [875] Q.A. Wang, *Incomplete statistical mechanics and the zeroth law of thermodynamics*, preprint (2000) [cond-mat/0009347].
- [876] Q.A. Wang, *Incomplete statistics and nonextensive generalization of statistical mechanics*, preprint (2000) [cond-mat/0009343].
- [877] Q.A. Wang, *Nonextensive statistics and incomplete information*, Eur. Phys. J. B **26**, 357 (2002).
- [878] Q.A. Wang, *Unnormalized nonextensive expectation value and zeroth law of thermodynamics*, preprint (2001) [cond-mat/0111238].
- [879] Q.A. Wang and A. Le Mehaute, *Unnormalized nonextensive expectation value and zeroth law of thermodynamics*, Chaos, Solitons and Fractals **15**, 537 (2002).
- [880] Q.A. Wang, L. Nivanen, A. Le Mehaute and M. Pezeril, *Note on Abe's general pseudoadditivity for nonextensive systems*, preprint (2001) [cond-mat/0111541].
- [881] P. Gupta and V. Kumar, *General pseudoadditivity of Kapur's entropy prescribed by the existence of equilibrium*, Internat. J. Scientific Engineering Research **1** (3), (2010) (6 pages).
- [882] R. Rani, V. Kumar and N. Singh, *Some results on quantile-based dynamic survival and failure Tsallis entropy*, Tamkang Journal of Mathematics **53**, (2022).
- [883] V. Kumar, A. Saxena and Y.K. Sharma, *Stability criteria of Kapur's entropy under the deformed specification of exponential distribution*, MR Internat. J. Engineering Technology **9** (1), 10-12 (2017).
- [884] Q.A. Wang, C.J. Ou, A. El Kaabouchi, J.C. Chen, and A. Le Mehaute, *Inconsistency of the basic nonadditivity of q-nonextensive statistical mechanics*, preprint, 0910.3826 [cond-mat.stat-mech].
- [885] H.J. Haubold and A.M. Mathai, *Comment on "Inconsistency of the basic nonadditivity of q-nonextensive statistical mechanics, arXiv:0910.3826v1"*, preprint (2009), 0910.4902 [cond-mat.stat-mech].
- [886] T. Yamano, *On the robust thermodynamical structures against arbitrary entropy form and energy mean value*, Eur. Phys. J. B **18**, 103 (2000).
- [887] T. Yamano, *Information theory based on non-additive information content*, Phys. Rev. A **63**, 046105 (2001).
- [888] T. Yamano, *Source coding theorem based on a nonadditive information content*, Physica A **305**, 190 (2002).
- [889] T. Yamano, *Source coding theorem with non-Shannon information content*, Proceedings of the 9th Symposium on Non-Equilibrium Statistical Physics, Bussei Kenkyu **77**, 918-921 (2002) [in Japanese].
- [890] G. Ram and S. Kumar, *Some useful coding results based on generalized weighted Havrda-Charvat and Tsallis entropy*, AIP Conf. Proc. **2735**, 040023 (2023).
- [891] T. Yamano, *On a simple derivation of a family of nonextensive entropies from information content*, Entropy **6**, 364-374 (2004).
- [892] T. Yamano, *Nonextensive entropies from information content and stabilities*, Physica A **365**, 71-75 (2005).
- [893] T. Yamano, *A generalization of the Kullback-Leibler divergence and its properties*, J. Math. Phys. **50**, 043302 (2009) (11 pages).
- [894] L. Zhu, Z. Chen, M. Schlegel and M. White, *General Munchausen reinforcement learning with Tsallis Kullback-Leibler divergence*, communication at 37th Conference on Neural Information Processing Systems (NeurIPS 2023).
- [895] T. Guilmeau, N. Branchini, E. Chouzenoux and V. Elvira, *Adaptive importance sampling for heavy-tailed distributions via α -divergence minimization*, preprint (2023), 2310.16653 [stat.CO].
- [896] T. Tsuchiya, *Environment adaptive regret analysis in bandit problems*, Doctor Thesis (Kyoto University, 2023).
- [897] A. Alexopoulos, *The fractional Kullback-Leibler divergence*, J. Phys. A (2021), in press, doi: 10.1088/1751-8121/abd8b5

- [898] T. Yamano, *Bounds on divergence in nonextensive statistical mechanics*, J. Indones. Math. Soc. **19** (2), 89-97 (2013).
- [899] J.-F. Bercher, *Escort entropies and divergences and related canonical distribution*, Phys. Lett. A (2011), in press.
- [900] J. Zhang and J. Naudts, *Information geometry under monotone embedding. Part I: Divergence functions*, International Conference on Geometric Science of Information GSI 2017, Geometric Science of Information, Lecture Notes in Computer Science book series **10589**, 205-214 (Springer, 2017).
- [901] J. Naudts and J. Zhang, *Rho-tau embedding and gauge freedom in information geometry*, Information Geometry **1**, 79-115 (2018), doi: 10.1007/s41884-018-0004-6
- [902] S. Luo and Y. Sun, *Some inequalities for Wigner-Yanase skew information*, IGAIA IV 2016: Information Geometry and Its Applications 377-398 (2018).
- [903] N.J. Newton, *A two-parameter family of non-parametric, deformed exponential manifolds*, Information Geometry (2022), doi: 10.1007/s41884-022-00079-5
- [904] Y. Zhang and S. Luo, *Entropy excesses as quantifiers of nonclassicality*, Eur. Phys. J. Plus **136**, 464 (2021).
- [905] F. Zhang, H.K.T. Ng and Y. Shi, *Information geometry on the curved q -exponential family with application to survival data analysis*, Physica A **512**, 788-802 (2018).
- [906] M. Vijayakumar, Z.A.A. Shameem and P.P. Bindu, *Weighted two parametric Rama distribution with survival data analysis*, Journal of Xi'an University of Architecture & Technology **XII** (IV), 5840 (2020).
- [907] F. Zhang, H.K.T. Ng and Y. Shi, *Geometry on degradation models and mis-specification analysis by using α -divergence*, Physica A **527**, 121343 (2019).
- [908] K. Domino, *Selected methods for non-Gaussian data analysis*, preprint (2018), 1811.10486 [stat.ME].
- [909] C.S. Liu, *Nonsymmetric entropy and maximum nonsymmetric entropy principle*, Chaos, Solitons and Fractals **40**, 2469-2474 (2009).
- [910] Q.A. Wang, M. Pezeril, L. Nivane and A. Le Mehaute, *Nonextensive distribution and the factorization of the joint probability*, Chaos, Solitons and Fractals **13**, 131 (2002).
- [911] Q.A. Wang, *Many-body q -exponential distribution prescribed by factorization of joint probability*, Phys. Lett. A **300**, 169 (2002).
- [912] Ph. Chomaz, F. Gulminelli and V. Duflot, *Topology of event distributions as a generalized definition of phase transitions in finite systems*, Phys. Rev. E **64**, 046114 (2001).
- [913] M. Ishihara, *Effects of the Tsallis distribution in the linear sigma model*, Internat. J. Modern Phys. E **24** (11), 1550085 (2015) (13 pages), doi: 10.1142/S0218301315500858
- [914] M. Ishihara, *Chiral phase transition within the linear sigma model in the Tsallis nonextensive statistics based on density operator*, preprint (2018), 1809.03128 [hep-ph].
- [915] M. Ishihara, *Chiral phase transitions in the linear sigma model in the Tsallis nonextensive statistics*, preprint (2016), 1606.04192 [hep-ph].
- [916] M. Ishihara, *Momentum distribution and correlation for a free scalar field in the Tsallis nonextensive statistics based on density operator*, Eur. Phys. J. A **54**, 164 (2018), doi: 10.1140/epja/i2018-12601-8
- [917] M. Ishihara, *Phase transition for the system of finite volume in the ϕ^4 theory in the Tsallis nonextensive statistics*, Int. J. Mod. Phys. A **33**, 1850067 (2018) (16 pages), doi: 10.1142/S0217751X18500677
- [918] M. Ishihara, *Derivation of density operators for generalized entropies with quantum analysis*, Physica A **543**, 123419 (2020).
- [919] M. Ishihara, *Derivation of the density operator with quantum analysis for the generalized Gibbs ensemble in quantum statistics*, preprint (2020), 2007.02627 [cond-mat.stat-mech].
- [920] M. Ishihara, *Thermodynamics of the independent harmonic oscillators with different frequencies in the Tsallis statistics in the high physical temperature approximation*, Eur. Phys. J. B **95**, 53 (2022), doi: 10.1140/epjb/s10051-022-00309-w
- [921] M. Ishihara, *Thermodynamic quantities of independent harmonic oscillators in microcanonical and canonical ensembles in the Tsallis statistics*, Eur. Phys. J. B **96**, 13 (2023).
- [922] M. Ishihara, *Thermodynamic relations and fluctuations in the Tsallis statistics*, Eur. Phys. J. Plus **138**, 241 (2023).
- [923] M. Ishihara, *Multiple quantum harmonic oscillators in the Tsallis statistics*, Eur. Phys. J. Plus **139**, 1004 (2024).
- [924] Y. Benbouzid, S. Chala and M. Maache, *Effect of long-range interactions on the Kosterlitz-Thouless transition*, J. Theor. Appl. Physics (2023), in press.

- [925] K.M. Shen, H. Zhang, D.F. Hou, B.W. Zhang and E.K. Wang, *Chiral phase transition in linear sigma model with nonextensive statistical mechanics*, Advances High Energy Phys., 4135329 (2017) (7 pages), doi: 10.1155/2017/4135329
- [926] Y.P. Zhao, S.Y. Zuo and C.M. Li, *QCD chiral phase transition and critical exponents within the nonextensive Polyakov-Nambu-Jona-Lasinio model*, Chinese Physics C **45**, 073105 (2021).
- [927] S. Denker, S. Imai and O. Guhne, *Chiral symmetries and multiparticle entanglement*, preprint (2025), 2506.15609 [quant-ph].
- [928] Y.P. Zhao, C.Y. Wang, S.Y. Zuo and C.M. Li, *Nonextensive effects on QCD chiral phase diagram and baryon-number fluctuations within Polyakov-Nambu-Jona-Lasinio model*, Chinese Phys. C **47**, 053103 (2023).
- [929] Y.P. Zhao, S.Y. Zuo and C.M. Li, *Nonextensive effects on QCD chiral phase transition with a chiral chemical potential*, Chinese Physics C **46**, 103107 (2022).
- [930] X.Q. Liu, *The QCD phase diagram of the SU(2) NJL model with chiral chemical potential under a non-extensive framework*, Eur. Phys. J. C **85**, 707 (2025).
- [931] J. Zhang and X.J. Wen, *QCD phase transition with nonextensive NJL model in the strong magnetic field*, Phys. Rev. D **110**, 094049 (2024).
- [932] M. Ishihara, *Momentum distribution and correlation due to mass difference caused by power-like distribution*, Internat. J. Mod. Phys. E - Nuclear Physics **26** (6), 1750039 (2017).
- [933] M. Annunziato, P. Grigolini and B.J. West, *Canonical and non-canonical equilibrium distribution*, preprint (2000) [cond-mat/0010363].
- [934] M. Bologna, M. Campisi and P. Grigolini, *Dynamic versus thermodynamic approach to non-canonical equilibrium*, Physica A **305**, 89 (2002).
- [935] S. Abe, S. Martinez, F. Pennini and A. Plastino, *Nonextensive thermodynamic relations*, Phys. Lett. A **281**, 126-130 (2001).
- [936] S. Abe, *Heat and generalized Clausius entropy of nonextensive systems*, preprint (2000) [cond-mat/0012115].
- [937] S. Abe, *General pseudoadditivity of composable entropy prescribed by existence of equilibrium*, Phys. Rev. E **63**, 061105 (2001).
- [938] S. Abe, *Macroscopic thermodynamics based on composable nonextensive entropies*, Physica A **305**, 62 (2002).
- [939] H.D. Petersen, *Composability of f-entropies*, preprint (2007), 0705.0739 [cond-mat.stat-mech].
- [940] C. Tsallis, *Remarks on the nonuniversality of Boltzmann-Gibbs statistical mechanics*, Fractals **11** (Suppl.), 319-324 (2003).
- [941] E.K. Lenzi, H. Belich and L.S. Lucena, *Specific heat in the nonextensive statistics: Effective temperature and Lagrange parameter β* , Phys. Lett. A **292**, 315 (2001); Erratum: **299**, 318 (2002).
- [942] F. Jedrzejewski, *Probabilistic properties of nonextensive thermodynamics*, preprint (2001) [cond-mat/0103386].
- [943] L. Velazquez and F. Guzman, *Geometric aspects in equilibrium thermodynamics*, preprint (2001) [cond-mat/0105364].
- [944] L. Velazquez and F. Guzman, *Where the Tsallis statistics is valid?*, preprint (2001) [cond-mat/0105378].
- [945] R. Toral, *On the definition of physical temperature and pressure for nonextensive thermostatistics*, Physica A **317**, 209 (2003).
- [946] Q.A. Wang, L. Nivanen, A. Le Mehaute and M. Pezeril, *Temperature and pressure in nonextensive thermostatics*, Europhys. Lett. **65**, 606 (2004).
- [947] L. Velazquez and F. Guzman, *Remarks about the Tsallis formalism*, Phys. Rev. E **65**, 046134 (2002).
- [948] W. Tatsuaki and S. Takeshi, *When non-extensive entropy becomes extensive*, Physica A **301**, 284 (2001).
- [949] W. Tatsuaki and S. Takeshi, *The additivity of the pseudo-additive conditional entropy for a proper Tsallis' entropic index*, Physica A **305**, 186 (2002).
- [950] S. Abe, *Heat and entropy in nonextensive thermodynamics: Transmutation from Tsallis theory to Renyi-entropy-based theory*, Physica A **300**, 417 (2001).
- [951] A. Plastino, E.M.F. Curado and M. Casas, *Thermodynamics' microscopic connotations*, in *Thermodynamics - Fundamentals and Its Application in Science*, Chapter 5 (2012) (14 pages).
- [952] J. Naudts and M. Czachor, *Thermostatistics based on Kolmogorov-Nagumo averages: Unifying framework for extensive and nonextensive generalizations*, Phys. Lett. A **298**, 369 (2002).
- [953] A.M. Scarfone, H. Matsuzoe and T. Wada, *Consistency of the structure of Legendre transform in thermodynamics with the Kolmogorov-Nagumo average*, Phys. Lett. A (2016), in press, doi: <http://dx.doi.org/10.1016/j.physleta.2016.07.012>
- [954] T. Wada, A.M. Scarfone and H. Matsuzoe, *On the canonical distributions of a thermal particle in a generalized velocity-dependent potential*, Physica A (2019), in press.

- [955] H. Matsuzoe, A.M. Scarfone and T. Wada, *A Sequential structure of statistical manifolds on deformed exponential family*, in *Geometric Science of Information*, eds. F. Nielsen and F. Barbaresco, Lecture Notes in Computer Science **10589** (Springer, 2017).
- [956] J. Zhang and H. Matsuzoe, *Entropy, cross-entropy, relative entropy: Deformation theory(a)*, EPL **134**, 18001 (2021).
- [957] J. Zhang and T.K.L. Wong, *λ -Deformation: A canonical framework for statistical manifolds of constant curvature*, Entropy **24**, 193 (2022).
- [958] N. Kalogeropoulos, *The Legendre transform in non-additive thermodynamics and complexity*, Entropy **19**, 298 (2017), doi: 10.3390/e19070298.
- [959] U. Jairuk, T. Kongkoom and S. Yoo-Kong, *The q -deformed Calogero's Goldfish systems*, preprint (2025), 2504.14644 [nlin.SI].
- [960] A. Dukkipati, M.N. Murty, S. Bhatnagar, *Nongeneralizability of Tsallis Entropy by means of Kolmogorov-Nagumo averages under pseudo-additivity*, preprint (2005) [math-ph/0505078].
- [961] A. Dukkipati, M.N. Murty and S. Bhatnagar, *Nonextensive Pythagoras' theorem*, preprint (2006) [cs.IT/0611030].
- [962] J. Naudts and M. Czachor, *Thermodynamic origin of universal fluctuations and two-power laws*, preprint (2001) [cond-mat/0108354].
- [963] D.H.E. Gross, *Non-extensive Hamiltonian systems follow Boltzmann's principle not Tsallis statistics - Phase transitions, second law of thermodynamics*, Physica A **305**, 99 (2002).
- [964] Q.A. Wang, *Comment on "Nonextensive Hamiltonian systems follow Boltzmann's principle not Tsallis statistics — Phase transition, second law of thermodynamics" by Gross*, preprint (2003) [cond-mat/0303641].
- [965] E. Vives and A. Planes, *Intensive variables and fluctuations in non-extensive thermodynamics: The generalized Gibbs-Duhem equation and Einstein's formula*, preprint (2001) [cond-mat/0106428].
- [966] M. Baranger, *Why Tsallis statistics?*, in *Non Extensive Statistical Mechanics and Physical Applications*, eds. G. Kaniadakis, M. Lissia and A. Rapisarda, Physica A **305**, 27 (2002).
- [967] L. Velazquez and F. Guzman, *Relaxing the extensive postulates*, preprint (2001) [cond-mat/0107214].
- [968] L. Velazquez and F. Guzman, *Justifying the Tsallis formalism*, preprint (2001) [cond-mat/0107441].
- [969] L.C. Malacarne, R.S. Mendes and E.K. Lenzi, *Average entropy of a subsystem from its average Tsallis entropy*, Phys. Rev. E **65**, 046131 (2002).
- [970] P. Jizba and T. Arimitsu, *The world according to Renyi: Thermodynamics of fractal systems*, preprint (2001) [cond-mat/0108184].
- [971] H. Suyari, *Nonextensive entropies derived from the form invariance of pseudoadditivity*, Phys. Rev. E **65**, 066118 (2002).
- [972] H. Suyari, *Three classes of nonextensive entropies characterized by Shannon additivity and pseudoadditivity*, preprint (2002) [cond-mat/0205001].
- [973] H. Suyari, *Generalization of Shannon-Khinchin axioms to nonextensive systems and the uniqueness theorem*, preprint (2002) [cond-mat/0205004].
- [974] H. Suyari, *Generalization of Shannon-Khinchin axioms to nonextensive systems and the uniqueness theorem for the nonextensive entropy*, IEEE Transactions on Information Theory **50**, 1783 (2004).
- [975] V.M. Ilic, M.S. Stankovic and E.H. Mulalic, *Comments on "Generalization of Shannon-Khinchin axioms to nonextensive systems and the uniqueness theorem for the nonextensive entropy"*, IEEE Transactions on Information Theory **59** (10), 6950-6952 (2013).
- [976] V.M. Ilic and M.S. Stankovic, *Generalized Shannon-Khinchin axioms and uniqueness theorem for pseudo-additive entropies*, Physica A **411**, 138-145(2014), doi: <http://dx.doi.org/10.1016/j.physa.2014.05.009>
- [977] H. Suyari, *On the most concise set of axioms and the uniqueness theorem for Tsallis entropy*, J. Phys. A **35**, 10731 (2002).
- [978] N.J.A. Harvey, J. Nelson and K. Onak, *Sketching and streaming entropy via approximation theory*, Proc. 49th Annual IEEE Symposium on Foundations of Computer Science, 489-498 (2008).
- [979] E.G.D. Cohen, *Statistics and dynamics*, Physica A **305**, 19 (2002).
- [980] E.G.D. Cohen, *Some recent advances in classical statistical mechanics*, in *Dynamics and Dissipation*, eds. P. Garbaczewski and R. Olkiewicz, Lecture Notes in Physics **597** (Springer, Berlin, 2002), p. 7.
- [981] F. Pennini, *Teoria de la informacion y mecanicas generalizadas*, PhD Thesis (August 2001, Universidad Nacional de La Plata-Argentina).
- [982] C. Tsallis, E.P. Borges and F. Baldovin, *Mixing and equilibration: Protagonists in the scene of nonextensive statistical mechanics*, in *Non Extensive Statistical Mechanics and Physical Applications*, eds. G. Kaniadakis, M. Lissia and A. Rapisarda, Physica A **305**, 1 (2002).

- [983] F. Baldovin, L.G. Moyano, A.P. Majtey, A. Robledo and C. Tsallis, *Ubiquity of metastable-to-stable crossover in weakly chaotic dynamical systems*, Physica A **340**, 205 (2004).
- [984] L.G. Moyano, *Mecanica Estatística Nao-Extensiva em Sistemas Complexos: Fundamentos Dinâmicos e Aplicações*, Doctor Thesis (Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro, Brazil, April 2006).
- [985] L.G. Moyano, A.P. Majtey and C. Tsallis, *Weak chaos in large conservative system — Infinite-range coupled standard maps*, in *Complexity, Metastability and Nonextensivity*, Proc. 31st Workshop of the International School of Solid State Physics (20-26 July 2004, Erice-Italy), eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 123 [cond-mat/0501035].
- [986] L.G. Moyano, A.P. Majtey and C. Tsallis, *Weak chaos and metastability in a symplectic system of many long-range-coupled standard maps*, Eur. Phys. J. B **52**, 493-500 (2006).
- [987] H. van Beijeren, *Generalized dynamical entropies in weakly chaotic systems*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 90 (2004).
- [988] A. Pluchino, V. Latora and A. Rapisarda, *Glassy dynamics in the HMF model*, Physica A **340**, 187 (2004).
- [989] D.M.R. Ibacache, *Clasificación y formación de múltiples clusters contra-propagantes en el Modelo Hamiltoniano de Campo Medio atractivo*, Master Thesis (Facultad de Ciencias Físicas y Matemáticas, Universidad de Concepción, Chile, 2022).
- [990] A. Pluchino, V. Latora and A. Rapisarda, *Effective spin-glass Hamiltonian for the anomalous dynamics of the HMF model*, Physica A **370**, 573-584 (2006).
- [991] S. Yan, Q. Wang and S. Liu, *Towards a dynamical temperature of finite Hamiltonian systems*, Physica A **388**, 4943-4949 (2009).
- [992] L. Sgurance, D.H.E. Gross and S. Ruffo, *Apparent fractal dimensions in the HMF model*, Transport Theory and Statistical Physics **34**, 431-440 (2005).
- [993] A. Rapisarda and A. Pluchino, *Nonextensive thermodynamics and glassy behavior*, Europhysics News **36**, 202 (2005) [Europhysics News Special Issue *Nonextensive Statistical Mechanics: New Trends, New Perspectives*, eds. J.P. Boon and C. Tsallis (November/December 2005)].
- [994] Comment to “Nonextensive thermodynamics and glassy behaviour in Hamiltonian systems” by A. Rapisarda and A. Pluchino, Europhysics **36**, 202 (2005).
- [995] F. Baldovin and E. Orlandini, *Hamiltonian dynamics reveals the existence of quasistationary states for long-range systems in contact with a reservoir*, Phys. Rev. Lett. **96**, 240602 (2006) (4 pages).
- [996] F. Baldovin and E. Orlandini, *Incomplete equilibrium in long-range interacting systems*, Phys. Rev. Lett. **97**, 100601 (2006) (4 pages).
- [997] C. Tsallis, A. Rapisarda, A. Pluchino and E.P. Borges, *On the non-Boltzmannian nature of quasi-stationary states in long-range interacting systems*, Physica A **381**, 143-147 (2007).
- [998] A. Pluchino, A. Rapisarda and C. Tsallis, *Nonergodicity and central limit behavior in long-range Hamiltonians*, Europhys. Lett. **80**, 26002 (2007) (6 pages).
- [999] A. Pluchino and A. Rapisarda, *Nonergodicity and central limit behavior for systems with long-range interactions*, SPIE **2**, 6802-32 (2007) (7 pages).
- [1000] N. Bolandhemat and M.M. Rahman, *Thermodynamics and critical behaviors of long-range interacting magnetic system using Tsallis non-extensive statistics*, J. Computational and Theoretical Nanoscience **12** (3), 464-467 (2015).
- [1001] A. Pluchino, A. Rapisarda and C. Tsallis, *A closer look at the indications of q-generalized Central Limit Theorem behavior in quasi-stationary states of the HMF model*, Physica A **387**, 3121-3128 (2008).
- [1002] A. Figueiredo, T.M. Rocha Filho and M.A. Amato, *Ergodicity and central limit theorem in systems with long-range interactions*, Europhys. Lett. **83**, 30011 (2008) (6 pages).
- [1003] A. Pluchino, A. Rapisarda and C. Tsallis, *Comment on “Ergodicity and central limit theorem in systems with long-range interactions” by Figueiredo A. et al*, Europhys. Lett. **85**, 60006 (2009) (2 pages).
- [1004] A. Figueiredo, T.M. Rocha Filho and M.A. Amato, *Reply to the Comment by A. Pluchino et al*, Europhys. Lett. **85**, 60007 (2009) (2 pages).
- [1005] L.J.L. Cirto, V.R.V. de Assis and C. Tsallis, *Non-Gaussian behaviour in a long-range hamiltonian system*, in Proceedings of the XXXIV National Meeting of Condensed Matter Physics (Iguassu, Brazil, 2011); <http://www.sbf1.sbfisica.org.br/eventos/enf/2011/prog/trabalhos.asp?sesId=110>
- [1006] L.J.L. Cirto, V.R.V. Assis and C. Tsallis, *Influence of the interaction range on the thermostatics of a classical many-body system*, Physica A **393**, 286-296 (2014), doi: <http://dx.doi.org/10.1016/j.physa.2013.09.002>
- [1007] L.J.L. Cirto, L.S. Lima and F.D. Nobre, *Controlling the range of interactions in the classical inertial ferromagnetic Heisenberg model: Analysis of metastable states*, JSTAT P04012 (2015) (18 pages).

- [1008] A. Rodriguez, F.D. Nobre and C. Tsallis, *d-Dimensional classical Heisenberg model with arbitrarily-ranged interactions: Lyapunov exponents and distributions of momenta and energies*, Entropy **21**, 31 (2019).
- [1009] A. Rodriguez, F.D. Nobre and C. Tsallis, *Quasi-stationary-state duration in d-dimensional long-range model*, Physical Review Research **2**, 023153 (2020).
- [1010] A. Rodriguez, F.D. Nobre and C. Tsallis, *Quasi-stationary-state duration in the classical d-dimensional long-range inertial XY ferromagnet*, Phys. Rev. E **103**, 042110 (2021).
- [1011] A. Rodriguez, F.D. Nobre and C. Tsallis, *Criticality in the duration of quasistationary state*, Physical Review E **104**, 014144 (2021).
- [1012] A. Rodriguez, F.D. Nobre and C. Tsallis, *Finite-size scaling of quasi-stationary-state temperature*, Phys. Rev. E **105**, 044111 (2022).
- [1013] A. Rodriguez, F.D. Nobre and C. Tsallis, *Criticality in the duration of the quasistationary state of the d-dimensional α -Heisenberg ferromagnet*. Phys. Rev. E **110**, 064131 (2024).
- [1014] L.J.L. Cirto, *Mecanica Estatística Nao Extensiva e Sistemas Hamiltonianos de Longo Alcance e Aplicacoes Recentes de Entropias Nao Aditivas*, Doctor Thesis (Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro, 2016).
- [1015] S.A. Shojaeezadeh and S.M. Amiri, *Estimation of two-dimensional velocity distribution profile using General Index Entropy in open channels*, Physica A **491**, 912-925 (2018), doi: 10.1016/j.physa.2017.09.096
- [1016] N. Ahamed and S. Kundu, *Fractional entropy-based modeling of suspended concentration distribution of type I and type II and sediment discharge in pipe and open-channel turbulent flows*, Z. Angew. Math. Phys. **74**, 101 (2023).
- [1017] M. Roy, H.K. Patel, S. Arora and B. Kumar, *Efficacy of Tsallis entropy for velocity estimation in an alluvial channel under different experimental scenarios*, Stochastic Environmental Research and Risk Assessment (2023).
- [1018] D. Nedela, T. Tichy and G. Torri, *Systemic risk detection using an entropy approach in portfolio selection strategy*, Decisions in Economics and Finance (2024).
- [1019] A. Sharma, H. Kumar and B. Kumar, *One-dimensional velocity distribution in seepage bed open channels using Tsallis entropy*, ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering Archive **9** (4) (2023).
- [1020] M. Kumbhakar and C.W. Tsai, *A probabilistic model on streamwise velocity profile in open channels using Tsallis relative entropy theory*, Chaos, Solitons and Fractals **165**, 112825 (2022).
- [1021] J.K. Vyas, M. Perumal and T. Moramarco, *Discharge estimation using Tsallis and Shannon entropy theory in natural channels*, Water **12**, 1786 (2020), doi: 10.3390/w12061786
- [1022] A. Kazemian-Kale-Kale, H. Bonakdari, A. Gholami, Z.S. Khozani, A.A. Akhtari and B. Gharabaghi, *Uncertainty analysis of shear stress estimation in circular channels by Tsallis entropy*, Physica A **510**, 558-576 (2018).
- [1023] B. Lashkar-Ara, N. Kalantari, Z.S. Khozani and A. Mosavi, *Assessing a smart technology versus a mathematical model to estimate the transverse shear stress distribution in a rectangular channel*, preprint (2021), doi: 10.20944/preprints202102.0470.v1
- [1024] A. Kazemian-Kale-Kale, A. Gholami, M. Rezaie-Balf, A. Mosavi, A.A. Sattar, B. Gharabaghi and H. Bonakdari, *A Bayesian Monte-Carlo uncertainty model for assessment of shear stress entropy*, preprint (2020), doi: 10.20944/preprints202001.0108.v1
- [1025] A. Kazemian-Kale-Kale, A. Gholami, M. Rezaie-Balf, A. Mosavi, A.A. Sattar, B. Gharabaghi and H. Bonakdari, *Uncertainty assessment of entropy-based circular channel shear stress prediction models using a novel method*, Geosciences **11**, 308 (2021), doi: 10.3390/geosciences11080308
- [1026] B. Lashkar-Ara, N. Kalantari, Z.S. Khozani and A. Mosavi, *Assessing a machine learning versus a mathematical model to estimate the transverse shear stress distribution in a rectangular channel*, Mathematics **9**, 596 (2021), doi: 10.3390/math9060596
- [1027] G. Lopes, C. Marcon and F. Moraes, *Application of machine learning techniques for secure traffic in NoC-based Manycores*, Progress Seminar (2019).
- [1028] H. Algabroun and L. Hakansson, *Parametric machine learning?based adaptive sampling algorithm for efficient IoT data collection in environmental monitoring*, Journal of Network and Systems Management **33**, 5 (2025).
- [1029] Y. Huang, *An overview of the development and applications of information entropy*, Proceedings of Machine Learning: Integrating machine learning techniques to advance network security - CONFMPSCS (2024).
- [1030] D. Sharma, *Data-driven algorithm design and principled hyperparameter tuning in machine learning*, Doctor Thesis (Computer Science Department, School of Computer Science, Carnegie Mellon University, 2024).

- [1031] N. Makke and S. Chawla, *Data-driven discovery of Tsallis-like distribution using symbolic regression in high-energy physics*, PNAS Nexus **3**, 467 (2024).
- [1032] N.P. Bhatta, *ML-assisted side channel security approaches for hardware Trojan detection and Puf modeling attacks*, Master Thesis (Computer Engineering, Wright State University, 2024).
- [1033] M.K. Oshtorjani, *Stochastic simulations and machine learning modeling to predict bedload transport and bed topography*, Doctor Thesis (Ecole Polytechnique Federale de Lausanne, 2024).
- [1034] R. Nock, E. Amid, F. Nielsen, A. Soen and M.K. Warmuth, *Tempered Calculus for ML: Application to Hyperbolic Model Embedding*, preprint (2024), 2402.04163 [cs.LG].
- [1035] T. Davies, *Analysis of attention learning schemes and the design of an attention integration into learning vector quantization*, Master Thesis (Mittweida, 2023).
- [1036] M.H. Afsharmovahed, G.G. Amiri and E. Darvishan, *A novel damage detection approach based on feature extraction and selection using machine learning without signal processing: A case study on the Tianjin Yonghe bridge*, Iranian Journal of Science and Technology, Transactions of Civil Engineering (2023).
- [1037] M.A.S. Afshar, M.R. Alipour, S.N. Gashti and J. Sadeghi, *Topological insights into black hole thermodynamics: Non-extensive entropy in CFT framework*, preprint (2025), 2501.00955 [gr-qc].
- [1038] M. Zecchin, *Robust machine learning approaches to wireless communication networks*, Doctor Thesis (Université Sorbonne, 2022).
- [1039] A.V. Lackovic, *Digital signal classification utilizing adaptive information entropy measures and machine learning*, Doctoral Thesis (University of Rijeka, Faculty of Engineering, 2024).
- [1040] I.A. Mageed, *Formalism of Renyian maximum entropy of stable M/G/1 queue with geometric mean and shifted geometric mean constraints with potential GeoM applications to wireless sensor networks*, electronic Journal of Computer Science and Information Technology **9** (1) (2023).
- [1041] K. Topal, A.C. Gunhan and G.B. Bagci, *Predicting annus mirabilis with machine learning: Turkish movie industry*, Multimedia Tools and Applications (2023), doi: 10.1007/s11042-023-16212-0
- [1042] A.C.S.V. Negreiros, I.D. Lins, C.B.S. Maior and M.C. Moura, *Automated detection of oil spills in images: combining a novel feature extraction technique based on the q-exponential distribution with machine learning models*, preprint (2022).
- [1043] R. Brekelmans, T. Genewein, J. Grau-Moya, G. Deletang, M. Kunesch, S. Legg and P. Ortega, *Your policy regularizer is secretly an adversary*, preprint (2022), 2203.12592 [cs.LG].
- [1044] K.S. Bohnsack, M. Kaden, J. Abel, S. Saralajew and T. Villmann, *The resolved mutual information function as a structural fingerprint of biomolecular sequences for interpretable machine learning classifiers*, Entropy **23**, 1357 (2021), doi: 10.3390/e23101357
- [1045] S. Saha, K. Jindal, D. Shakti, S. Tewary and V. Sardana, *Chirplet transform-based machine-learning approach towards classification of cognitive state change using galvanic skin response and photoplethysmography signals*, Expert Systems (Wiley, 2022), doi: 10.1111/exsy.12958
- [1046] R.P. Bonidia, A.P.A. Santos, B.L.S. de Almeida, P.F. Stadler, U.N. da Rocha, D.S. Sanches and A.C.P.L.F. de Carvalho, *Information theory for biological sequence classification: A novel feature extraction technique based on Tsallis entropy*, Entropy **24**, 1398 (2022).
- [1047] R.P. Bonidia, *BioAutoML: Democratizing machine learning in life sciences*, Doctor Thesis (Instituto de Ciencias Matematicas e de Computacao, Universidade de Sao Paulo-Sao Carlos, 2024).
- [1048] R. Bachelard and M. Kastner, *Universal threshold for the dynamical behavior of lattice systems with long-range interactions*, Phys. Rev. Lett. **110**, 170603 (2013) (5 pages).
- [1049] N. Komatsu, *Time-reversibility, instability and thermodynamics in N-body systems interacting with long-range potentials*, IUTAM Symposium on 50 Years of Chaos: Applied and Theoretical C 27 (Kyoto, Japan, Nov 28 to Dec 2 2011) (2 pages).
- [1050] M.D. Correia and C. Tsallis, *Calculo numerico da funcao distribuicao de probabilidades marginais em estatistica nao extensiva para o hamiltoniano HMF*, communicated at the 2nd Workshop of the National Institute of Science and Technology for Complex Systems (Rio de Janeiro, 1-5 March 2010).
- [1051] G. Miritello, *Dinamica nonlineare di oscillatori accoppiati con interazione a lungo raggio*, Master Thesis (University of Catania, 2008).
- [1052] G. Miritello, A. Pluchino and A. Rapisarda, *Anomalous and nonergodic dynamics in long-range interacting systems*, invited talk at SigmaPhi2008 (July 2008, Kolymbari, Crete).
- [1053] G. Miritello, A. Pluchino and A. Rapisarda, *Anomalous and nonergodic dynamics in long-range interacting systems*, communicated at the 7th International Conference in Nonextensive Statistical Mechanics: Foundations and Applications (27-31 October 2008, Iguacu-Brazil).

- [1054] G. Miritello, A. Pluchino and A. Rapisarda, *Central limit behavior in the Kuramoto model at the 'edge of chaos'*, Physica A **388**, 4818-4826 (2009).
- [1055] A. Pluchino and A. Rapisarda, *Metastability in the Hamiltonian Mean Field model and Kuramoto model*, Physica A **365**, 184-189 (2006).
- [1056] A. Alexandrov and A. Gorsky, *Information geometry and synchronization phase transition in Kuramoto model*, preprint (2022), 2211.15617 [cond-mat.stat-mech].
- [1057] F.A. Tamarit, G. Maglione, D.A. Stariolo and C. Anteneodo, *Quasi-stationary trajectories of the HMF model: A topological perspective*, Phys. Rev. E **71**, 036148 (2005).
- [1058] B. Atenas and S. Curilef, *Relationship between the average kinetic energy and the temperature out of equilibrium*, communicated at the Workshop on Statistical Physics, (Antofagasta, Chile, 19-20 December 2019).
- [1059] B. Atenas, S. Curilef and F. Pennini, *Complexity and disequilibrium in the dipole-type Hamiltonian mean-field model*, Chaos **32**, 113119 (2022).
- [1060] S. Curilef, *Derivation and analytical solutions of a non-linear diffusion equation applied to non-constant heat conductivity and ionic diffusion in glasses*, Chaos **32**, 113133 (2022), doi: 10.1063/5.0105154
- [1061] M. Leo, R.A. Leo and P. Tempesta, *Thermostatistics in the neighborhood of the π -mode solution for the Fermi-Pasta-Ulam β system: From weak to strong chaos*, J. Stat. Mech. P04021 (2010) (13 pages).
- [1062] M. Leo, R.A. Leo, P. Tempesta and C. Tsallis, *Non Maxwellian behaviour and quasi-stationary regimes near the modal solutions of the Fermi-Pasta-Ulam β -system*, Phys. Rev. E **85**, 031149 (2012).
- [1063] M. Leo, R.A. Leo and P. Tempesta, *A non-Boltzmannian behavior of the energy distribution for quasi-stationary regimes of the Fermi-Pasta-Ulam system*, Annals Phys. **333**, 12-18 (2013).
- [1064] T. Bountis, *Long range interactions enhance stability in 1-D Hamiltonian lattices*, Seminars / Webinars (CRANS-Center for Research and Applications in Nonlinear Systems, University of Patras, 2023).
- [1065] C.G. Antonopoulos, T.C. Bountis and V. Basios, *Quasi-stationary chaotic states in multi-dimensional Hamiltonian systems*, Physica A **390**, 3290-3307 (2011).
- [1066] T. Bountis, *From mechanical to biological oscillator networks: The role of long range interactions*, Eur. Phys. J. Special Topics **225**, 1017-1035 (2016), doi: 10.1140/epjst/e2016-02652-5
- [1067] T. Bountis, T. Manos and C. Antonopoulos, *Complex statistics in Hamiltonian barred galaxy models*, Celest. Mech. Dyn. Astr. **113**, 63-80 (2012), doi: 10.1007/s10569-011-9392-9
- [1068] T. Bountis and H. Skokos, *Complex Hamiltonian Dynamics*, Springer Series in Synergetics (Springer, Berlin, 2012).
- [1069] G. Ruiz, T. Bountis and C. Tsallis, *Time-evolving statistics of chaotic orbits of conservative maps in the context of the Central Limit Theorem*, Int. J. Bifurcation and Chaos **22** (9), 1250208 (2012) (18 pages).
- [1070] Y.Y. Yamaguchi, J. Barre, F. Bouchet, T. Dauxois and S. Ruffo, *Stability criteria of the Vlasov equation and quasi-stationary states of the HMF model*, Physica A **337**, 36 (2004).
- [1071] J. Barre, F. Bouchet, T. Dauxois, S. Ruffo and Y.Y. Yamaguchi, *The Vlasov equation and the Hamiltonian mean-field model*, Physica A **365**, 177-183 (2006).
- [1072] F. Bouchet and T. Dauxois, *Prediction of anomalous diffusion and algebraic relaxations for long-range interacting systems, using classical statistical mechanics*, Phys. Rev. E **72**, 045103 (2005).
- [1073] F. Bouchet and T. Dauxois, *Out of equilibrium statistical mechanics with long range interactions: Long range temporal correlations and anomalous diffusion*, Proc. of Statistical Mechanics of Non-Extensive Systems, Comptes Rendus Acad. Sc. (Paris) (2006), in press.
- [1074] A. Antoniazzi, D. Fanelli, J. Barre, P.-H. Chavanis, T. Dauxois and S. Ruffo, *Maximum entropy principle explains quasi-stationary states in systems with long-range interactions: The example of the Hamiltonian mean-field model*, Phys. Rev. E **75**, 011112 (2007) (4 pages).
- [1075] A. Antoniazzi, F. Califano, D. Fanelli and S. Ruffo, *Exploring the thermodynamic limit of Hamiltonian models: Convergence to the Vlasov equation*, Phys. Rev. Lett. **98**, 150602 (2007).
- [1076] F. Borgonovi, G.L. Celardo, M. Maiani and E. Pedersoli, *Broken ergodicity in classically chaotic spin systems*, J. Stat. Phys. **116**, 1435 (2004).
- [1077] C. Anteneodo and R.O. Vallejos, *Vlasov stability of the Hamiltonian mean field model*, Physica A **344**, 383 (2004).
- [1078] C. Anteneodo and R.O. Vallejos, *Vlasov analysis of relaxation and meta-equilibrium*, in *Complexity, Metastability and Nonextensivity*, Proc. 31st Workshop of the International School of Solid State Physics (20-26 July 2004, Erice-Italy), eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 113.

- [1079] E. Romera, J.C. Angulo and J.S. Dehesa, *The Hausdorff entropic moment problem*, J. Math. Phys. **42**, 2309 (2001).
- [1080] J. Naudts and M. Czachor, *Generalized thermostatics and Kolmogorov-Nagumo averages*, preprint (2001) [cond-mat/0110077].
- [1081] L. Velazquez and F. Guzman, *Softening the extensive postulates*, preprint (2001) [cond-mat/0107441].
- [1082] E.K. Lenzi, R.S. Mendes, L.R. da Silva and L.C. Malacarne, *Remarks on $(1 - q)$ expansion and factorization approximation in the Tsallis nonextensive statistical mechanics*, Phys. Lett. A **289**, 44 (2001).
- [1083] R.S. Johal, *Generalized bit-moments and cumulants based on discrete derivative*, Phys. Lett. A **294**, 292 (2002).
- [1084] L. Rebollo-Neira and A. Plastino, *Nonextensive maximum-entropy-based formalism for data subset selection*, Phys. Rev. E **65**, 011113 (2002).
- [1085] L. Rebollo-Neira and A. Plastino, *Constructive approximations of the $q = 1/2$ maximum entropy distribution from redundant and noisy data*, Phys. Rev. E **70**, 021104 (2004).
- [1086] Z. Xu, L. Rebollo-Neira and A. Plastino, *Subspace modelling for structured noise suppression*, Physica A **389**, 2030-2035 (2010).
- [1087] T. Kobayashi and T. Aoyama, *Adaptive absolute-relative rating for noise rejection in behavioral cloning based on Tsallis statistics*, IEEE/SICE International Symposium on System Integration (January 21-24, 2025, Munich, Germany).
- [1088] X. Chen and C.L. Wang, *Noise suppression for Lamb wave signals by Tsallis mode and fractional-order differential*, Acta Physica Sinica **63** (18) (2014).
- [1089] M.P. Leubner, *A nonextensive entropy approach to kappa-distributions*, preprint (2001) [astro-ph/0111444].
- [1090] S.R. Addison and J.E. Gray, *Is extensivity a fundamental property of entropy?*, J. Phys. A **34**, 7733 (2001).
- [1091] Q.A. Wang, *Many-body q -exponential distribution prescribed by factorization hypothesis*, preprint (2001) [cond-mat/0112211].
- [1092] E. Vives and A. Planes, *Is Tsallis thermodynamics nonextensive?*, Phys. Rev. Lett. **88**, 020601 (2002).
- [1093] V. Garcia-Morales and J. Cervera, *Comment on "Is Tsallis thermodynamics nonextensive?" by E. Vives and A. Planes*, preprint (2003) [cond-mat/0310642].
- [1094] H. Touchette, *When is a quantity additive, and when is it extensive?*, Physica A **305**, 84 (2002).
- [1095] W. Tatsuaki, *On the thermodynamic stability conditions of Tsallis' entropy*, Phys. Lett. A **297**, 334-337 (2002).
- [1096] T. Yamano, *A possible extension of Shannon's information theory*, Entropy **3**, 280 (2001).
- [1097] Q.A. Wang and A. Le Mehaute, *Extensive form of equilibrium nonextensive statistics*, J. Math. Phys. **43**, 5079 (2002).
- [1098] J. Naudts, *Deformed exponentials and logarithms in generalized thermostatics*, Physica A **316**, 323 (2002).
- [1099] J. Naudts, *Quantum statistical manifold: The linear growth case*, Rep. Mathematical Physics **84** (2), 151 (2019).
- [1100] E.K. Lenzi, *Mecanica estatística não extensiva - Aplicações a propriedades de transporte*, Doctor Thesis (Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro, March 2002).
- [1101] R. Trasarti-Battistoni, *Euclidean and Riemannian geometrical approaches to non-extensive thermo-statistical mechanics*, preprint (2002) [cond-mat/0203536].
- [1102] A.B. Adib, A.A. Moreira, J.S. Andrade Jr. and M.P. Almeida, *Tsallis thermostatics for finite systems: A Hamiltonian approach*, Physica A **322**, 276 (2003).
- [1103] A.K. Aringazin and M.I. Mazhitov, *Quasicanonical Gibbs distribution and Tsallis nonextensive statistics*, Physica A **325**, 409 (2003).
- [1104] C. Beck and E.G.D. Cohen, *Superstatistics*, Physica A **322**, 267 (2003).
- [1105] P. Jizba, J. Korbel, H. Lavicka, M. Proks, V. Svoboda and C. Beck, *Transitions between superstatistical regimes: validity, breakdown and applications*, Physica A **493**, 29-46 (2018).
- [1106] S. Guan, Q. Chang and W. Yao, *Thermodynamic duality symmetry and uncertainty relation between conjugate variables in superstatistics*, preprint (2022), 2207.09635 [cond-mat.stat-mech].
- [1107] S. Davis, G. Avaria, B. Bora, J. Jain, J. Moreno, C. Pavez and L. Soto, *Single-particle velocity distributions of collisionless, steady-state plasmas must follow superstatistics*, preprint (2019), 1906.08072 [cond-mat.stat-mech].
- [1108] S. Davis, G. Avaria, B. Bora, J. Jain, J. Moreno, C. Pavez and L. Soto, *Kappa distribution from particle correlations in nonequilibrium, steady-state plasmas*, Phys. Rev. E **108**, 065207 (2023).
- [1109] S. Davis, *A superstatistical measure of distance from canonical equilibrium*, J. Phys. A **57** (29) (2024).

- [1110] G.L. Vasconcelos, D.S.P. Salazar and A.M.S. Macedo, *A maximum entropy approach to H-theory: Statistical mechanics of hierarchical systems*, preprint (2017), 1706.09963 [cond-mat.stat-mech].
- [1111] S. Abe, C. Beck (2) and E.G.D. Cohen, *Superstatistics, thermodynamics, and fluctuations*, Phys. Rev. E **76**, 031102 (2007).
- [1112] P. Rabassa and C. Beck, *Extreme value laws for superstatistics*, Entropy **16**, 5523-5536 (2014), doi:10.3390/e16105523
- [1113] V.V. Ryazanov, *Lifetime distributions in the methods of non-equilibrium statistical operator and superstatistics*, Eur. Phys. J. B **72**, 629-639 (2009).
- [1114] V.V. Ryazanov, *Relationship between chain reactions in a nuclear reactor and multifractality*, preprint (2024), arxiv 2402.18972
- [1115] V.V. Ryazanov, *Application of the concept of hierarchical subordination to chain reactions in a nuclear reactor*, preprint (2024), arxiv 2403.01462
- [1116] I. Santamaria-Holek and R.F. Rodriguez, *A nonequilibrium thermodynamic approach to generalized statistics for Brownian motion*, Physica A **366**, 141-148 (2006).
- [1117] S.A. Rashkovskiy, *Theory of Brownian motion in the Hamilton-Jacobi form*, Phys. Fluids **37**, 037199 (2025).
- [1118] S. Gheorghiu and M.O. Coppens, *Heterogeneity explains features of "anomalous" thermodynamics and statistics*, Proc. Natl. Acad. Sc. USA **101**, 15852 (2004).
- [1119] C. Beck, *Superstatistics: Theory and Applications*, in *Nonadditive entropy and nonextensive statistical mechanics*, ed. M. Sugiyama, Continuum Mechanics and Thermodynamics **16**, 293 (Springer-Verlag, Heidelberg, 2004).
- [1120] E.G.D. Cohen, *Superstatistics*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 35 (2004).
- [1121] C. Tsallis and A.M.C. Souza, *Constructing a statistical mechanics for Beck-Cohen superstatistics*, Phys. Rev. E **67**, 026106 (2003).
- [1122] F.J. Sevilla, A.V. Arzola and E. Puga Cital, *Stationary superstatistics distributions of trapped run-and-tumble particles*, Phys. Rev. E **99**, 012145 (2019).
- [1123] C. Caamano-Carrillo, J.E. Contreras-Reyes, M. Gonzalez-Navarrete and E. Sanchez, *Bivariate superstatistics based on generalized gamma distribution*, Eur. Phys. J. B **93**, 43 (2020), doi: doi.org/10.1140/ep_jb/e2020-100606-8
- [1124] K. Ourabah, *Superstatistics from a dynamical perspective: Entropy and relaxation*, Phys. Rev. E **109**, 014127 (2024).
- [1125] K. Ourabah, *Reaction rates in quasiequilibrium states*, preprint (2024), 2412.10407 [cond-mat.stat-mech].
- [1126] E. Sanchez, *q-Weibull distribution to explain the PM2.5 air pollution concentration in Santiago de Chile*, Eur. Phys. J. B **96**, 108 (2023).
- [1127] M. Oliveira, J. Vasconcelos, F. Gomes-Silva and A. Nascimento, *Estimation and goodness-of-fit for the q-Weibull distribution via the Mellin transform*, Methodology and Computing in Applied Probability **27**, 38 (2025).
- [1128] A.A. Alahmadi, O. Albalawi, R.H. Khashab, A. Johannssen, S. Nasiru, S.M. Almarzouki and M. Elgarhy, *Modeling of lifetime scenarios with nonmonotonic failure rates*, PLoS ONE **20**(1), e0314237 (2025).
- [1129] M. Bildirici, O.O. Ersin and B. Ibrahim, *Chaos, fractionality, nonlinear contagion, and causality dynamics of the metaverse, energy consumption, and environmental pollution: Markov-switching generalized autoregressive conditional heteroskedasticity copula and causality methods*, Fractal Fract. **8**, 114 (2024).
- [1130] M. Bildirici, Y. Ucan and R. Tekercioglu, *Stochastic SO(2) Lie group method for approximating correlation matrices*, Mathematics **13**, 1496 (2025).
- [1131] P. Leleux, B. Lebichot, G. Guex and M. Saerens, *Sparse randomized policies for Markov decision processes based on Tsallis divergence regularization*, Knowledge-Based Systems 112105 (2024).
- [1132] M.N. Alshahrani, *Weighted Weibull inverse exponential model with application*, Advances and Applications in Statistics **89** (1), 55-72 (2023).
- [1133] T.N. Sindhu, A. Shafiq, S.A. Lone, Q.M. Al-Mdallal and T.A. Abushal, *Distributional properties of the entropy transformed Weibull distribution and applications to various scientific fields*, Scientific Reports **14**, 31827 (2024).
- [1134] M. Kamal, M. Alam, O.A. Alqasem, E.I. Mohamed, M.I. Habadi, D.K. Alnagar, R. Aldallal and A.S. Alghamdi, *Estimation and statistical properties of the Weibull-Rayleigh model with applications to industrial data*, Alexandria Engineering Journal **128**, 556-570 (2025).
- [1135] A.S. Hassan, O.A. Saudi and H.F. Nagy, *Sine inverted exponentiated Weibull distribution: Statistical inference and application*, The Egyptian Statistical Journal **68** (2), 34-64 (2024).

- [1136] Y.Y. Abdelall and A.S. Abdullah, *Bayesian inference on residual Tsallis entropy of the inverse Weibull model: A progressive type I censoring approach*, The Egyptian Statistical Journal **68** (2), 104-128 (2024).
- [1137] T. Mukherjee, B. Pati, C.R. Panigrahi and S. Beborotta, *Performance modeling of composite fading channels: an application to wearable wireless communication systems*, Discover Electronics **1**, 16 (2024).
- [1138] W. Chen, *The q -analogue of the extended generalized gamma distribution*, USRI Project, (Department of Statistical and Actuarial Sciences, The University of Western Ontario, 2022).
- [1139] J.E. Contreras-Reyes, *Mutual information matrix based on Renyi entropy and application*, preprint (2022).
- [1140] O. Obregon, J. Torres-Arenas and A. Gil-Villegas, *H-theorem and thermodynamics for generalized entropies that depend only on the probability*, preprint (2016), 1610.06596 [cond-mat.stat-mech].
- [1141] A. Gil-Villegas, O. Obregon and J. Torres-Arenas, *Computer simulation of effective potentials for generalized Boltzmann-Gibbs statistics*, J. Molecular Liquids (2017), in press, doi:10.1016/j.molliq.2017.10.027
- [1142] J.L. Lopez, O. Obregon and J. Torres-Arenas, *Thermodynamic geometry for a non-extensive ideal gas*, preprint (2017), 1710.00679 [cond-mat.stat-mech].
- [1143] O. Obregon and M. Ortega-Cruz, *Generalized entropies depending only on the probability and their quantum statistics*, Proceedings **19**, 169 (2018), doi:10.3390/ecea-4-05020
- [1144] E. van der Straeten and C. Beck, *Superstatistical distributions from a maximum entropy principle*, Phys. Rev. E **78**, 051101 (2008) (7 pages).
- [1145] E. van der Straeten and C. Beck, *Superstatistical fluctuations in time series: Applications to share-price dynamics and turbulence*, Phys. Rev. E **80**, 036108 (2009) (13 pages).
- [1146] A.M.C. Souza and C. Tsallis, *Stability of the entropy for superstatistics*, Phys. Lett. A **319**, 273 (2003).
- [1147] H. Wang, W. Deng and Z. Chen, *q -Index degree distribution in random networks via superstatistics*, preprint (2024), 2411.08066 [physics.soc-ph].
- [1148] A.M.C. Souza and C. Tsallis, *Stability analysis of the entropy for superstatistics*, Physica A **342**, 132 (2004).
- [1149] R. Hanel, S. Thurner and M. Gell-Mann, *Generalized entropies and the transformation group of superstatistics*, PNAS **110** 3539108 (2011) (5 pages).
- [1150] R. Hanel, S. Thurner and M. Gell-Mann, *Generalized entropies and logarithms and their duality relations*, PNAS **109** (47), 19151-19154 (2012).
- [1151] A.R. Plastino, C. Tsallis, R.S. Wedemann and H.J. Haubold, *Entropy optimization, generalized logarithms, and duality relations*, Entropy **24**, 1723 (2022).
- [1152] A.R. Plastino, C. Tsallis and R.S. Wedemann, *A family of nonlinear diffusion equations related to the q -error function*, Physica A **635**, 129475 (2024).
- [1153] C. Beck, *Superstatistics: Recent developments and applications*, in *Complexity, Metastability and Nonextensivity*, Proc. 31st Workshop of the International School of Solid State Physics (20-26 July 2004, Erice-Italy), eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 33 [cond-mat/0502306].
- [1154] C. Beck, *Recent developments in superstatistics*, Braz. J. Phys. **39**, 357-363 (2009).
- [1155] C. Beck, *Correlations in superstatistical systems*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 60-67 (New York, 2007).
- [1156] C. Beck, *Generalized statistical mechanics for super statistical systems*, Phil. Trans. R. Soc. A **369**, 453-465 (2011).
- [1157] H. Wang, W. Deng and Z. Chen, *Investigation of thermodynamic properties of classical oscillators under statistical and superstatistical frameworks*, preprint (2025), 2503.06535 [cond-mat.stat-mech].
- [1158] C. Vignat, A. Plastino and A.R. Plastino, *Superstatistics based on the microcanonical ensemble*, N. Cimento B **120**, 951-963 (2005).
- [1159] I. Lubashevsky, R. Friedrich, A. Heuer and A. Ushakov, *Generalized superstatistics of nonequilibrium Markovian systems*, Physica A **388**, 4535-4550 (2009).
- [1160] J.-F. Bercher, *Maximum entropy with fluctuating constraints: The example of K distributions*, Phys. Lett. A **372**, 4361-4363 (2008).
- [1161] C. Vignat and A. Plastino, *Power-law random walks*, Phys. Rev. E **74**, 051124 (2006) (5 pages).
- [1162] M. Ausloos and R. Lambiotte, *Brownian particle having a fluctuating mass*, Phys. Rev. E **73**, 011105 (2006).
- [1163] S. Jung and H.L. Swinney, *Velocity difference statistics in turbulence*, Phys. Rev. E **72**, 026304 (2005) (7 pages).
- [1164] S. Magni, H.E. Roman, R. Barni, C. Riccardi, Th. Pierre and D. Guyomarc'h, *Statistical analysis of correlations and intermittency of a turbulent rotating column in a magnetoplasma device*, Phys. Rev. E **72**, 026403 (2005) (7 pages).

- [1165] G. E-Ali, *Nonlinear structures in nonuniform magnetoplasma with non-Maxwellian distributions*, Doctor Thesis (Department of Physics Quaid-I-Azam University, Islamabad, 2018).
- [1166] C. Beck, E.G.D. Cohen and H.L. Swinney, *From time series to superstatistics*, Phys. Rev. E **72**, 056133 (2005) (8 pages).
- [1167] A.M.C. Souza and C. Tsallis, *Generalizing the Planck distribution*, in *Complexity, Metastability and Nonextensivity*, Proc. 31st Workshop of the International School of Solid State Physics (20-26 July 2004, Erice-Italy), eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 66 [cond-mat/0501389].
- [1168] R.D.B. Carvalho and A.M.C. Souza, *Generalizing Planck's distribution by using the Carati-Galgani model of molecular collisions*, Physica A **391**, 2911-2916 (2012).
- [1169] F. Sattin, *Superstatistics from a different perspective*, Physica A **338**, 437 (2004).
- [1170] H. Touchette and C. Beck, *Asymptotics of superstatistics*, Phys. Rev. E **71**, 016131 (2005) (6 pages).
- [1171] A.G. Bashkirov, *On maximum entropy principle, superstatistics, power-law distribution and Renyi parameter*, Physica A **340**, 153 (2004).
- [1172] C. Beck, *Superstatistics, escort distributions, and applications*, Physica A **342**, 139 (2004).
- [1173] S. Davis, *Fluctuating temperature outside superstatistics: thermodynamics of small systems*, preprint (2021), 2109.09560 [cond-mat.stat-mech].
- [1174] S. Davis, *First-principles derivation of the q -canonical ensemble in Bayesian superstatistics*, preprint (2021), 2112.11496 [cond-mat.stat-mech].
- [1175] E. Neyman, *Algorithmic Bayesian epistemology*, PhD Thesis (Graduate School of Arts and Sciences, Columbia University, 2024).
- [1176] G.R. Al-Dayian, A.A. EL-Helbawy and F.G. Abd El-Maksoud, *Bayesian and maximum likelihood estimation for mixture models of the new Topp-Leone-G family*, Journal of Business and Environmental Sciences **4** (2), 210-253 (2024).
- [1177] A.S. Hassan, D.S. Metwally, M. Elgarhy, H.E. Semary, A. Faal and R.E. Mohamed, *Sine power unit inverse Lindley model: Bayesian analysis and practical application*, Engineering Reports **7**, e70242 (2025).
- [1178] A. Mouzakitis and A. Liapakis, *Managerial infophysics unveiled: A systematic literature review on the amalgamation of business process management and information entropy analysis*, preprint (2025).
- [1179] M. Zecchin, S. Park, O. Simeone, M. Kountouris and D. Gesbert, *Robust PACm: Training ensemble models under model misspecification and outliers*, preprint (2022), 2203.01859 [cs.LG].
- [1180] P. Chomaz and F. Gulminelli, *Phase coexistence in finite systems*, Progr. Theor. Phys. (Suppl.) **146**, 135 (2002).
- [1181] F. Sattin, *Non-Gaussian probability distribution functions from maximum-entropy-principle considerations*, Phys. Rev. E **68**, 032102 (2003).
- [1182] S. Abe, *Generalized entropy optimized by a given arbitrary distribution*, J. Phys. A **36**, 8733 (2003).
- [1183] T.D. Frank, *Interpretation of Lagrange multipliers of generalized maximum-entropy distributions*, Phys. Lett. A **299**, 153 (2002).
- [1184] J. Naudts, *Deformed exponentials and logarithms in generalized thermostatistics*, Physica A **316**, 323-334 (2002).
- [1185] G. Kaniadakis, M. Lissia and A.M. Scarfone, *Deformed logarithms and entropies*, Physica A **340**, 41 (2004).
- [1186] G. Kaniadakis, *Statistical mechanics in the context of special relativity*, Phys. Rev. E **66**, 056125 (2002).
- [1187] V. Badescu and P. Landsberg, *Statistically q -deformed and τ -deformed systems*, Complexity **15**, 19-25 (2010).
- [1188] A.N. Gorban and I.V. Karlin, *Family of additive entropy functions out of thermodynamic limit*, Phys. Rev. E **67**, 016104 (2003).
- [1189] A.N. Gorban, I.V. Karlin and H.C. Ottinger, *Additive generalization of the Boltzmann entropy*, Phys. Rev. E **67**, 067104 (2003).
- [1190] A.N. Gorban, P.A. Gorban and G. Judge, *Entropy: The Markov ordering approach*, Entropy **12**, 1145-1193 (2010).
- [1191] A.N. Gorban, *General H -theorem and entropies that violate the second law*, Entropy **16**, 2408-2432 (2014), doi:10.3390/e16052408
- [1192] G. Judge and R.C. Mittelhammer, *Implications of the Cressie-Read family of additive divergences for information recovery*, Entropy **14**, 2427-2438 (2012).
- [1193] T. Wada, *On the thermodynamic stability conditions of Tsallis' entropy*, Phys. Lett. A **297**, 334-337 (2002).
- [1194] A. Golan, *Information and entropy econometrics - Editor's view*, J. Econometrics **107**, 1 (2002).
- [1195] S. Bwanakare, *Non-extensive entropy econometric model (NEE): The case of labour demand in the Podkarpacie province*, Acta Physica Polonica A **117** (4), 647-651 (2010).

- [1196] C. Ricotta, *On parametric evenness measures*, J. Theor. Biol. **222**, 189 (2003).
- [1197] C.R. Shalizi, *Maximum likelihood estimation of q -exponential (Tsallis) distributions*, preprint (2007) [math.ST/0701854].
- [1198] Y. Hirose, *Regularization methods based on the L_q -likelihood for linear models with heavy-tailed errors*, preprint (2020), 2008.10876 [stat.ME].
- [1199] T. Kobayashi and T. Enomoto, *Autonomous driving of personal mobility by imitation learning from small and noisy dataset*, comm. at 2024 IEEE/SICE International Symposium on System Integration (2024, Ha Long, Vietnam).
- [1200] P. Gimenez, L. Guarracino and M. Galea, *Robust estimation in functional comparative calibration models via maximum L_q -likelihood*, Braz. J. Probab. Stat. **36** (4), 725-750 (2022).
- [1201] F.Z. Dogru, Y.M. Bulut and O. Arslan, *Double reweighted estimators for the parameters of the multivariate t distribution*, Comm. Statistics - Theory and Methods **47** (19), 4751-4771 (2018).
- [1202] A. Gayen and M.A. Kumar, *Generalized Fisher-Darmonis-Koopman-Pitman theorem and Rao-Blackwell type estimators for power-law distributions*, preprint (2022), 2205.00530 [math.ST].
- [1203] P. Macedo, M. Scotto and E. Silva, *A new class of estimators to the linear regression model affected by collinearity and/or outliers*, preprint (2009), Economics Bulletin EB-09-00296.
- [1204] M.S. Tabas, *Using the generalized maximum Tsallis entropy for estimating the Ridge regression parameter*, Autumn and Winter **27** (2) (2022-2023).
- [1205] C. Shalizi and C. Dutang, *Tsallis q -exp distribution*, Package 'tsallisqexp' (2015); <http://bactra.org/research/tsallis-MLE/>
- [1206] A.G. Patriota, *A q -Exponential regression model*, Sankhya : The Indian Journal of Statistics **74-B**, Part. 1, 149-170 (2012).
- [1207] Y. Gao, N. Li, N. Ding, Y. Li, T. Dai and S.T. Xia, *Generalized local aggregation for large scale Gaussian process regression*, IEEE 2020 International Joint Conference on Neural Networks (IJCNN) (2020).
- [1208] H. Zhang and J. Liu, *Large-scale Gaussian process regression based on random Fourier features and local approximation with Tsallis entropy*, IEICE Transactions on Information and Systems E **106-D** (10), 1747-1751 (2023).
- [1209] D. Ferrari and Y. Yang, *Maximum L_q -likelihood estimation*, Annals Statistics **38**, 753-783 (2010).
- [1210] A.P. Dawid, *The geometry of proper scoring rules*, Annals of the Institute of Statistical Mathematics **59**, 77-93 (2007).
- [1211] A.P. Dawid, M. Musio and L. Ventura, *Minimum scoring rule Inference*, Scandinavian J. Statistics **43**, 123-138 (2016), doi: 10.1111/sjos.12168
- [1212] P. Sunehag, *On a connection between entropy, extensive measurement and memoryless characterization*, preprint (2007), 0710.4179 [physics.data-an].
- [1213] A.S. Martinez, R.S. Gonzalez and A.L. Espindola, *Generalized exponential function and discrete growth models*, Physica A **388**, 2922-2930 (2009).
- [1214] A.S. Martinez, R.S. Gonzalez and C.A.S. Tercariol, *Continuous growth models in terms of generalized logarithm and exponential functions*, Physica A **387**, 5679- 5687 (2008).
- [1215] A. Cichocki, *Generalized exponentiated gradient algorithms using the Euler two-parameter logarithm*, preprint (2025), 2502.17500 [cs.LG].
- [1216] I. Rondon, O. Sotolongo-Costa and J.A. Gonzalez, *A generalized q growth model based on nonadditive entropy*, Internat. J. Modern Physics B 2050281 (2020) (9 pages), doi: 10.1142/S0217979220502811
- [1217] B.C.T. Cabella and A.S. Martinez, *Data collapse, scaling functions, and analytical solutions of generalized growth models*, Phys. Rev. E **83**, 061902 (2011) (7 pages).
- [1218] B.C.T. Cabella, F. Ribeiro and A.S. Martinez, *Effective carrying capacity and analytical solution of a particular case of the Richards-like two-species population dynamics model*, Physica A **391**,1281-1286 (2012).
- [1219] F. Ribeiro, B.C.T. Cabella and A.S. Martinez, *Richards-like two species population dynamics model*, Theory Biosci. (2014), doi: 10.1007/s12064-014-0205-z
- [1220] E.H. Colombo and C. Anteneodo, *Nonlinear population dynamics in a bounded habitat*, J. Theoretical Biology **446**, 11-18 (2018).
- [1221] V. Dornelas, E.H. Colombo, C. Lopez, E. Hernandez-Garcia and C. Anteneodo, *Landscape-induced spatial oscillations in population dynamics*, Scientific Reports **11**, 3470 (2021).
- [1222] G.P. Karev, *Non-linearity and heterogeneity in modeling of population dynamics*, Mathematical Biosciences (2014) (8 pages), in press. 1?8
- [1223] B. Sayrafi, D. Van Gucht and M. Gyssens, *The implication problem for measure-based constraints*, Information Systems **33**, 221-239 (2008).

- [1224] J. A Bonachela, H. Hinrichsen and M.A. Munoz, *Entropy estimates of small data sets*, J. Phys. A **41**, 202001 (2008) (9 pages).
- [1225] D. Costa, E.M. Rocha and N. Ferreira, *Estimating data complexity and drift through a multiscale generalized impurity approach*, Journal of Computational Mathematics and Data Science **12**, 100098 (2024).
- [1226] Z.I. Botev and D.P. Kroese, *Non-asymptotic bandwidth selection for density estimation of discrete data*, Methodol. Comput. Appl. Probab. **10**, 435-451 (2008).
- [1227] B. Wang and P.H. Ho, *Energy-efficient routing and bandwidth allocation in OFDM-based optical networks*, J. Opt. Commun. Netw. **8** (2), 71-84 (2016).
- [1228] D. Chen, Z. Chen, J. Li and X. Wang, *Risk assessment of power optical cable network based on Tsallis entropy*, IEEE IAEAC(ISSN:2689-6621), 1368-1372 (2022).
- [1229] N. Leonenko, L. Pronzato and V. Savani, *A class of Renyi information estimators for multidimensional densities*, Annals of Statistics **36**, 2153-2182 (2008).
- [1230] N. Leonenko and L. Pronzato, *Correction of "A class of Renyi information estimators for multidimensional densities" Ann. Statist. **36**, (2008) 2153-2182*, (2 pages).
- [1231] N. Leonenko and L. Pronzato, *Correction of "A class of Renyi information estimators for multidimensional densities" Ann. Statist. **36**, (2008) 2153-2182 for the case $q < 1$* , (12 pages).
- [1232] N. Leonenko and L. Pronzato, *A class of Renyi information estimators for multidimensional densities (**36**, 2153 (2008))*, Ann. Statist. **38** (6), 3837-3838 (2010).
- [1233] N. Leonenko and O. Seleznev, *Statistical inference for the ϵ -entropy and the quadratic Renyi entropy*, J. Multivariate Analysis **101**, 1981-1994 (2010).
- [1234] N. Leonenko, L. Pronzato and V. Savani, *Estimation of entropies and divergences via nearest neighbors*, PROBABSTAT '06 **39**, 265-273 (2008).
- [1235] L. Pronzato and W.G. Muller, *Design of computer experiments: space filling and beyond*, Stat. Comput. **22**, 681-701 (2012).
- [1236] E.W. Koch, E.W. Rosolowsky, R.D. Boyden, B. Burkhart, A. Ginsburg, J.L. Loeppky and S.S.R. Offner, *TurboStat: Turbulence statistics in Python*, Astronomical J. **158**, 1 (2019) (11 pages).
- [1237] B. Burkhart, *Diagnosing turbulence in the neutral and molecular interstellar medium of galaxies*, Publications of the Astronomical Society of the Pacific **133**, 102001 (2021).
- [1238] A.A.B. Pessa and H.V. Ribeiro, *ordpy: A Python package for data analysis with permutation entropy and ordinal network methods*, Chaos **31** (6), 063110 (2120).
- [1239] P. Clifford and I.A. Cosma, *A simple sketching algorithm for entropy estimation*, Proceedings of the 16th International Conference on Artificial Intelligence and Statistics (AISTATS) 2013, Scottsdale, AZ, USA, Vol. **31**, 196-206, JMLR: WCP 31, 0908.3961 [stat.CO].
- [1240] J. Huang, Y. Dai and L. Huang, *Adaptive best-of-both-worlds algorithm for heavy-tailed multi-armed bandits*, 38th International Conference on Machine Learning (ICML) **162** (2022).
- [1241] S. Chakraborty, S. Sharma, A.K. Saha and A. Saha, *A novel improved whale optimization algorithm to solve numerical optimization and real-world applications*, Artificial Intelligence Review (2022), in press, doi: 10.1007/s10462-021-10114-z
- [1242] R. Levin, *Submodular optimization under uncertainty*, Doctor Thesis (School of Computer Science, Carnegie Mellon University, Pittsburgh, PA, USA, 2022).
- [1243] K.R.F. Angeles, E.B. Cuntapay, R.M. Dioses, V.A. Agustin and D.A.M. Cortez, *An enhanced Grasshopper optimization algorithm applied to feature selection*, United International Journal for Research and Technology **3** (7), 112-118 (2022).
- [1244] X. Gao, F. Liu, L. Pan, Y. Deng and S.B. Tsai, *Uncertainty measure based on Tsallis entropy in evidence theory*, Internat. J. of Intelligent Systems **34**, 3105-3120 (2019), doi: 10.1002/int.22185
- [1245] Y. Deng, *Uncertainty measure in evidence theory*, Science China, Information Sciences **63** 210201 (2020), doi: 10.1007/s11432-020-3006-9
- [1246] J. Su and Y. Deng, *An interval method to measure the uncertainty of basic probability assignment*, Soft Computing (2022), doi:10.1007/s00500-022-07114-8
- [1247] F. Liu, X. Gao, J. Zhao, Y. Deng, *Generalized belief entropy and its application in Identifying conflict evidence*, IEEE Access **7**, 126625-126633. (2019), doi: 10.1109/ACCESS.2019.2939332
- [1248] R. Yu and Y. Deng, *A generalization of Renyi entropy for basic probability assignment*, Comm. Statistics - Theory and Methods (2022), doi: 10.1080/03610926.2022.2037646
- [1249] W. Yamaka and S. Sriboonchitta, *Forecasting using information and entropy based on belief functions*, Complexity ID 3269647 (2020) (16 pages), doi: 10.1155/2020/3269647

- [1250] L. Trieste and G. Turchetti, *The nature, causes, and effects of skepticism on technology diffusion*, Technological Forecasting and Social Change **208**, 123663 (2024).
- [1251] A.L. Jusselme, F. Pichon, N.B. Abdallah and S. Destercke, *A note about entropy and inconsistency in evidence theory*, International Conference on Belief Functions, BELIEF 2021: Belief Functions: Theory and Applications, Springer Lecture Notes in Computer Science book series **12915**, 215-223 (2021).
- [1252] S.M. Duarte Queiros, *Effectiveness of the Kozachenko-Leonenko estimator for generalized entropic forms*, Phys. Rev. E **80**, 062101 (2009) (4 pages).
- [1253] M.Y.A. Riabi, G.R.M. Borzadaran and G.H. Yari, *β -entropy for Pareto-type distributions and related weighted distributions*, Statistics and Probability Lett. **80**, 1512-1519 (2010).
- [1254] M. Ausloos, *Zipf-Mandelbrot-Pareto model for co-authorship popularity*, preprint (2014), 1404.0269 [physics.soc-ph].
- [1255] Z. Neda, L. Varga and T.S. Biro, *Science and Facebook: the same popularity law!*, PLoS ONE **12** (7), e0179656 (2017), doi: 10.1371/journal.pone.0179656
- [1256] S. Chatzopoulos, T. Vergoulis, I. Kanellos, T. Dalamagas and C. Tryfonopoulos, *Further improvements on estimating the popularity of recently published papers*, Quantitative Science Studies (2021), in press.
- [1257] G. Chatzopoulos, G. Michas and F. Vallianatos, *Fracture network organization with continuation of injections in the Habanero field (Cooper Basin, Australia) disclosed by coda wave fluctuations*, Geomechanics for Energy and the Environment **36**, 100510 (2023).
- [1258] G. Rotundo, *Black-Scholes-Schrodinger-Zipf-Mandelbrot model framework for improving a study of the coauthor core score*, Physica A **404**, 296-301 (2014).
- [1259] A.V. Miransky, M. Davison, M. Reesor and S.S. Murtaza, *Using entropy measures for comparison of software traces*, Information Sciences **203**, 59-72 (2012).
- [1260] S. Sharma and P.C. Pendharkar, *On the analysis of power law distribution in software component sizes*, J. Software: Evolution and Process (2021), in press, doi: 10.1002/smr.2417
- [1261] S. Sharma, *Analysis of faults in software systems using Tsallis distribution: A unified approach*, Software **1**, 473-484 (2022).
- [1262] S. Bwanakare, *A stochastic non-homogeneous constant elasticity of substitution production function as an inverse problem: A non-extensive entropy estimation approach*, Acta Physica Polonica A **123** (3), 502-507 (2013).
- [1263] J.V.T. Lima, J.M. Araujo, S.L.E.F. da Silva, G. Corso and G.Z.S. Lima, *Generalized statistics: Applications to data inverse problems with outlier-resistance*, PLoS ONE **18** (3) (2023).
- [1264] S.L.E.F. da Silva, A. Karsou, A. de Souza, F. Capuzzo, F. Costa, R. Moreira and M. Cetale, *A graph-space optimal transport objective function based on q-statistics to mitigate cycle-skipping issues in FWI*, preprint (2022).
- [1265] A.A.Q. da Silveira, R.F. de Souza, J.S. Maciel, J.L.S. da Costa, D.T. dos Santos, J.M. Araujo, S.L.E.F. da Silva and G. Corso, *Puzzle in inverse problems: Tsallis noise and Tsallis norm*, Eur. Phys. J. B **96**, 30 (2023).
- [1266] S. Bwanakare, M. Cierpial-Wolan and A. Mantaj, *Predicting gross domestic product components through Tsallis entropy econometrics*, Proceedings 8th Polish Symposium of Physics in Economy and Social Sciences FENS (Rzeszow, November 4-6, 2015), Acta Physica Polonica A **129** (5), 993-996 (2016).
- [1267] O.M. Ardakani, M. Asadi, N. Ebrahimi and E.S. Soofi, *Variants of mixtures: Information properties and applications*, JIRSS **20** (01), 27-59 (2021), doi: 10.52547/jirss.20.1.27
- [1268] K. Gajowniczek, A. Orlowski and T. Zabkowski, *Entropy based trees to support decision making for customer churn management*, Proceedings 8th Polish Symposium of Physics in Economy and Social Sciences FENS (Rzeszow, November 4-6, 2015), Acta Physica Polonica A **129** (5), 971-979 (2016).
- [1269] K.K. Raghuvanshi, A. Agarwal, A.K. Singh and K. Jain, *Time-dependent entropic analysis of software bugs*, Int. J. Syst. Assur. Eng. Manag. (2023), doi: 10.1007/s13198-023-01976-3
- [1270] M. Narmontas, P. Rupsys and E. Petrauskas, *Models for tree taper form: The Gompertz and Vasicek diffusion processes framework*, Symmetry **12**, 80 (2020), doi: 10.3390/sym12010080
- [1271] M.Z. Anis, *The Unit-Gompertz distribution: Characterizations and properties*, preprint (2020), 2010.04347 [math.ST].
- [1272] M.Z. Anis and K. Bera, *The unit-Gompertz distribution revisited: properties and characterizations*, Rendiconti del Circolo Matematico di Palermo Series 2 (2024).
- [1273] M. Denys, M. Jagielski, T. Gubiec, R. Kutner and H.E. Stanley, *Statistical collapse of excessive market losses*, Proceedings 8th Polish Symposium of Physics in Economy and Social Sciences FENS (Rzeszow, November 4-6, 2015), Acta Physica Polonica A **129** (5), 916-913 (2016).

- [1274] D.J.C. Koegelenberg, *A framework for intraday ensemble trading on the foreign exchange market*, Doctor Thesis (Faculty of Engineering at Stellenbosch University, 2024).
- [1275] S. Curilef, D. Gonzalez and C. Calderon, *Analyzing the 2019 Chilean social outbreak: Modelling Latin American economies*, PLoS ONE **16** (8) (2021), doi: 10.1371/journal.pone.0256037
- [1276] C. Gurdgiev and G. Harte, *Tsallis entropy: Do the market size and liquidity matter?*, Finance Research Letters **17**, 151-157 (2016).
- [1277] A. Evren, E. Tuna, E. Ustaoglu and B. Sahin, *Some dominance indices to determine market concentration*, J. Applied Statistics (2021), in press, doi: 10.1080/02664763.2021.1963421
- [1278] E. Tuna, A. Evren, E. Ustaoglu, B. Sahin and Z.Z. Sahinbasoglu, *Testing nonlinearity with Renyi and Tsallis mutual information with an application in the EKC hypothesis*, Entropy **25**, 79 (2023).
- [1279] N. Gradojevic and R. Gencay, *Overnight interest rates and aggregate market expectations*, preprint (2022).
- [1280] G.S. Argyroudis and F.M. Siokis, *Spillover effects of great recession on Hong-Kong's real estate market: An analysis based on causality plane and Tsallis curves of complexity-entropy*, Physica A **524**, 576-586 (2019).
- [1281] U. Ozdilek, *The role of thermodynamic and informational entropy in improving real estate valuation methods*, Entropy **25**, 907 (2023).
- [1282] M.S. Mohamed, N. Alsadat and O.S. Balogun, *Continuous Tsallis and Renyi entropy with pharmaceutical market application*, AIMS Mathematics, **8** (10), 24176-24195 (2023).
- [1283] I.A. Hussein, M. Nagy, A.H. Mansi and M.A. Alawady, *Some Tsallis entropy measures in concomitants of generalized order statistics under iterated FGM bivariate distribution*, AIMS Mathematics **9** (9), 23268-23290 (2024).
- [1284] M. Lei and K.H. Cheong, *Embedding model of multilayer networks structure and its application to identify influential nodes*, Information Sciences **661**, 120111 (2024).
- [1285] Y. Lu, J. Wang and X.T. Zhuang, *Research on payment preferences for reverse mortgage based on q -exponential discount function* [in Chinese], Journal of Northeastern University (Natural Science) **40** (12), 1796 (2019).
- [1286] J. Abernethy, C. Lee and A. Tewari, *Fighting bandits with a new kind of smoothness*, Advances in Neural Information Processing Systems, 2197-2205 (January 2015) [29th Annual Conference on Neural Information Processing Systems, NIPS 2015, Montreal, 7 to 12 December 2015; Code 120037]
- [1287] Z. Liang, X. Duan and X. Li, *Entropy measures in neural signals*, Signal Processing in Neuroscience 125-166 (2016, Springer).
- [1288] R.L. Mendonca Sales Filho, *A novel q -exponential based stress-strength reliability model and applications to fatigue life with extreme values*, Doctor Thesis (Universidade Federal de Pernambuco, Engenharia de Producao, Recife, Brazil, 2016).
- [1289] A.C.S.V. Negreiros, I.D. Lins, M.J. Chagas Moura and E.L. Drogue, *Reliability data analysis of systems in the wear-out phase using a (corrected) q -Exponential likelihood*, Reliability Engineering and System Safety **197**,106787 (2020), doi: doi.org/10.1016/j.ress.2019.106787
- [1290] N.U. Nair, S.M. Sunoj and G. Rajesh, *Reliability modelling with information measures*, (CRC Press, 2022).
- [1291] D.C. Raju, S.M. Sunoj and G. Rajesh, *Cumulative Tsallis entropy under maximum (minimum) ranked set sampling with unequal samples using the quantile function*, Ricerche di Matematica (2022), doi: 10.1007/s11587-022-00739-9
- [1292] R. Trandafir, V. Preda, S. Demetriu and I. Mierlus-Mazilu, *On mixing of continuous distributions with discrete distributions used in reliability*, Review of the Air Force Academy **2** (37), 5-16 (2018).
- [1293] F. Suter, V. Preda and I. Cernata, *Some information measures for the concomitants of m -GOS from a Gumbel's bivariate exponential distribution*, communication at Conference OSD (2022).
- [1294] S. Kanzi and H. Ghasemian, *Fuzzy analysis of particle movement in quantum mechanics*, Internat. J. Multidisciplinary and Current Research (2016), ISSN: 2321-3124
- [1295] Y. Kanzawa and T. Kondo, *Collaborative filtering with q -divergence-based fuzzy clustering for spherical data*, J. Ambient Intelligence and Humanized Computing (2021), doi: 10.1007/s12652-021-03128-6
- [1296] D. Markechova, *Tsallis entropy of fuzzy dynamical systems*, Mathematics **6**, 264 (2018), doi:10.3390/math6110264
- [1297] R.K. Verma, *Some fuzzy noiseless coding theorems connected with non-Shannon information measures and their bounds*, International Journal of Fuzzy Mathematics and Systems **13** (1), 1-9 (2023).
- [1298] R.K. Verma, *Modified version of Verma measures of information and their kinship with past information measures*, International Journal of Pure and Applied Mathematical Sciences **16** (1), 17-24 (2023).
- [1299] H. Mao and R. Cai, *Negation of Pythagorean fuzzy number based on a new uncertainty measure applied in a service supplier selection system*, Entropy **22**, 195 (2020), doi: 10.3390/e22020195

- [1300] V.M. Joshi and J.G. Dar, *Some results on Mathai-Haubold fuzzy entropy*, European Journal Pure and Applied Mathematics **17** (3), 2349-2360 (2024).
- [1301] V.M. Joshi and J.G. Dar, *A generalized directed divergence of fuzzy entropy*, International Journal of Neutrosophic Science **26** (1), 311-321 (2025).
- [1302] M. Fujita and Y. Kanzawa, *Three fuzzy c-shapes clustering algorithms for series data*, Journal of Advanced Computational Intelligence and Intelligent Informatics **27** (5), 976 (2023).
- [1303] Y. Suzuki and Y. Kanzawa, *Tsallis entropy-regularized fuzzy classification maximum likelihood clustering with a t-distribution*, Journal of Advanced Computational Intelligence and Intelligent Informatics **29** (2), 365-378 (2025).
- [1304] S. Kar, B.K. Roy and M.K. Mohanty, *A dual measure of fuzzy entropy: Fuzzy entropy*, Iranian Journal of Fuzzy Systems **21** (5) 71-88 (2024).
- [1305] S. Bwanakare, *Non-extensive entropy econometrics: New statistical features of constant elasticity of substitution-related models*, Entropy **16**, 2713-2728 (2014), doi:10.3390/e16052713
- [1306] A. Golan and J.M. Perloff, *Comparison of maximum entropy and higher-order entropy estimators*, J. Econometrics **107**, 195 (2002).
- [1307] P. Macedo, E. Silva and M. Scotto, *Technical efficiency with state-contingent production frontiers using maximum entropy estimators*, J. Prod. Anal. (2014) **41**, 131-140 (2014), doi: 10.1007/s11123-012-0314-y
- [1308] Q.A. Wang, L. Nivanen, M. Pezeril and A. Le Mehaute, *On the energy translation invariance of probability distributions*, preprint (2002) [cond-mat/0206043].
- [1309] S. Abe, *Stability of Tsallis entropy and instabilities of Renyi and normalized Tsallis entropies: A basis for q-exponential distributions*, Phys. Rev. E **66**, 046134 (2002).
- [1310] S. Abe, *Stability analysis of generalized entropies and q-exponential distributions*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 84 (2004).
- [1311] S. Abe, G. Kaniadakis and A.M. Scarfone, *Stabilities of generalized entropies*, J. Phys. A **37**, 10513 (2004).
- [1312] J. Naudts, *Continuity of κ -deformed entropies and relative entropies*, preprint (2002) [math-ph/0208038].
- [1313] J. Naudts, *Continuity of a class of entropies and relative entropies*, Rev. Math. Phys. **16**, 809 (2004).
- [1314] M.P. Almeida, F.Q. Potiguar and U.M.S. Costa, *Microscopic analog of temperature within nonextensive thermostatics*, preprint (2002) [cond-mat/0206243].
- [1315] D.H.E. Gross, *Thermo-statistics or topology of the microcanonical entropy surface*, preprint (2002) [cond-mat/0206341].
- [1316] M. Sebawe Abdalla, M. Abdel-Aty and A.S.F. Obada, *Generalized von Neumann mutual information for anisotropic coupled oscillators interacting with a single two-level atom*, Int. J. Theor. Phys. **44**, 1649-1662 (2005).
- [1317] S.W. Ho and S. Verdu, *Convexity/concavity of Renyi entropy and α -mutual information*, International Symposium on Information Theory (2015) (5 pages).
- [1318] Y.J. Fan and H.X. Cao, *Monotonicity of the unified quantum (r, s) -entropy and (r, s) -mutual information*, Quantum Inf. Process **14**, 4537-4555 (2015), doi: 10.1007/s11128-015-1126-6
- [1319] M. Abdel-Aty, *Quantum information entropy and multi-clubit entanglement*, Progress in Quantum Electronics **31**, 1-49 (2007).
- [1320] A. Rapisarda and V. Latora, *Nonextensive effects in Hamiltonian systems*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [1321] D.H.E. Gross, *Thermo-statistics or topology of the microcanonical entropy surface*, in *Dynamics and Thermodynamics of Systems with Long Range Interactions*, eds. T. Dauxois, S. Ruffo, E. Arimondo, M. Wilkens, Lecture Notes in Physics **602** (Springer, Berlin, 2002).
- [1322] J.P. Vigneaux, *The structure of information: From probability to homology*, Doctor Thesis (Universite Paris Diderot, 2017), 1709.07807 [cs.IT].
- [1323] J.P. Vigneaux, *A combinatorial interpretation for Tsallis 2-entropy*, preprint (2018), 1807.05152 [math-ph].
- [1324] J.P. Vigneaux, *A characterization of generalized multinomial coefficients related to the entropic chain rule*, Aequationes Mathematicae (2023), doi: 10.1007/s00010-022-00938-7
- [1325] K. Okamura, *On the q-generalised multinomial/divergence correspondence*, J. Math. Phys. **66**, 033302 (2025).
- [1326] C. Tsallis, A. Rapisarda, V. Latora and F. Baldovin, *Nonextensivity: From low-dimensional maps to Hamiltonian systems*, in *Dynamics and Thermodynamics of Systems with Long Range Interactions*, eds. T. Dauxois, S. Ruffo, E. Arimondo, M. Wilkens, Lecture Notes in Physics **602** (Springer, Berlin, 2002).
- [1327] L. Velazquez, J.C. Castro, R. Sospedra and F. Guzman, *On the dynamical anomalies in the Hamiltonian Mean Field model*, preprint (2003) [cond-mat/0302456].

- [1328] F. Baldovin, E. Brigatti and C. Tsallis, *Quasi-stationary states in low dimensional Hamiltonian systems*, Phys. Lett. A **320**, 254 (2004).
- [1329] F. Baldovin, *On time and ensemble averages in quasistationary state of low-dimensional Hamiltonian maps*, Physica A **342**, 119 (2004).
- [1330] D.H.E. Gross, *Comment on “Nonextensivity: from low-dimensional maps to Hamiltonian systems” by Tsallis et al.*, preprint (2002) [cond-mat/0210448].
- [1331] S. Martinez, F. Pennini, A. Plastino and C. Tessone, *On the equipartition and virial theorems*, Physica A **305**, 48 (2002).
- [1332] M. Casas, S. Martinez, F. Pennini and A. Plastino, *Thermodynamics and the Tsallis variational problem*, Physica A **305**, 41 (2002).
- [1333] P. Jizba and T. Arimitsu, *The world according to Renyi: Thermodynamics of multifractal systems*, preprint (2002) [cond-mat/0207707].
- [1334] R.S. Johal, *Zeroth law of thermodynamics and the transformation from nonextensive to extensive framework*, preprint (2002) [cond-mat/0207268].
- [1335] M.P. Almeida, *Additive generalized entropy*, preprint (2002) [cond-mat/0208064].
- [1336] F.Q. Potiguar and U.M.S. Costa, *Thermodynamics arising from Tsallis’ thermostatics*, preprint (2002) [cond-mat/0208357].
- [1337] F.Q. Potiguar and U.M.S. Costa, *Thermodynamical relations for systems in contact with finite heat baths*, Physica A **344**, 614 (2004).
- [1338] A. Argun, A.R. Moradi, E. Pince, G.B. Bagci, A. Imperato and G. Volpe, *Non-Boltzmann stationary distributions and nonequilibrium relations in active baths*, Phys. Rev. E **94**, 062150 (2016) (9 pages).
- [1339] F.Q. Potiguar and U.M.S. Costa, *Numerical calculation of the energy relative fluctuation for a system in contact with a finite heat bath*, preprint (2003) [cond-mat/0302593].
- [1340] T. Wada, *Model-free derivations of the Tsallis factor: Constant heat capacity derivation*, Phys. Lett. A **318**, 491 (2003).
- [1341] S. Abe, *Thermodynamic entropy of nonextensive systems*, Mathematical Sciences **450**, 51 (2002) [In Japanese].
- [1342] Q.A. Wang, L. Nivanen, A. Le Mehaute and M. Pezeril, *On the generalized entropy pseudoadditivity for complex systems*, J. Phys. **35**, 7003 (2002).
- [1343] F.Q. Potiguar and U.M.S. Costa, *Fluctuation of energy in the generalized thermostatics*, Physica A **321**, 482 (2003).
- [1344] A.G. Bashkirov and A.D. Sukhanov, *The distribution function for a subsystem experiencing temperature fluctuations*, J. Exp. Theor. Phys. **95**, 440 (2002).
- [1345] M. Nauenberg, *A critique of q-entropy for thermal statistics*, Phys. Rev. E **67**, 036114 (2003).
- [1346] C. Tsallis, *Comment on “Critique of q-entropy for thermal statistics” by M. Nauenberg*, Phys. Rev. E **69**, 038101 (2004) [cond-mat/0304696].
- [1347] M. Nauenberg, *Reply to “Comment on ‘Critique of q-entropy for thermal statistics by M. Nauenberg’ ”*, Phys. Rev. E **69**, 038102 (2004).
- [1348] H. Touchette, *Temperature fluctuations and mixtures of equilibrium states in the canonical ensemble*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [1349] J. Naudts, *Generalized thermostatics and mean-field theory*, Physica A **332**, 279 (2004).
- [1350] A.G. Bashkirov, *On the Renyi entropy, power-law distribution and Renyi parameter*, preprint (2002) [cond-mat/0211685].
- [1351] A.G. Bashkirov, *Renyi entropy as a statistical entropy for complex systems*, Theor. Math. Phys. **149**, 1559-1573 (2006).
- [1352] A. Franz and K.H. Hoffman, *Threshold accepting as limit case for a modified Tsallis statistics*, Appl. Math. Lett. **16**, 27 (2003).
- [1353] C. Tsallis, D. Prato and A.R. Plastino, *Nonextensive statistical mechanics: Some links with astronomical phenomena*, Proc. XIth United Nations / European Space Agency Workshop on Basic Space Science (9-13 September 2002, Cordoba, Argentina), eds. H. Haubold and M. Rabolli, Astrophysics and Space Science **290**, 259 (Kluwer, 2004). [cond-mat/0301590].
- [1354] S. Abe, *Nonadditive generalization of the quantum Kullback-Leibler divergence for measuring the degree of purification*, Phys. Rev. A **68**, 032302 (2003).
- [1355] R.S. Johal, *Additive entropy underlying the general composable entropy prescribed by thermodynamic meta-equilibrium*, Phys. Lett. A **318**, 48 (2003).

- [1356] P. Jizba, *Information theory and generalized statistics*, in *Decoherence and Entropy in Complex Systems*, ed. H.-T. Elze, *Lecture Notes in Physics* **633** (Springer-Verlag, Berlin, 2004), page 362.
- [1357] S. Abe, *Monotonic decrease of the quantum nonadditive divergence by projective measurements*, Phys. Lett. A **312**, 336 (2003); Corrigendum: Phys. Lett. A **324**, 507 (2004).
- [1358] G. Kaniadakis and A.M. Scarfone, *A new one-parameter deformation of the exponential function*, Physica A **305**, 69 (2002).
- [1359] J. Batle, M. Casas, A.R. Plastino and A. Plastino, *Supersymmetry and the q -MaxEnt treatment*, Physica A **305**, 316 (2002).
- [1360] Ph. Chomaz and F. Gulminelli, *Generalized definitions of phase transitions*, Physica A **305**, 330 (2002).
- [1361] F. Gulminelli and Ph. Chomaz, *Observables of first-order phase transitions*, Physica A **305**, 336 (2002).
- [1362] A.K. Rajagopal, *Heat and entropy in nonextensive thermodynamics*, in *Nonadditive entropy and nonextensive statistical mechanics*, ed. M. Sugiyama, Continuum Mechanics and Thermodynamics **16**, 257 (Springer-Verlag, Heidelberg, 2004).
- [1363] T. Yamano, *On the laws of thermodynamics from the escort average and on the uniqueness of statistical factors*, Phys. Lett. A **308**, 364 (2003).
- [1364] N. Kalogeropoulos, *On the origin of escort distributions for q -entropies*, preprint (2024), 2407.07499 [cond-mat.stat-mech].
- [1365] J. Naudts, *Non-unique way to generalize the Boltzmann-Gibbs distribution*, preprint (2003) [cond-mat/0303051].
- [1366] A.K. Rajagopal and S. Abe, *Statistical mechanical foundations of power-law distributions*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 73 (2004).
- [1367] S. Abe and A.K. Rajagopal, *Validity of the second law in nonextensive quantum thermodynamics*, Phys. Rev. Lett. **91**, 120601 (2003).
- [1368] T. Deesuan, *Towards thermodynamics of quantum systems away from equilibrium*, Doctor Thesis (Department of Physics, Imperial College, London, 2016).
- [1369] M. Menard, V. Courboulay and P.A. Dardignac, *Possibilistic and probabilistic fuzzy clustering: Unification within the framework of the non-extensive thermostatistics*, Pattern Recognition **36**, 1325 (2003).
- [1370] H. Zhang and J. Liu, *Jointly stochastic fully symmetric interpolatory rules and local approximation for scalable Gaussian process regression*, Pattern Recognition **159**, 111125 (2025).
- [1371] K. Peng and P. Shang, *Characterizing ordinal network of time series based on complexity-entropy curve*, Pattern Recognition (2021), in press.
- [1372] S. Sharma and I. Bassi, *Efficacy of Tsallis entropy in clustering categorical data*, IEEE Bombay Section Signature Conference (2019).
- [1373] A. Honda and Y. Okazaki, *Characterization for entropy and solution of set function on lattice*, J. Phys. C Series **201**, 012014 (2010) (10 pages).
- [1374] R.W. Ibrahim, *Utility function for intelligent access web selection using the normalized fuzzy fractional entropy*, Soft Computing (2020), doi: doi.org/10.1007/s00500-020-04858-z
- [1375] R.W. Ibrahim, *Water engineering modeling controlled by generalized Tsallis entropy*, Montes Taurus J. Pure Appl. Math. (2021), in press.
- [1376] Z. Chen and J.W. Gu, *Exploratory utility maximization problem with Tsallis entropy*, preprint (2025), 2502.01269 [cs.LG].
- [1377] Y. Wang and G. Zhu, *Evaluation of water quality reliability based on entropy in water distribution system*, Physica A **584**, 126373 (2021), doi: 10.1016/j.physa.2021.126373
- [1378] Q.A. Wang, L. Nivanen, M. Perezil and A. Le Mehaute, *How to proceed with nonextensive systems at equilibrium?*, preprint (2003) [cond-mat/0304178].
- [1379] S. Abe, *Tsallis entropy: How unique?*, in *Nonadditive entropy and nonextensive statistical mechanics*, ed. M. Sugiyama, Continuum Mechanics and Thermodynamics **16**, 237 (Springer-Verlag, Heidelberg, 2004).
- [1380] C. Tsallis and E. Brigatti, *Nonextensive statistical mechanics: A brief introduction*, in *Nonadditive entropy and nonextensive statistical mechanics*, ed. M. Sugiyama, Continuum Mechanics and Thermodynamics **16**, 223 (Springer-Verlag, Heidelberg, 2004).
- [1381] L.G. Moyano, F. Baldovin and C. Tsallis, *Zeroth principle of thermodynamics in aging quasistationary states*, preprint (2003) [cond-mat/0305091].
- [1382] F. Baldovin, L.G. Moyano and C. Tsallis, *Boltzmann-Gibbs thermal equilibrium distribution for classical systems and Newton law: A computational discussion*, Europhys. J. B **52**, 113-117 (2006).

- [1383] D.H. Zanette and M.A. Montemurro, *A note on non-thermodynamical applications of non-extensive statistics*, Phys. Lett. A **324**, 383 (2004). [cond-mat/0305070].
- [1384] C. Tsallis, *Reply to the Zanette-Montemurro critique concerning non thermodynamical applications of nonextensive statistics*, Physica A (2003), in press.
- [1385] S. Abe, *Geometry of escort distributions*, Phys. Rev. E **68**, 031101 (2003).
- [1386] R.E. Nettleton, *Fisher information as thermodynamic entropy model in a classical fluid*, J. Phys. A **36**, 2443 (2003).
- [1387] C. Tsallis, *What should a statistical mechanics satisfy to reflect nature?*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 3 (2004).
- [1388] Q.A. Wang, A. Le Mehaute, L. Nivanen and M. Pezeril, *Equilibrium or meta-equilibrium incomplete thermostatics with different q indices*, preprint (2003) [cond-mat/0305398].
- [1389] L. Nivanen, M. Pezeril, Q.A. Wang and A. Le Mehaute, *Applying incomplete statistics to nonextensive systems with different q indices*, Chaos, Solitons and Fractals **24**, 1337 (2005).
- [1390] W. Li, Q.A. Wang, L. Nivanen and A. Le Mehaute, *On different q -systems in nonextensive thermostatics*, Eur. Phys. J. B **48**, 95-100 (2005).
- [1391] A. Le Mehaute and L. Nivanen, *Generalisation de statistiques et d'algebres destinees au traitement de systemes fractionnaires*, ISTE Open Science (2023).
- [1392] P. Gorban, *Monotonically equivalent entropies and solution of additivity equation*, Physica A **328**, 380 (2003).
- [1393] A.N. Gorban and D. Packwood, *Allowed and forbidden regimes of entropy balance in lattice Boltzmann collisions*, Phys. Rev. E **86**, 025701(R) (2012) (4 pages).
- [1394] A.N. Gorban, *Maxallent: Maximizers of all Entropies and Uncertainty of Uncertainty*, Computers Mathematics Applications **65**, 1438-1456 (2013).
- [1395] L. Knockaert, *On scale and concentration invariance in entropies*, Information Sciences **152**, 139 (2003).
- [1396] Y.G. Rudoï, *Generalized informational entropy and noncanonical distribution in equilibrium statistical mechanics*, Theor. Math. Phys. **135**, 451-496 (2003).
- [1397] M.P. Almeida, *Thermodynamical entropy (and its additivity) within generalized thermodynamics*, Physica A **325**, 426 (2003).
- [1398] J. Naudts and M. Baeten, *Non-extensivity of the configurational density distribution in the classical micro-canonical ensemble*, Entropy **11**, 285-294 (2009).
- [1399] M. Baeten and J. Naudts, *On the thermodynamics of classical micro-canonical systems*, Entropy **13**, 1186-1199 (2011).
- [1400] M. Baeten, *Faseovergangen in eindige systemen*, Master Thesis (Faculteit Wetenschappen, Departement Fysica, Universiteit Antwerpen, 2010).
- [1401] F. Quarati and P. Quarati, *Phase space cell in nonextensive classical systems*, preprint (2003) [physics/0306149].
- [1402] T. Wada, *Thermodynamic stability conditions for nonadditive composable entropies*, in *Nonadditive entropy and nonextensive statistical mechanics*, ed. M. Sugiyama, Continuum Mechanics and Thermodynamics **16**, 263 (Springer-Verlag, Heidelberg, 2004).
- [1403] R.S. Johal, *Composable entropy and deviation from macroscopic equilibrium*, Phys. Lett. A **332**, 345 (2004).
- [1404] M. Grendar Jr. and M. Grendar, *Maximum entropy method with non-linear moment constraints: Challenges*, AIP Conference Proceedings **707**, 97 (2004).
- [1405] V. Majernik, E. Majernikova and S. Shpyrko, *Uncertainty relations expressed by Shannon-like entropies*, Central European J. Phys. **1**, 393 (2003).
- [1406] V. Majernik and S. Shpyrko, *Bhattacharyya statistical divergence of quantum observables*, Reports Math. Phys. **61**, 319-325 (2008).
- [1407] V. Majernik, *Entropy – A universal concept in sciences*, Natural Science **6**, 552-564 (2014), doi: <http://dx.doi.org/10.4236/ns.2014.67055>
- [1408] B. Chen and S.M. Fei, *Uncertainty relations based on mutually unbiased measurements*, Quantum Inf. Process **14**, 2227-2238 (2015), doi: 10.1007/s11128-015-0949-5
- [1409] P. Sanchez-Moreno, R. Gonzalez-Ferez and J.S. Dehesa, *Improvement of the Heisenberg and Fisher-information-based uncertainty relations for D -dimensional central potentials*, New Journal Physics **8**, 330 (2006).
- [1410] D. Nath, *An introduction to analysis of Renyi complexity ratio of quantum states for central potential*, Internat. J. Quantum Chemistry (2021), doi: 10.1002/qua.26816
- [1411] D. Nath and A.K. Roy, *Energy and information-entropic measures of Hulthen potential in D dimension by a new approximation to centrifugal term*, J. Math. Chemistry (2022), doi: 10.1007/s10910-022-01440-w

- [1412] D. Nath and A.K. Roy, *Information theoretic measures in Makarov potential*, Eur. Phys. J. Plus **138**, 395 (2023).
- [1413] K.S. Fa and E.K. Lenzi, *Thermostatistical aspects of generalized entropies*, Chaos, Solitons and Fractals **20**, 227 (2003).
- [1414] P.W. Lamberti and A.P. Majtey, *Non-logarithmic Jensen-Shannon divergence*, Physica A **329**, 81 (2003).
- [1415] A.P. Majtey, P.W. Lamberti and D. Prato, *Quantum Jensen-Shannon divergence*, communicated at IX Latin American Workshop on Nonlinear Phenomena (23-28 October 2005, Bariloche).
- [1416] D. Bussandri, L. Garro Linck, M. Re and P. Lamberti, *Generalizacion de la divergencia de Jensen-Shannon a estatistica no extensiva para el analisis de secuencias* [Nonextensive generalization of the Jensen-Shannon divergence for sequence analysis], Anales AFA **24** (2), 113-118 (2014).
- [1417] L.E. Riveaud, D. Mateos and P.W. Lamberti, *Gamma-divergence. An introduction to new divergence family*, preprint (2020), doi: 10.20944/preprints202011.0388.v1
- [1418] A.F.T. Martins, P.M.Q. Aguiar and M.A.T. Figueiredo, *Nonextensive generalizations of the Jensen-Shannon divergence*, preprint (2008), arxiv 0804.1653.
- [1419] A.F.T. Martins, P.M.Q. Aguiar and M.A.T. Figueiredo, *Tsallis kernels on measures*, Proc IEEE Information Theory Workshop - ITW, Porto, Portugal, Vol. , pp. , (May 2008).
- [1420] A.F.T. Martins, N.A. Smith, E.P. Xing, P.M.Q. Aguiar and M.A.T. Figueiredo, *Nonextensive information theoretic kernels on measures*, J. Machine Learning Research **10**, 935-975 (2009).
- [1421] S. Sklaviadis, S. Agrawal, A. Farinhas, A. Martins and M. Figueiredo, *Fenchel-Young variational learning*, preprint (2025), 2502.10295 [cs.LG].
- [1422] B. Peters and A.F.T. Martins, *Smoothing and shrinking the sparse Seq2Seq search space*, preprint (2021), 2103.10291 [cs.CL] .
- [1423] B. Peters, V. Niculae and A.F.T. Martins, *Sparse sequence-to-sequence models*, Proc. 57th Annual Meeting of the Association for Computational Linguistics, pages 1504-1519 (Florence, Italy, July 28-August 2, 2019).
- [1424] A.F.T. Martins, *Reconciling the discrete-continuous divide: Towards a mathematical theory of sparse communication*, preprint (2021), 2104.00755 [cs.LG].
- [1425] M. Treviso, A. Gois, P. Fernandes, E. Fonseca and A.F.T. Martins, *Predicting attention sparsity in transformers*, preprint (2021), 2109.12188 [cs.CL].
- [1426] A.F.T. Martins, A. Farinhas, M. Treviso, V. Niculae, P.M.Q. Aguiar and M.A.T. Figueiredo, *Sparse and continuous attention mechanisms*, 34th Conference on Neural Information Processing Systems (NeurIPS), (Vancouver, Canada, 2020).
- [1427] P.H. Martins, Z. Marinho and A.F.T. Martins, *Sparse text generation*, Proc. 2020 Conference on Empirical Methods in Natural Language Processing, pages 4252-4273, (November 16-20, 2020).
- [1428] A.F.T. Martins, M. Treviso, A. Farinhas, P.M.Q. Aguiar, M.A.T. Figueiredo, M. Blondel and V. Niculae, *Sparse continuous distributions and Fenchel-Young losses*, preprint (2021), 2108.01988 [cs.LG].
- [1429] B. Peters and A.F.T. Martins, *Beyond characters: Subword-level morpheme segmentation*, 19th SIGMORPHON Workshop on Computational Research in Phonetics, Phonology, and Morphology, 131-138 (2022).
- [1430] M.M. Campos, J. Calem, S. Sklaviadis, M.A.T. Figueiredo and A.F.T. Martins, *Sparse activations as conformal predictors*, preprint (2025), 2502.14773 [cs.LG].
- [1431] S.K. Thiyagarajan and K. Murugan, *Arithmetic optimization-based K means algorithm for segmentation of ischemic stroke lesion*, Soft Computing (2023), in press.
- [1432] G.M.M.A. Correia, *Learnable sparsity and weak supervision for data-efficient, transparent, and compact neural models*, Doctor Thesis, (Universidade de Lisboa, Instituto Superior Tecnico, 2022).
- [1433] D. Padovano, A. Martinez-Rodrigo, J.M. Pastor, J.J. Rieta and R. Alcaraz, *An experimental review on obstructive sleep apnea detection based on heart rate variability and machine learning techniques*, IEEE Spectrum (Web Conference, 29-30 October 2020, Romania).
- [1434] M.A. Hossain, R.M. Noor, K.L.A. Yau, S.R. Azzuhri, M.R. Zaba, I. Ahmedy and M.R. Jabbarpour, *Machine learning-based cooperative spectrum sensing in dynamic segmentation enabled cognitive radio vehicular network*, Energies **14**, 1169 (2021), doi: 10.3390/en14041169
- [1435] A.F.T. Martins, M. Treviso, A. Farinhas, V. Niculae, M.A.T. Figueiredo and P.M.Q. Aguiar, *Sparse and continuous attention mechanisms*, preprint (2020), 2006.07214 [cs.LG].
- [1436] B. Peters and A.F.T. Martins, *DeepSPIN at SIGMORPHON 2020: One-Size-Fits-All multilingual models*, Proceedings of the Seventeenth SIGMORPHON Workshop on Computational Research in Phonetics, Phonology, and Morphology, 63-69 (2020).
- [1437] M. Hainy, W.G. Muller and H.P. Wynn, *Learning functions and approximate Bayesian computation design: ABCD*, Entropy **16**, 4353-4374 (2014), doi:10.3390/e16084353

- [1438] F. Giummole, V. Mameli, E. Ruli and L. Ventura, *Objective Bayesian inference with proper scoring rules*, *Test* **28**, 728-755 (2019), doi: 10.1007/s11749-018-0597-z
- [1439] V. Mameli, M. Musio and L. Ventura, *Bootstrap adjustments of signed scoring rule root statistics*, *Communications in Statistics - Simulation and Computation* **47** (4), 1204-1215 (2018).
- [1440] F. Giummole and L. Ventura, *Invited Discussion*, *Bayesian Analysis* **15** (4), 1384 (2020).
- [1441] E. Bortolato and L. Ventura, *On approximate robust confidence distributions*, preprint (2022), 2212.09552 [stat.ME].
- [1442] J. Briet and P. Harremoës, *Properties of classical and quantum Jensen-Shannon divergence*, *Phys. Rev.A* **79**, 052311 (2009) (11 pages).
- [1443] S. Menchon, C.A. Condat and P.W. Lamberti, *Using nonextensive statistical mechanics to define the displacement moments for symmetric long-jump distributions*, communication at XV Conference on Nonequilibrium Statistical Mechanics and Nonlinear Physics (4-8 December 2006, Mar del Plata, Argentina).
- [1444] S. Menchon, C.A. Condat and P.W. Lamberti, *Regularization of the displacements moments for asymmetric Lévy flights*, *Phys. Rev. E* **77**, 011120 (2008) (8 pages).
- [1445] C. Tsallis, F. Baldovin, R. Cerbino and P. Pierobon, *Introduction to nonextensive statistical mechanics and thermodynamics*, Proc. 1953-2003 Jubilee “Enrico Fermi” International Summer School of Physics *The Physics of Complex Systems: New Advances and Perspectives*, eds. F. Mallamace and H.E. Stanley (1-11 July 2003, Varenna sul lago di Como), (Societa Italiana di Fisica, Roma, 2004).
- [1446] S. Martinez, F. Pennini, A. Plastino and M. Portesi, *q-Thermostatistics and the analytical treatment of the ideal Fermi gas*, *Physica A* **332**, 230-248 (2003).
- [1447] A.G. Bashkirov, *Maximum entropy principle for Renyi's and Tsallis' entropies*, preprint (2003) [cond-mat/0310211].
- [1448] A.G. Bashkirov, *Comments on “Stability of Tsallis entropy and instabilities of Renyi and normalized Tsallis entropy: A basis for q-exponential distributions”*, *Phys. Rev. E* **72**, 028101 (2005).
- [1449] S. Abe, *Reply to Comments on “Stability of Tsallis entropy and instabilities of Renyi and normalized Tsallis entropy: A basis for q-exponential distributions”*, *Phys. Rev. E* **72**, 028102 (2005).
- [1450] A.G. Bashkirov, *Comments on paper by B. Lesche (Phys. Rev. E 70, 017102 (2004)) “Renyi entropies and observables”*, preprint (2005) [cond-mat/0504103].
- [1451] P. Allegrini, M. Giuntoli, P. Grigolini and B.J. West, *From knowledge, knowability and the search for objective randomness to a new vision of complexity*, *Chaos, Solitons and Fractals* **20**, 11 (2004).
- [1452] L.L.A. Price, *Entropy, colour and colour rendering*, *J. Optical Soc. America A* (2012), in press.
- [1453] Y. Dover, *A short account of a connection of power laws to the information entropy*, *Physica A* **334**, 591 (2004).
- [1454] E. Ruthotto, *Physical temperature and the meaning of the q parameter in Tsallis statistics*, preprint (2003) [cond-mat/0310413].
- [1455] R.K. Niven, *The constrained entropy and cross-entropy functions*, *Physica A* **334**, 444 (2004).
- [1456] B.H. Lavenda and J. Dunning-Davies, *Qualms concerning Tsallis's condition of pseudo-additivity as a definition of non-extensivity*, preprint (2003)
- [1457] B.H. Lavenda and J. Dunning-Davies, *Qualms concerning Tsallis's use of the maximum entropy formalism*, preprint (2003) [cond-mat/0312132].
- [1458] B.H. Lavenda and J. Dunning-Davies, *Qualms regarding “Superstatistics” by C. Beck and E.G.D. Cohen, Physica A 321 (2003) (cond-mat/0205097)*, preprint (2003) [cond-mat/0311271].
- [1459] B.H. Lavenda and J. Dunning-Davies, *Qualms regarding “Dynamical foundations of nonextensive statistical mechanics” by C. Beck (cond-mat/0105374)*, preprint (2003) [cond-mat/0312301].
- [1460] B.H. Lavenda, *A New Perspective on Thermodynamics* (Springer, Berlin, 2010).
- [1461] B.H. Lavenda, *Entropies of mixing (EOM) and the Lorenz order*, *Open Systems and Information Dynamics* **13**, 75-90 (2006).
- [1462] J. Dunning-Davies, *Hadron thermodynamics, concavity and negative heat capacities*, preprint (2004) [physics/0406041]
- [1463] J. Naudts, *Generalized thermostatistics based on deformed exponential and logarithmic functions*, *Physica A* **340**, 32 (2004).
- [1464] F. Pennini and A. Plastino, *Power-law distributions and Fisher's information measure*, *Physica A* **334**, 132 (2004).
- [1465] P. Jizba and T. Arimitsu, *Generalized statistics: Yet another generalization*, *Physica A* **340**, 110 (2004).
- [1466] P. Jizba and J. Korbel, *On q-non-extensive statistics with non-Tsallisian entropy*, *Physica A* **444**, 808-827 (2016).

- [1467] M.N. Cankaya and J. Korbel, *On statistical properties of Jizba-Arimitsu hybrid entropy*, Physica A **475**, 1-10 (2017).
- [1468] M.N. Cankaya, *On the estimating equations and objective functions for parameters of exponential power distribution: Application for disorder*, preprint (2021), 2102.03262 [math.ST].
- [1469] M.N. Cankaya, *Derivatives by ratio principle for q -sets on the time scale calculus*, Fractals **29** (8), 2140040 (2021).
- [1470] M.N. Cankaya, *On the statistical properties of the deformed algebras on the Jackson q -derivative*, International Conference on Mathematics and Its Applications in Science and Engineering (ICMASE, 2022).
- [1471] J. Korbel, *Rescaling the nonadditivity parameter in Tsallis thermostatics*, Phys. Lett. A **381**, 2588-2592 (2017).
- [1472] E.M.F. Curado and F.D. Nobre, *On the stability of analytic entropic forms*, Physica A **335**, 94 (2004).
- [1473] Q.A. Wang, *Maximizing entropy change for nonequilibrium systems*, preprint (2003) [cond-mat/0312329].
- [1474] C. Tsallis, *Dynamical scenario for nonextensive statistical mechanics*, in *News and Expectations in Thermostatistics*, eds. G. Kaniadakis and M. Lissia, Physica A **340**, 1-10 (2004).
- [1475] R.S. Johal, A. Planes and E. Vives, *Statistical mechanics in the extended Gaussian ensemble*, Phys. Rev. E **68**, 056113 (2003).
- [1476] B.H. Lavenda, *On the definition of fluctuating temperature*, preprint (2004) [cond-mat/0401024].
- [1477] S. Abe and A.K. Rajagopal, *Scaling relations in equilibrium nonextensive thermostatics*, Phys. Lett. A **337**, 292 (2005).
- [1478] S. Abe, P.T. Landsberg, A.R. Plastino and T. Yamano, *Nonadditive statistical measure of complexity and values of the entropic index q* , preprint (2004) [cond-mat/0402217].
- [1479] P. Jizba and T. Arimitsu, *Observability of Renyi's entropy*, Phys. Rev. E **69**, 026128 (2004).
- [1480] P. Jizba and T. Arimitsu, *Towards information theory for q -nonextensive statistics without q -deformed distributions*, Physica A **365**, 76-84 (2006).
- [1481] A.R. Plastino, H.G. Miller and A. Plastino, *General thermostatical formalisms based on parameterized entropic measures*, in *Nonadditive entropy and nonextensive statistical mechanics*, ed. M. Sugiyama, Continuum Mechanics and Thermodynamics **16**, 269 (Springer-Verlag, Heidelberg, 2004).
- [1482] A.K. Rajagopal, C.S. Pande and S. Abe, *Nanothermodynamics – A generic approach to material properties at nanoscale*, preprint (2004) [cond-mat/0403738].
- [1483] N. Maniotis and N. Frangis, *The connection between Hill's nanothermodynamics and Tsallis non-extensive statistical mechanics: Extracting the thermodynamic properties of a nanosystem*, Physica E **172**, 116285 (2025).
- [1484] E.C. Aifantis, *Gradient material mechanics: Perspectives and prospects*, Acta Mech. **225**, 999-1012 (2014), doi:10.1007/s00707-013-1076-y
- [1485] E.C. Aifantis, *Continuum nanomechanics for nanocrystalline and ultrafine grain materials*, 6th International Conference on Nanomaterials by Severe Plastic Deformation, IOP Conf. Series: Materials Science and Engineering **63**, 012129 (2014) (30 pages), doi:10.1088/1757-899X/63/1/012129
- [1486] E.C. Aifantis, *Gradient extension of classical material models: From nuclear and condensed matter scales to Earth and cosmological scales*, Size-Dependent Continuum Mechanics Approaches, 417-452 (2021).
- [1487] A.A. Konstantinidis, X. Zhang and E.C. Aifantis, *On the combined gradient-stochastic plasticity model: Application to mo-micropillar compression*, in *International conferences and exhibition on nanotechnologies and organic electronics (NANOTECHNOLOGY 2014)*, eds. S. Logothetidis, A. Laskarakis and C. Gravalidis, AIP Conference Proceedings **1646**, 3-9 (2015), doi: 10.1063/1.4908575
- [1488] A. Konstantinidis and E.C. Aifantis, *Gradients and internal lengths in small scale problems of mechanics*, Internat. J. Multiscale Computational Engineering **20** (6), 89-110 (2022).
- [1489] A.C. Iliopoulos, N.S. Nikolaidis and E.C. Aifantis, *Portevin-Le Chatelier effect and Tsallis nonextensive statistics*, Physica A **438**, 509-518 (2015), doi: //dx.doi.org/10.1016/j.physa.2015.07.007
- [1490] A.C. Iliopoulos and E.C. Aifantis, *Tsallis q -triplet, intermittent turbulence and Portevin-Le Chatelier effect*, Physica A **498**, 17-32 (2018).
- [1491] E. Zorzetto, A.D. Bragg and G. Katul, *Extremes, intermittency, and time directionality of atmospheric turbulence at the crossover from production to inertial scales*, Phys. Rev. Fluids **3**, 094604 (2018).
- [1492] H. Farfan-Bachiloglu, S. Curilef and F. Calderon, *Q -triplet characterization of atmospheric time series at Antofagasta: A missing values problem*, communication at III International Workshop on Statistical Physics (13th-15th of December 2023, Antofagasta, Chile)
- [1493] A.C. Iliopoulos, M. Tsolaki and E.C. Aifantis, *Tsallis statistics and neurodegenerative disorders*, Journal of the Mechanical Behavior of Materials (August 2016).

- [1494] A.C. Iliopoulos, M. Tsolaki and E.C. Aifantis, *Tsallis q -triplet and neurodegenerative diseases*, Hellenic Journal of Nuclear Medicine **20** (2), 57-66 (2017).
- [1495] N.M.G. Al-Saidi, H. Yahya and S.J. Obaiys, *Discrete dynamic model of a disease-causing organism caused by 2D-quantum Tsallis entropy*, Symmetry **14**, 1677 (2022).
- [1496] J. Nikolaidis and E. Aifantis, *Exploring modeling analogies between living and non-living systems*, Hellenic Journal of Nuclear Medicine **20** (2), 4-11 (2017).
- [1497] A. Iliopoulos and E. Aifantis, *Tsallis q -triplet and neurodegenerative diseases*, Hellenic Journal of Nuclear Medicine **20** (2), 57-66 (2017).
- [1498] A.C. Tsolakis, G. Petsos, O. Kapetanou, I.N. Nikolaidis and E.C. Aifantis, *Model analogies between pattern formation in deforming engineering materials and morphogenesis in ageing human brains*, Journal of the Mechanical Behavior of Materials **28**, 95-106 (2019).
- [1499] E.C. Aifantis, *Internal length gradient (ILG) material mechanics across scales and disciplines*, Advances in Applied Mechanics **49**, 1-110 (2016).
- [1500] G.P. Pavlos, *Complexity theory, time series analysis and Tsallis q -entropy principle part one: Theoretical aspects*, J. Mechanical Behavior of Materials **26** (5-6), 139-180 (2017).
- [1501] E.C. Aifantis, *Towards internal length gradient chemomechanics*, Reviews on Advanced Materials Science **48** (2), 112-130 (2017).
- [1502] F. Brouers, O. Sotolongo-Costa and K. Weron, *Burr, Levy, Tsallis*, Physica A **344**, 409 (2004).
- [1503] A.A. Ogunde and O.E. Adeniji, *Type II Topp-Leone Bur XII distribution: Properties and applications to failure time data*, Scientific African (2022), in press, doi: 10.1016/j.sciaf.2022.e01200
- [1504] A.S. Hassan and E.M. Almetwally, *Applications to physical data using four-parameter inverted Topp-Leone model*, Thailand Statistician **22** (2), 430-457 (2024).
- [1505] I.E. Ragab, H. Daud, A.A. Suleiman, N. Alsadat, V.B.V. Nagarjuna and M. Elgarhy, *Type II Topp-Leone exponentiated gamma distribution with application to breaking stress data*, Journal of Radiation Research and Applied Sciences **17**, 101045 (2024).
- [1506] F. Brouers and F. Marquez-Montesino, *Dubinin isotherms versus the Brouers-Sotolongo family isotherms: A case study*, Adsorption Science and Technology **34** (9-10), 552-564 (2016).
- [1507] F. Brouers, *The Burr XII distribution family and the maximum entropy principle: power-law phenomena are not necessarily "nonextensive"*, Open J. Statistics **5**, 730-741 (2015), doi: <http://dx.doi.org/10.4236/ojs.2015.57073>
- [1508] F. Brouers and T.J. Al-Musawi, *The use of the fractal Brouers-Sotolongo formalism to analyze the kinetics of drug release*, preprint (2019), arxiv 1907.01540
- [1509] F. Brouers and T.J. Al-Musawi, *The use of the Brouers-Sotolongo fractal kinetic equation for the study of drug release*, Adsorption (2019) (11 pages), doi: doi.org/10.1007/s10450-019-00183-6
- [1510] E. Sanchez, *Some physical features of the Burr-type-XII distribution*, Phys. Rev. E **99**, 022123 (2019).
- [1511] Z.I. Kalantan, S.M.S. Binhind, H.N. Salem, G.R. AL-Dayian, A.A. El-Helbawy and M.K.A. Elaal, *Chen-Burr XII model as a competing risks model with applications to real-life data sets*, Axioms **13**, 531 (2024).
- [1512] R.A.R. Bantan, C. Chesneau, F. Jamal, I. Elbatal and M. Elgarhy, *The truncated Burr X-G family of distributions: Properties and applications to actuarial and financial data*, Entropy **23**, 1088 (2021).
- [1513] Q.V. Tran and J. Kukal, *Renyi entropy based design of heavy tailed distribution for return of financial assets*, Physica A **637**, 129531 (2024).
- [1514] H. Sharma and P. Kumar, *On mixture of Burr XII and Nakagami distributions: Properties and applications*, RT&A **18** (4), 76 (2023).
- [1515] N. Kumar, A. Dixit and V. Vijay, *q -Generalization of Nakagami distribution with applications*, Japanese Journal of Statistics and Data Science Article (2024).
- [1516] P.R. Dewick, *On financial distributions modelling methods: Application on regression models for time series*, Journal of Risk and Financial Management **15**, 461 (2022).
- [1517] O.D. Adubisi, A. Abdulkadir, U.F. Abbas and H. Chiroma, *Financial data and a new generalization of the skew-T distribution*, Covenant Journal of Physical & Life Sciences **9** (2) (2021).
- [1518] M. Shrahili, I. Elbatal and M. Elgarhy, *Sine half-logistic inverse Rayleigh distribution: Properties, estimation, and applications in biomedical data*, Journal of Mathematics, ID 4220479 (2021), doi: 10.1155/2021/4220479
- [1519] I.E. Ragab, M. Kayid, O.S. Balogun and T.S. Helal, *Applications to medical and failure time data: Using a new extension of the extended exponential model*, Journal of Radiation Research and Applied Sciences **18**, 101373 (2025).
- [1520] A.S. Al-Moisheer, I. Elbatal, W. Almutiry and M. Elgarhy, *Odd inverse power generalized Weibull generated family of distributions: Properties and applications*, Mathematical Problems in Engineering, 5082192 (2021).

- [1521] F.A. Bhatti, A. Ali, G.G. Hamedani and M. Ahmad, *On generalized log Burr XII distribution*, Pak. J. Stat. Oper. Res. **XIV** (3), 615-643 (2018).
- [1522] F.A. Bhatti, A. Ali, G.G. Hamedani and M. Ahmad, *On the generalized log Burr III distribution: Development, properties, characterization and applications*, Pak. J. Statist. **35** (1), 25-51 (2019).
- [1523] F.A. Bhatti, A. Ali, G.G. Hamedani, M.C. Korkmaz and M. Ahmad, *The unit generalized log Burr XII distribution: properties and application*, AIMS Mathematics **6** (9), 10222-10252 (2021).
- [1524] E. Sanchez, *Burr type-XII as a superstatistical stationary distribution*, Physica A **516**, 443-446 (2019).
- [1525] S. Nadarajah and S. Kotz, *q-exponential is a Burr distribution*, Phys. Lett. A **359**, 577-579 (2006).
- [1526] S. Nadarajah and S. Kotz, *On the q-type distributions*, Physica A **377**, 465-468 (2007).
- [1527] X. Jiang and S. Nadarajah, *On characteristic functions of products of two random variables*, Wireless Personal Communications (2019) (21 pages), doi: doi.org/10.1007/s11277-019-06462-3
- [1528] P. Hetman and K. Weron, *Extreme-value approach to the Tsallis superstatistics*, Acta Phys. Pol. B **35**, 1375 (2004).
- [1529] M. Gell-Mann and S. Lloyd, *Effective complexity*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [1530] E. Canessa, *Possible force-entropy correlation*, Physica A **341**, 165 (2004).
- [1531] J. Naudts, *Estimators, escort probabilities, and Φ -exponential families in statistical physics*, J. Ineq. Pure Appl. Math. **5**, 102 (2004).
- [1532] J. Naudts, *Escort density operators and generalized quantum information measures*, Open Systems and Information Dynamics **12**, 13 (2005).
- [1533] J.S. Kim, *Tsallis entropy and entanglement constraints in multiqubit systems*, Phys. Rev. A **81**, 062328 (2010) (8 pages).
- [1534] E.P. Hanson, *Entropic continuity bounds and eventually entanglement-breaking channels*, Doctor Thesis (Department of Applied Mathematics and Theoretical Physics, University of Cambridge, 2020).
- [1535] J.S. Kim and B.C. Sanders, *Unified entropy, entanglement measures and monogamy of multi-party entanglement*, J. Phys. A **44**, 295303 (2011) (14 pages).
- [1536] Y. Luo, F.G. Zhang and Y. Li, *Entanglement distribution in multi-particle systems in terms of unified entropy*, Scientific Reports **7**, 1122 (2017), doi: 10.1038/s41598-017-01286-2
- [1537] S. Szalay, *Partial separability revisited II: Multipartite entanglement measures*, preprint (2015), 1503.06071 [quant-ph].
- [1538] S. Szalay, *Multipartite entanglement measures*, Phys. Rev. A **92**, 042329 (2015) (34 pages).
- [1539] C. Eltschka, F. Huber, O. Guhne and J. Siewert, *Exponentially many entanglement and correlation constraints for multipartite quantum states*, Phys. Rev. A **98**, 052317 (2018).
- [1540] S.M. Wu, X.W. Teng, W.M. Li, Y.X. Wang and J. Lu, *Nonseparability of multipartite systems in dilaton black hole*, preprint (2025), 2503.17923 [gr-qc].
- [1541] Q. Sun, T. Li, Z.X. Jin and D.F. Liang, *Unified entropy entanglement with tighter constraints on multipartite systems*, Chinese Phys. B **32**, 030304 (2023).
- [1542] T. Simmacher, N. Wyderka, R. Schwonnek and O. Guhne, *Entanglement detection with scrambled data*, Phys. Rev. A **99**, 062339 (2019).
- [1543] A.E. Rastegin, *Renyi and Tsallis formulations of separability conditions in finite dimensions*, Quantum Inf. Process (2017) **16**, 293 (2017), doi: 10.1007/s11128-017-1746-0
- [1544] S. Abe and G.B. Bagci, *Constraints and relative entropies in nonextensive statistical mechanics*, preprint (2004) [cond-mat/0404253].
- [1545] G. Kaniadakis and A.M. Scarfone, *Lesche stability of κ -entropy*, Physica A **340**, 102 (2004).
- [1546] T. Yamano, *Does the Lesche condition for stability validate generalized entropies?*, Phys. Lett. A **329**, 268 (2004) [Erratum: **331**, 348 (2004)].
- [1547] X.L. Cao and S.L. Luo, *On the stability of generalized entropies*, J. Phys. A **42**, 075205 (2009) (9 pages).
- [1548] Z.M. Zhang, *Uniform estimates on the Tsallis entropies*, Lett. Math. Phys. **80**, 171-181 (2007).
- [1549] L. Luo, J. Wang, L. Zhang and Y. Jing, *Differential entropy of induced random state ensemble*, Internat. J. Theor. Phys. (2021), doi: 10.1007/s10773-021-04781-5
- [1550] B. Lesche, *Renyi entropies and observables*, Phys. Rev. E **70**, 017102 (2004).
- [1551] A. El Kaabouchi, A. Le Mehaute, L. Nivanen, C. J. Ou and A. Q. Wang, *On an extension of Lesche stability*, preprint (2008), 0810.3860 [math-ph].
- [1552] A. El Kaabouchi and S. Abe, *Necessary and sufficient condition for stability of generalized expectation value*, J. Appl. Math. **804836** (2011) (7 pages).
- [1553] A.E. Rastegin, *Continuity and stability of partial entropic sums*, Lett. Math. Phys. **94**, 229-242 (2010).

- [1554] T. Matolcsi and P. Van, *On the continuity and Lesche stability of Tsallis and Renyi entropies and q-expectation values*, preprint (2009), 0910.1918 [cond-mat.stat-mech].
- [1555] C.J. Ou, A. El Kaabouchi, J. Chen, A. Le Mehaute, and A. Q. Wang, *Stability of incomplete entropy and incomplete expectation*, Physica A **388**, 1813-1817 (2009).
- [1556] T. Wada, *Thermodynamic stability of the generalized Boltzmann entropies*, Physica A **340**, 126-130 (2004).
- [1557] A. M. Scarfone and T. Wada, *Thermodynamic equilibrium and its stability for microcanonical systems described by the Sharma-Taneja-Mittal entropy*, Phys. Rev. E **72**, 026123-1 to 026123-13 (2005).
- [1558] A.V. Kolesnichenko, *Two-parameter Sharma-Taneja-Mittal entropy as the basis of family of equilibrium thermodynamics of nonextensive systems*, preprint (2020), doi: doi.org/10.20948/prepr-2020-36
- [1559] A.V. Kolesnichenko, *Chandrasekhar's integral stability criterion for an equilibrium spherical cloud of a protostar, modified in the framework of non-Gaussian kappa-statistics*, Journal **32**, 35 (2021), doi: 10.20948/prepr-2021-32
- [1560] A.V. Kolesnichenko, *Chandrasekhar's integral stability criterion modified within the Kaniadakis κ -statistics for an equilibrium cloud of a protostar*, Solar System Research **59**, 18 (2025).
- [1561] A.V. Kolesnichenko, *To the derivation of relativistic hydrodynamic equations for a rarefied non-ideal gas system of high-energy particles in the framework of Tsallis statistics*, Mathematica Montisnigri **58** (2023).
- [1562] A.V. Kolesnichenko, *Constructing an entropic-force model for the expansion of the universe caused by gravitationally-induced production of dark matter*, Solar System Research **59**, 19 (2025).
- [1563] A.V. Kolesnichenko, *Entropic cosmology based on Kaniadakis dual entropy on the cosmological horizon of the universe*, Astronomy Reports **69** (4), 308-323 (2025).
- [1564] K. Ourabah, *Chandrasekhar and Gamow conditions in quasiequilibrium*, Eur. Phys. J. Plus **138**, 254 (2023).
- [1565] A.M. Scarfone, *Legendre structure of the thermostatics theory based on the Sharma-Taneja-Mittal entropy*, Physica A **365**, 63-70 (2006).
- [1566] A.M. Scarfone and T. Wada, *Lie symmetries and related group-invariant solutions of a nonlinear Fokker-Planck equation based on the Sharma-Taneja-Mittal*, Braz. J. Phys. **39**, 475-482 (2009).
- [1567] A. Lavagno, A.M. Scarfone and P.N. Swamy, *Basic-deformed thermostatics*, J. Phys. A - Math. and Theo. **40**, 8635-8654 (2007).
- [1568] A. Plastino, *A conceptual framework for the Wheeler program*, Physica A **340**, 85 (2004).
- [1569] F. Topsoe, *Entropy and equilibrium via games of complexity*, Physica A **340**, 11 (2004).
- [1570] F. Topsoe, *Factorization and escorting in the game-theoretical approach to non-extensive entropy measures*, Physica A **365**, 91-95 (2006).
- [1571] F. Topsoe, *Exponential families and MaxEnt calculations for entropy measures of statistical physics*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 104-113 (New York, 2007).
- [1572] F. Topsoe, *Interaction between truth and belief as the key to entropy and other quantities of statistical physics*, preprint (2008), 0807.4337[math-ph].
- [1573] F. Topsoe, *On truth, belief and knowledge*, ISIT 2009 (28 June to 3 July 2009, Seoul, Korea), IEEE 139-143 (2009).
- [1574] F. Topsoe, *Truth, belief and experience - A route to information*, J. Contemporary Mathematical Analysis - Armenian Academy of Sciences **44**, 105-110 (2009).
- [1575] F. Topsoe, *Paradigms of cognition*, communicated at the Research Institute of Mathematical Science Workshop on Mathematical Aspects of Generalized Entropies and their Applications (7-9 July 2009, Kyoto).
- [1576] F. Topsoe, *Towards operational interpretations of generalized entropies*, J. Phys. C Series **201**, 012013 (2010) (15 pages).
- [1577] F. Topsoe, *Cognition beyond Shannon*, preprint (2010).
- [1578] F. Topsoe, *A Quantitative Theory of Cognition with Applications*, 1st International Electronic Conference on Entropy and its Applications (3-21 November 2014) (52 pages), doi: 10.3390/ecea-1-b007
- [1579] F. Topsoe, *Paradigms of cognition*, Entropy **19**, 143 (2017) (70 pages), doi: 10.3390/e19040143
- [1580] F. Topsoe, *Elements of the cognitive universe*, AIP Conference Proceedings **1853**, 040002 (2017) [36th International Workshop on Bayesian Inference and Maximum Entropy Methods in Science and Engineering, MaxEnt 2016; Ghent; Belgium; 10 to 15 July 2016; Code 128341].
- [1581] F. Zhang, H.K.T. Ng and Y. Shi, *Bayesian duality and risk analysis on the statistical manifold of exponential family with censored data*, J. Computational and Applied Mathematics **342**, 534-549 (2018).
- [1582] H. Kilic and A. Evren, *Comparing Shannon entropies and standard deviations of the order statistics for uncensored, semicensored, and censored distributions*, Internat. J. Engineering and Applied Sciences (IJEAS) **5** (10) ISSN: 2394-3661 (2018).

- [1583] P. Mertikopoulos and W.H. Sandholm, *Regularized best responses and reinforcement learning in games*, preprint (2014), 1407.6267 [math.OC].
- [1584] P. Mertikopoulos and W.H. Sandholm, *Learning in games via reinforcement and regularization*, (2017).
- [1585] P. Mertikopoulos and W.H. Sandholm, *Riemannian game dynamics*, *J. Economic Theory* **177**, 315-364 (2018).
- [1586] C. Fiegel, P. Menard, T. Kozuno, R. Munos, V. Perchet and M. Valko, *Adapting to game trees in zero-sum imperfect information games*, preprint (2022), 2212.12567 [stat.ML].
- [1587] H. Yoshioka, *Computational analysis on a linkage between generalized logit dynamic and discounted mean field game*, preprint (2024), arxiv 2405.15180
- [1588] O. Kharazmi and J.E. Contreras-Reyes, *Deng-Fisher information measure and its extensions: Application to Conway's Game of Life*, *Chaos, Solitons and Fractals* **174**, 113871 (2023).
- [1589] O. Kharazmi and J.E. Contreras-Reyes, *Fractional cumulative residual inaccuracy information measure and its extensions with application to chaotic maps*, preprint (2023).
- [1590] O. Kharazmi and J.E. Contreras-Reyes, *Belief inaccuracy information measures and their extensions*, *Fluctuation and Noise Letters*, 2450041 (2024).
- [1591] O. Kharazmi, E. Castilla and F. Yalcin, *On Jensen- Φ -divergence measure: Applications to logistic regression model and image processing*, *Computational and Applied Mathematics* **44**, 323 (2025).
- [1592] W. Azizian, F. Iutzeler, J. Malick and P. Mertikopoulos, *The last-iterate convergence rate of optimistic mirror descent in stochastic variational inequalities*, *Proceedings of Machine Learning Research* **134**, 1-31 (2021).
- [1593] N.R. Bramley, J.D. Nelson, M. Speekenbrink, V. Crupi and D.A. Lagnado, *What should an active causal learner value*, *Psychonomics* (2104).
- [1594] J.D. Nelson, V. Crupi, B. Meder, G. Cevolani and K. Tentori, *A unified model of entropy and the value of information*, 1459-1460 (2017).
- [1595] V. Crupi, J.D. Nelson, B. Meder, G. Cevolani and K. Tentori, *Generalized Information Theory Meets Human Cognition: Introducing a Unified Framework to Model Uncertainty and Information Search*, *Cognitive Science* **42**, 1410-1456 (2018), doi: 10.1111/cogs.12613
- [1596] Y. Xue and P. Bogdan, *Constructing compact causal mathematical models for complex dynamics*, *ACM* 97-107 (2017).
- [1597] M. Li, Q. Zhang and Y. Deng, *Multiscale probability transformation of basic probability assignment*, preprint (2014), 1406.1697 [cs.AI].
- [1598] L. Pan and Y. Deng, *A new belief entropy to measure uncertainty of basic probability assignments based on belief function and plausibility function*, *Entropy* **20**, 842 (2018), doi: 10.3390/e20110842
- [1599] Y. He and Y. Deng, *Ordinal belief entropy*, *Soft Computing* (2023), doi: 10.1007/s00500-023-07947-x
- [1600] L. Sakhnovich, *Entropy and energy in non-extensive statistical mechanics*, preprint (2011), 1103.1572 [math-ph].
- [1601] I. Ojima, *Meaning of non-extensive entropies in micro-macro duality*, *J. Phys. C Series* **201**, 012017 (2010) (9 pages).
- [1602] J. Briet, P. Harremoës and F. Topsøe, *Properties of Classical and Quantum Jensen-Shannon Divergence*, preprint (2008), 0806.4472 [quant-ph].
- [1603] D. Ghoshdastidar, A. Dukkipati, A.P. Adsul and A.S. Vijayan, *Spectral clustering with Jensen-type kernels and their multi-point extensions*, *Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition*, Article number 6909587, 1472-1477 (24 September 2014, 27th IEEE Conference on Computer Vision and Pattern Recognition, CVPR 2014; Columbus; United States; 23 June 2014 through 28 June 2014; Category numberE5260; Code 107390).
- [1604] O.A. Arigbabu, *Entropy decision fusion for smartphone sensor based human activity recognition*, preprint (2020), 2006.00367 [cs.CV].
- [1605] Z. Wang, P. Shang and X. Mao, *Feature recognition of complex systems using cumulative residual Tsallis signal entropy and grey wolf optimized support vector machine*, *Expert Systems with Applications* **238**, 122246 (2024).
- [1606] X. Yan, J. Liu, L. Wang, S. Wang, S. Zhang and Y. Xin, *Detection of respiratory events during sleep based on fusion analysis and entropy features of cardiopulmonary signals*, *Entropy* **25**, 879 (2023).
- [1607] R. Dhandapani, *Application of signal processing techniques in high voltage equipment fault detection using partial discharge signal*, Doctor Thesis (Glasgow Caledonian University, 2024).
- [1608] R. Kadian and S. Kumar, *Renyi's-Tsallis fuzzy divergence measure and its applications to pattern recognition and fault detection*, *J. Intelligent and Fuzzy Systems* **39** (1), 731-752 (2020).

- [1609] R. Kadian and S. Kumar, *Tsallis information measure between picture fuzzy sets with application to pattern recognition*, AIP Conference Proceedings **2555**, 050025 (2022).
- [1610] R. Gupta and S. Kumar, *A New generalization of Renyi's entropy of order β with coding theory in fuzzy environment*, AIP Conference Proceedings **2555**, 040003 (2022).
- [1611] V. Arya and S. Kumar, *Fuzzy entropy measure with an application in decision making under bipolar fuzzy environment based on TOPSIS method*, Internat. J. Information and Management Sciences **31**, 99-121 (2020), doi: 10.6186/IJIMS.202006 31(2).0001
- [1612] V. Arya and S. Kumar, *A novel TODIM-VIKOR approach based on entropy and Jensen-Tsallis divergence measure for picture fuzzy sets in a decision-making problem*, International Journal of Intelligent Systems (2020), doi: 10.1002/int.22289
- [1613] V. Arya and S. Kumar, *Picture fuzzy multiple criteria decision making based on TODIM with Tsallis entropy weighted method*, Advances and Applications in Mathematical Sciences **19** (8), 729-752 (2020).
- [1614] V. Arya and S. Kumar, *A picture fuzzy multiple criteria decision-making approach based on the combined TODIM-VIKOR and entropy weighted method*, Cognitive Computation (2021), doi: 10.1007/s12559-021-09892-z
- [1615] V. Arya and S. Kumar, *Extended TODIM method based on VIKOR for q-rung orthopair fuzzy information measures and their application in MAGDM problem of medical consumption products*, Internat. J. Intelligent Systems (2021), doi: 10.1002/int.22571
- [1616] R. Kadian and S. Kumar, *New fuzzy mean codeword length and similarity measure*, Granul. Comput. (2021), 10.1007/s41066-021-00278-y
- [1617] S. Kumar, V. Arya, S. Kumar and A. Dahiya, *A new picture fuzzy entropy and its application based on combined picture fuzzy methodology with partial weight information*, Int. J. Fuzzy Syst. (2022), doi: 10.1007/s40815-022-01332-w
- [1618] C.T. Ng, R. Duncan Luce and A.A.J. Marley, *Utility of gambling when events are valued: An application of inset entropy*, Theory and Decision **67**, 23-63 (2009).
- [1619] H.D. Arora and V. Kumar, *Expected utility entropy model under risk by Tsallis measure of entropy*, J. Appl. Probab. Statistics **11** (1), 115-120 (2016).
- [1620] V. Kumar, H.D. Arora and R. Sahni, *An assessment of some entropy measures in predicting bugs of open-source software*, Software Engineering 609-621 (2018).
- [1621] H.D. Arora and T. Parveen, *Computation of Various Entropy Measures for Anticipating Bugs in Open-Source Software*, Software Engineering, 235-247 (2018).
- [1622] E.Ph. Jharko, E.A. Sakrutina and K.R. Chernyshov, *Intelligent NPP operators support systems: Flexible modeling software package and digital twins*, IEEE 2020 International Russian Automation Conference (RusAutoCon) (2020).
- [1623] R. Ahlswede and N. Cai, *An interpretation of identification entropy*, IEEE Transactions Inf.Theory **52**, 4198-4207 (2006).
- [1624] T. Yamano, *A statistical measure of complexity with nonextensive entropy*, Physica A **340**, 131 (2004).
- [1625] S. Sieniutycz, *Extremum properties of entropy to determine dynamics of growth and evolution in complex systems*, Physica A **340**, 356-363 (2004).
- [1626] F. Pennini and A. Plastino, *Escort Husimi distributions, Fisher information and nonextensivity*, Phys. Lett. A **326**, 20 (2004).
- [1627] F. Pennini, A. Plastino and G.L. Ferri, *Fisher information from Husimi distributions in a nonextensive setting*, communicated at IX Latin American Workshop on Nonlinear Phenomena (23-28 October 2005, Bariloche).
- [1628] A. Plastino and A.R. Plastino, *Application of nonextensive concepts that include Fisher's estimation theory*, Proc. XIth United Nations / European Space Agency Workshop on Basic Space Science (9-13 September 2002, Cordoba, Argentina), eds. H. Haubold and M. Rabolli, Astrophysics and Space Science **290**, 287 (Kluwer, 2004).
- [1629] T. Yamano, *A statistical complexity measure with nonextensive entropy and quasi-multiplicativity*, J. Math. Phys. **45**, 1974 (2004).
- [1630] Q.A. Wang, *Maximum entropy change and least action principle for nonequilibrium systems*, Astrophys. Space Sci. **305**, 273-281 (2006).
- [1631] J.M. Yang, *Quantum scalar field theory based on an extended least action principle*, International Journal of Theoretical Physics **63**, 15 (2024).

- [1632] T. Cardoso-Bufalo, R. Bufalo, L.P.G. Figueiredo, Q.A. Wang and F.L. Alves, *Assessing black swan events with the stochastic least action principle, Tsallis entropy and heavy-tailed distribution*, Eur. Phys. J. Plus **138**, 282 (2023).
- [1633] J. Naudts, *On the maximum entropy principle in non-extensive thermostatistics*, preprint (2004) [cond-mat/0405508].
- [1634] S. Furuichi, *Chain rules and subadditivity for Tsallis entropies*, preprint (2004) [cond-mat/0405600].
- [1635] S. Furuichi, K. Yanagi and K. Kuriyama, *Tsallis relative operator entropy in mathematical physics*, preprint (2004) [math.FA/0406136].
- [1636] H.R. Moradi, M.S. Hosseini, M.E. Omidvar and S.S. Dragomir, *Some lower and upper bounds for relative operator entropy*, U.P.B. Sci. Bull., Series A **79** (3), 97-106 (2017).
- [1637] S.S. Dragomir, *Inequalities for quantum f -divergence of convex functions and matrices*, Korean Journal of Mathematics **26** (3), 349-371 (2018).
- [1638] K. Yanagi, K. Kuriyama and S. Furuichi, *Generalized Shannon inequalities based on Tsallis relative operator entropy*, Linear Algebra and its Applications **394**, 109 (2004).
- [1639] S. Furuichi, K. Yanagi and K. Kuriyama, *Fundamental properties of Tsallis relative entropy*, J. Math. Phys. **45**, 4868 (2004).
- [1640] S. Furuichi, *A characterization of the Tsallis relative entropy by the generalized properties*, preprint (2004) [cond-mat/0410270].
- [1641] S. Furuichi, *A generalized Faddeev's axiom and the uniqueness theorem for Tsallis entropy*, preprint (2004) [cond-mat/0410271].
- [1642] S. Furuichi, *On uniqueness theorems for Tsallis entropy and Tsallis relative entropy*, IEEE Transactions on Inf. Theory **51**, 3638-3645 (2005).
- [1643] S. Furuichi, *On a parametrically extended entanglement-measure due to Tsallis relative entropy*, preprint (2005) [quant-ph/0504023].
- [1644] S. Furuichi, K. Yanagi and K. Kuriyama, *A note on operator inequalities of Tsallis relative operator entropy*, Linear Algebra and its Applications **407**, 19-31 (2005).
- [1645] S. Furuichi, *Information theoretical properties of Tsallis entropies*, J. Math. Phys. **47**, 023302 (2006).
- [1646] S. Furuichi, *The uniqueness theorem for a two-parameter extended relative entropy*, preprint (2008), 0810.5399 [cond-mat.stat-mech].
- [1647] S. Furuichi, *An axiomatic characterization of a two-parameter extended relative entropy*, J. Math. Phys. **51**, 123302 (2010) (10 pages).
- [1648] S. Furuichi, *On bounds of Tsallis relative entropy and an inequality for generalized skew information*, preprint (2010), 1008.3441 [math.FA].
- [1649] S. Furuichi, N. Minculete and F.-C. Mitroi, *Some inequalities on generalized entropies*, J. Inequalities and Applications **2012**, 226, (2012).
- [1650] S. Furuichi and N. Minculete, *Refined Young inequality and its application to divergences*, Entropy **23**, 514 (2021), doi: 10.3390/e23050514
- [1651] N. Minculete and S. Furuichi, *Types of entropies and divergences with their applications*, Entropy **25**, 198 (2023), doi: 10.3390/e25020198
- [1652] S. Furuichi and F.-C. Mitroi, *Mathematical inequalities for some divergences*, Physica A **391**, 388-400 (2012).
- [1653] S. Furuichi, *Inequalities for Tsallis relative entropy and generalized skew information*, Linear and Multilinear Algebra **59** (10), 1143-1158 (2011).
- [1654] S. Furuichi, F.C. Mitroi-Symeonidis and E. Symeonidis, *On some properties of Tsallis hypoenropies and hypodivergences*, Entropy **16**, 5377-5399 (2014), doi:10.3390/e16105377
- [1655] S. Furuichi, K. Yanagi and K.Kuriyama, *Remarks of bounds for symmetric divergence measures*, communication at MaxEnt 2016 (2016).
- [1656] S. Furuichi, K. Yanagi and K. Kuriyama, *On bounds for symmetric divergence measures*, AIP Conference Proceedings **1853**, 080002 (2017), doi: 10.1063/1.4985367, 1903.08311 [cs.IT].
- [1657] S. Furuichi and N. Minculete, *Alternative estimates for Tsallis relative operator entropy*, preprint (2017), 1706.03334 [math.FA].
- [1658] S. Furuichi and H.R. Moradi, *Advances in mathematical inequalities*, (Publisher Walter de Gruyter, 2020).
- [1659] F.-C. Mitroi and N. Minculete, *Mathematical inequalities for biparametric extended information measures*, J. Math. Inequalities **7** (1), 63-71 (2013).
- [1660] S. Furuichi and N. Minculete, *Inequalities for relative operator entropies and operator means*, Acta Math. Vietnam **43** (4), 607-618 (2018), doi: 10.1007/s40306-018-0250-7

- [1661] S. Furuichi and N. Minculete, *Bounds for the differences between arithmetic and geometric means and their applications to inequalities*, Symmetry **13**, 2398 (2021), doi: 10.3390/sym13122398
- [1662] S. Furuichi and N. Minculete, *Inequalities related to some types of entropies and divergences*, Physica A **532**, 121907 (2019).
- [1663] T. Furuta, *Two reverse inequalities associated with Tsallis relative operator entropy via generalized Kantorovich constant and their applications*, Linear Algebra and its Applications **412**, 526-537 (2006).
- [1664] L.H.F. Andrade, R.F. Vigelis and C.C. Cavalcante, *A generalized quantum relative entropy*, Advances in Mathematics of Communications **14** (3), 413-422 (2020), doi: 10.3934/amc.2020063
- [1665] R.F. Vigelis, L.H.F. Andrade and C.C. Cavalcante, *Properties of a generalized divergence related to Tsallis generalized divergence*, IEEE Transactions on Information Theory **66** (5), 2891-2897 (2020).
- [1666] R.F. Vigelis, L.H.F. Andrade and C.C. Cavalcante, *Conditions for the existence of a generalization of Renyi divergence*, Physica A **558**, 124953 (2020).
- [1667] S. Martinez and A. Plastino, *Nonextensive normalized treatment of Clausius equation*, Physica A **345**, 493-505 (2005).
- [1668] A.H. Tavares and A. Batel Anjo, *Entropy - A remark on Santos axiomatic*, preprint (2004).
- [1669] G.L. Ferri, S. Martinez and A. Plastino, *The role of constraints in Tsallis' nonextensive treatment revisited*, Physica A **347**, 205 (2005).
- [1670] F. Pennini, A. Plastino and G.L. Ferri, *Semiclassical information from deformed and escort information measures*, Physica A **383**, 782-796 (2007).
- [1671] F. Olivares, F. Pennini, A. Plastino and G.L. Ferri, *Semiclassical statistical mechanics' tools for deformed algebras*, preprint (2008), 0712.3492 [cond-mat.stat-mech].
- [1672] H. Matsuzoe and T. Wada, *Deformed algebras and generalizations of independence on deformed exponential families*, Entropy **17**, 5729-5751 (2015), doi:10.3390/e17085729
- [1673] C. Castro, *On non-extensive statistics, chaos and fractal strings*, Physica A **347**, 184 (2005).
- [1674] A.S. Parvan and T.S. Biro, *Extensive Renyi statistics from non-extensive entropy*, Phys. Lett. A **340**, 375-387 (2005).
- [1675] A.S. Parvan and T.S. Biro, *Renyi statistics in equilibrium statistical mechanics*, Phys. Lett. A **374**, 1951-1957 (2010).
- [1676] T.S. Biro, *Is There a Temperature? - Conceptual Challenges at High Energy, Acceleration and Complexity, Fundamental Theories in Physics 171*, (Springer, 2011).
- [1677] T.S. Biro, *Non-additive entropy composition rules connected with finite heat-bath effects*, Entropy **24**, 1769 (2022).
- [1678] F. Shafee, *A new nonextensive entropy*, preprint (2004) [nlin.AO/0406044]
- [1679] F. Shafee, *Generalized entropies and statistical mechanics*, preprint (2004) [cond-mat/0409037].
- [1680] F. Shafee, *Generalized entropies and quantum entanglement*, preprint (2004) [cond-mat/0410554].
- [1681] F. Shafee, *Lambert function and a new non-extensive form of entropy*, IMA J. Appl. Math. **72**, 785-800 (2007).
- [1682] F. Shafee, *Nonextensive entropy, prior PDFs and spontaneous symmetry breaking*, preprint (2008), 0810.1072 [cond-mat.stat-mech].
- [1683] F. Shafee, *Generalized entropy from mixing: Thermodynamics, mutual information and symmetry breaking*, preprint (2009), 0906.2458 [cond-mat.stat-mech].
- [1684] T. Yamano, *Generalized symmetric mutual information applied for channel capacity*, preprint (2001) [cond-mat/0102322].
- [1685] M. Marinescu and C. Balcau, *On the use of mutual information for testing independence*, preprint (2025), 2502.17636 [stat.ME].
- [1686] T. Tsuruyama, *Channel capacity of coding system on Tsallis entropy and q-statistics*, Entropy **19**, 682 (2017) (5 pages), doi: 10.3390/e19120682
- [1687] R. Botet, M. Ploszajczak, K.K. Gudima, A.S. Parvan and V.D. Toneev, *The thermodynamic limit in the non-extensive thermostatics*, Physica A **344**, 403 (2004).
- [1688] R.M. Yulmetyev, N.A. Emelyanovo and F.M. Gafarov, *Dynamical Shannon entropy and information Tsallis entropy in complex systems*, Physica A **341**, 649 (2004).
- [1689] A. Carati, *Thermodynamics and time averages*, Physica A **348**, 110 (2005).
- [1690] A. Carati, *Time-averages and the heat theorem*, in *Complexity, Metastability and Nonextensivity*, Proc. 31st Workshop of the International School of Solid State Physics (20-26 July 2004, Erice-Italy), eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 55.
- [1691] A. Carati, *On the definition of temperature using time-averages*, Physica A **369**, 417-431 (2006).

- [1692] A. Carati, *Thermodynamics and time-averages*, preprint (2005).
- [1693] A. Carati, *On the fractal dimension of orbits compatible with Tsallis statistics*, Physica A **387**, 1491-1503 (2008).
- [1694] A. Carati, *Compatibility between dynamics and Tsallis statistics*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 43-50 (New York, 2007).
- [1695] S. Abe and Y. Nakada, *Temporal extensivity of Tsallis' entropy and the bound on entropy production rate*, Phys. Rev. E **74**, 021120 (2006) (6 pages).
- [1696] S. Martinez and A. Plastino, *Nonextensive normalized treatment of Clausius equation*, Physica A **345**, 493 (2004).
- [1697] A. Plastino, *The need for alternative information measures*, Physica A **342**, 126 (2004).
- [1698] S. Abe, *Quantum q -divergence*, Physica A **344**, 359 (2004).
- [1699] C. Tsallis, *Is the entropy S_q extensive or nonextensive?*, in *Complexity, Metastability and Nonextensivity*, eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 13 [cond-mat/0409631].
- [1700] Y. Sato and C. Tsallis, *On the extensivity of the entropy S_q for $N \leq 3$ specially correlated binary subsystems*, Proceedings of the Summer School and Conference on *Complexity in Science and Society* (Patras and Ancient Olympia, 14-26 July 2004), *Complexity: An unifying direction in science*, eds. T. Bountis, G. Casati and I. Procaccia, International Journal of Bifurcation and Chaos **16**, 1727-1738 (2006).
- [1701] C. Tsallis, M. Gell-Mann and Y. Sato, *Asymptotically scale-invariant occupancy of phase space makes the entropy S_q extensive*, Proc. Natl. Acad. Sc. USA **102**, 15377-15382 (2005).
- [1702] C. Tsallis, *Generalization of the possible algebraic basis of q -triplets*, Eur. Phys. J. Special Topics **226**, 455-466 (2017), doi: 10.1140/epjst/e2016-60159-x
- [1703] C. Tsallis, *Statistical mechanics for complex systems: On the structure of q -triplets*, in *Physical and Mathematical Aspects of Symmetries*, Proceedings of the 31st International Colloquium in Group Theoretical Methods in Physics, Eds. Duarte, S., Gazeau, J.-P., Faci, S., Micklitz, T., Scherer, R., and Toppan, F., 51-60 (2017, Springer), 1607.07097 [cond-mat.stat-mech].
- [1704] J.P. Gazeau and C. Tsallis, *Moebius transforms, cycles and q -triplets in statistical mechanics*, Entropy **21**, 1155 (2019), doi:10.3390/e21121155(2019)
- [1705] H. Farfan-Bachilloglu, F.A. Calderon and D.G. Perez, *Q -triplet characterization of atmospheric time series at Antofagasta: A missing values problem*, 3rd International Workshop on Statistical Physics, Journal of Physics: Conference Series **2839**, 012009 (2024).
- [1706] D. Prenga and M. Ifti, *Complexity methods used in the study of some real systems with weak characteristic properties*, 9th International Physics Conference of the Balkan Physical Union (BPU-9), AIP Conf. Proc. **1722**, 080006 (2016) (4 pages), doi: 10.1063/1.4944171
- [1707] D. Asani and D. Prenga, *A practical strategy to improve econometric modeling – a case study for informal economy on the Republic of Macedonia*, Internat. J. Scientific Research and Management **06** (7), 627-632 (2018).
- [1708] C. Tsallis, M. Gell-Mann and Y. Sato, *Extensivity and entropy production*, Europhysics News Special Issue, Europhysics News **36**, 186 (2005) [Europhysics News Special Issue *Nonextensive Statistical Mechanics: New Trends, new perspectives*, eds. J.P. Boon and C. Tsallis (November/December 2005)].
- [1709] J. Marsh and S. Earl, *New solutions to scale-invariant phase-space occupancy for the generalized entropy S_q* , Phys. Lett. A **349**, 146-152 (2005).
- [1710] A.K. Rajagopal and R.W. Rendell, *Classical statistics inherent in a quantum density matrix*, Phys. Rev. A **72**, 022322 (2005).
- [1711] A.K. Rajagopal and R.W. Rendell, *Non-additive entropy in quantum information*, Europhysics News **36**, 221 (2005) [Europhysics News Special Issue *Nonextensive Statistical Mechanics: New Trends, new perspectives*, eds. J.P. Boon and C. Tsallis (November/December 2005)].
- [1712] C. Zander and A.R. Plastino, *Composite systems with extensive S_q (power law) entropies*, Physica A **364**, 145-156(2006).
- [1713] C. Tsallis, *Nonextensive statistical mechanics, anomalous diffusion and central limit theorems*, Milan Journal of Mathematics **73**, 145-176 (2005).
- [1714] L.G. Moyano, C. Tsallis and M. Gell-Mann, *Numerical indications of a q -generalised central limit theorem*, Europhys. Lett. **73**, 813-819 (2006).
- [1715] H.J. Hilhorst and G. Schehr, *A note on q -Gaussians and non-Gaussians in statistical mechanics*, J. Stat. Mech. (2007) P06003.

- [1716] T. Dauxois, *Non-Gaussian distributions under scrutiny*, J. Stat. Mech. (2007) N08001.
- [1717] C. Tsallis, *T. Dauxois' "Non-Gaussian distributions under scrutiny" under scrutiny*, in *Proceedings of the Third UN/ESA/NASA Workshop on the International Heliophysical Year 2007 and Basic Space Science*, Astrophysics and Space Science Proceedings, eds. H.J. Haubold and A.M. Mathai, DOI 10.1007/978-3-642-03325-4 (Springer-Verlag, Berlin, 2010), pages 1-10, 0712.4165 [cond-mat.stat-mech].
- [1718] E. Milotti, *Non-Gaussianity as a data analysis artifact*, Phys. Rev. E **83**, 042103 (2011) (4 pages).
- [1719] W.J. Thistleton, J.A. Marsh, K.P. Nelson and C. Tsallis, *q-Gaussian approximants mimic non-extensive statistical-mechanical expectation for many-body probabilistic model with long-range correlations*, Cent. Eur. J. Phys. **7**, 387-394 (2009).
- [1720] A. Celikoglu and U. Tirnakli, *Comment on "Universal relation between skewness and kurtosis in complex dynamics"*, Phys. Rev. E **92**, 066801 (2015) (3 pages).
- [1721] A. Celikoglu and U. Tirnakli, *Skewness and kurtosis analysis for non-Gaussian distributions*, Physica A **499**, 325-334 (2018).
- [1722] P. Sulewski, *Easily changeable kurtosis distribution*, Communication at XLVIII Conference Mathematical Statistics (December 5-9 2022, Bedlewo, Poland).
- [1723] P. Sulewski, *New members of the Johnson family of probability distributions: Properties and application*, REVSTAT - Statistical Journal **21** (4), 535-556 (2023).
- [1724] A. Rodriguez, V. Schwammle and C. Tsallis, *Strictly and asymptotically scale-invariant probabilistic models of N correlated binary random variables having q -Gaussians as $N \rightarrow \infty$ limiting distributions*, JSTAT P09006 (2008).
- [1725] R. Hanel, S. Thurner and C. Tsallis, *Limit distributions of scale-invariant probabilistic models of correlated random variables with the q -Gaussian as an explicit example*, Eur. Phys. J. B **72**, 263-268 (2009).
- [1726] A.A. Tateishi, R. Hanel and S. Thurner, *The transformation-groupoid structure of the q -Gaussian family*, Phys. Lett. A **377**, 1804-1809 (2013).
- [1727] H. Bergeron, E.M.F. Curado, J.P. Gazeau and L.M.C.S. Rodrigues, *Symmetric generalized binomial distributions*, J. Math. Phys. **54**, 123301 (2013) (17 pages).
- [1728] H. Bergeron, E.M.F. Curado, J.P. Gazeau and L.M.C.S. Rodrigues, *Entropies of deformed binomial distributions*, preprint (2014), 1412.0581 [cond-mat.stat-mech].
- [1729] H. Bergeron, E.M.F. Curado, J.P. Gazeau and L.M.C.S. Rodrigues, *Extensivity of Renyi entropy for the Laplace-de Finetti distribution*, Physica A **441**, 23-31 (2016), doi: 10.1016/j.physa.2015.08.014
- [1730] H. Bergeron, E.M.F. Curado, J.P. Gazeau and L.M.C.S. Rodrigues, *Symmetric deformed binomial distributions: An analytical example where the Boltzmann-Gibbs entropy is not extensive*, J. Math. Phys. **57**, 023301 (2016) (20 pages).
- [1731] H. Zhang, K. Tan and B. Li, *The COM-negative binomial distribution: modeling overdispersion and ultrahigh zero-inflated count data*, Front. Math. China **13** (4), 967-998 (2018), doi: 10.1007/s11464-018-0714-z
- [1732] J. Ruseckas, *Probabilistic model of N correlated binary random variables and non-extensive statistical mechanics*, Phys. Lett. A **379**, 654-659 (2015).
- [1733] A. Kononovicius and J. Ruseckas, *Stochastic dynamics of N correlated binary variables and non-extensive statistical mechanics*, preprint (2016), 1601.06968 [cond-mat.stat-mech].
- [1734] H.J. Hilhorst, *Central limit theorems for correlated variables: some critical remarks*, Braz. J. Phys. **39**, 371-379 (2009).
- [1735] H.J. Hilhorst, *Note on a q -modified central limit theorem*, J. Stat. Mech., P10023 (2010) (9 pages).
- [1736] S. Umarov and C. Tsallis, *Limit distribution in the q -CLT for $q \geq 1$ can not have a compact support*, preprint (2010), 1012.1814 [cond-mat.stat-mech].
- [1737] S. Umarov and C. Tsallis, *The limit distribution in the q -CLT for $q \geq 1$ is unique and can not have a compact support*, J. Phys. A **49**, 415204 (2016) (14 pages), doi: 10.1088/1751-8113/49/41/415204
- [1738] G.M. Nakamura, A.H. de Martini and A.S. Martinez, *Extension of inverse q -Fourier transform via conformal mapping*, Physica A **524**, 106-111(2019).
- [1739] A. Rodriguez and C. Tsallis, *A dimension scale-invariant probabilistic model based on Leibniz-like pyramids*, J. Math. Phys. **53**, 023302 (2012) (27 pages).
- [1740] A. Rodriguez and C. Tsallis, *A generalization of the cumulant expansion. Application to a scale-invariant probabilistic model*, J. Math. Phys. **51**, 073301 (2010) (17 pages).
- [1741] A. Rodriguez and C. Tsallis, *Connection between Dirichlet distributions and a scale-invariant probabilistic model based on Leibniz-like pyramids*, J. Stat. Mech. P12027 (2014) (15 pages).
- [1742] A. Rodriguez, *A discrete probabilistic model yielding multidimensional q -Gaussians in the thermodynamic limit for specific parameter values*, Phys. Scr. **99**, 055405 (2024).

- [1743] P. Thankamani, N. Sebastian and H.J. Haubold, *On complex matrix-variate Dirichlet averages and its applications in various sub-domains*, Entropy **25**, 1534 (2023).
- [1744] G. Sicuro, P. Tempesta, A. Rodriguez and C. Tsallis, *On the robustness of the q -Gaussian family*, Annals Physics **363**, 316-336 (2015).
- [1745] H. Suyari and T. Wada, *Multiplicative duality, q -triplet and (μ, ν, q) -relation derived from the one-to-one correspondence between the (μ, ν) -multinomial coefficient and Tsallis entropy S_q* , Physica A **387**, 71-83 (2007).
- [1746] T. Wada, *Nonextensive entropies derived from Gauss principle*, Phys. Lett. A **375**, 2037-2040 (2011).
- [1747] S. Umarov, C. Tsallis and S. Steinberg, *On a q -central limit theorem consistent with nonextensive statistical mechanics*, Milan J. Math. **76**, 307-328 (2008).
- [1748] S. Umarov, C. Tsallis, M. Gell-Mann and S. Steinberg, *Symmetric (q, α) -Stable Distributions. Part I: First Representation*, preprint (2008) [cond-mat/0606038v2].
- [1749] S. Umarov, C. Tsallis, M. Gell-Mann and S. Steinberg, *Symmetric (q, α) -Stable Distributions. Part II: Second Representation*, preprint (2008) [cond-mat/0606040v2].
- [1750] S. Umarov, C. Tsallis, M. Gell-Mann and S. Steinberg, *Generalization of symmetric α -stable Lévy distributions for $q > 1$* , J. Math. Phys. **51**, 033502 (2010) (23 pages).
- [1751] B.S. Nahla, *Some properties of q -Gaussian distributions*, preprint (2021), 2101.00516 [math.PR].
- [1752] A.M. Scarfone, *κ -deformed Fourier transform*, Physica A **480**, 63-78 (2017), doi: 10.1016/j.physa.2017.03.036
- [1753] A.M. Scarfone, *Boltzmann configurational entropy revisited in the framework of generalized statistical mechanics*, Entropy **24**, 140 (2022).
- [1754] S.G. Bobkov, G.P. Chistyakov and F. Gotze, *Renyi divergence and the Central Limit Theorem*, Annals Probability **47** (1), 270-323 (2019).
- [1755] M.G. Hahn, X.X. Jiang and S. Umarov, *On q -Gaussians and exchangeability*, J. Phys. A **43** (16), 165208 (2010) (11 pages).
- [1756] X.X. Jiang, M.G. Hahn and S. Umarov, *On generalized Leibniz triangles and q -Gaussians*, Phys. Lett. A **376**, 2447-2450 (2012).
- [1757] D.J. Eck and I.W. McKeague, *Central Limit Theorems under additive deformations*, Statistics and Probability Letters **118**, 156-162 (2016).
- [1758] A.A. Budini, *Central limit theorem for a class of globally correlated random variables*, Phys. Rev. E **93**, 062114 (2016) (14 pages).
- [1759] S. Umarov and C. Tsallis, *Multivariate generalizations of the q -central limit theorem*, preprint (2007) [cond-mat/0703533].
- [1760] S. Umarov and C. Tsallis, *On a representation of the inverse F_q -transform*, Phys. Lett. A **372**, 4874-4876 (2008).
- [1761] S. Umarov and S.M.D. Queiros, *Functional-differential equations for the q -Fourier transform of q -Gaussians*, J. Phys. A **43**, 095202 (2010) (15 pages).
- [1762] S. Umarov and C. Tsallis, *On multivariate generalizations of the q -central limit theorem consistent with nonextensive statistical mechanics*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 34-42 (New York, 2007).
- [1763] K.P. Nelson and S. Umarov, *The relationship between Tsallis statistics, the Fourier transform, and nonlinear coupling*, preprint (2008), 0811.3777 [cs.IT].
- [1764] K. Nelson and S. Umarov, *Extension of the q -Central Limit Theorem to the compact-support domain*, preprint (2009).
- [1765] K.P. Nelson and S. Umarov, *Nonlinear statistical coupling*, Physica A **389**, 2157-2163 (2010).
- [1766] K.P. Nelson, S. Umarov and M.A. Kon, *On the average uncertainty for systems with nonlinear coupling*, Physica A **468**, 30-43 (2017).
- [1767] K.P. Nelson, M.A. Kon and S.R. Umarov, *Use of the geometric mean as a statistic for the scale of the coupled Gaussian distributions*, Physica A (2018), in press, arxiv 1804.03989
- [1768] K.P. Nelson, *Inference assessment on a probability scale*, IEEE (2017) (5 pages).
- [1769] K.P. Nelson, I. Oliveira, A. Al-Najafi, F. Zhang and H.K.T. Ng, *variational inference optimized using the curved geometry of coupled free energy*, preprint (2025), 2506.09091 [cs.LG].
- [1770] K.P. Nelson, *Assessing probabilistic inference by comparing the generalized mean of the model and source probabilities*, (2017), in press, doi:10.20944/preprints201706.0002.v1
- [1771] K.P. Nelson, *Independent approximates enable closed-form estimation of heavy-tail distributions*, preprint (2022), arxiv 2012.11026

- [1772] K.P. Nelson, *Open problems within nonextensive statistical mechanics*, preprint (2024), arxiv 2401.02977
- [1773] S. Umarov, *q-central limit theorems, Tsallis q-statistics, and applications*, communicated at Joint Meeting of Boston Chapter of the American Statistical Association and the New Hampshire Chapter of the IEEE Communications and Signal Processing (October 2010).
- [1774] H. Ma and D. Tian, *Generalized entropic risk measures and related BSDEs*, Statistics and Probability Letters **174**, 109110 (2021), doi: 10.1016/j.spl.2021.109110
- [1775] G. Di Nunno and E.R. Gianin, *Cash non-additive risk measures: horizon risk and generalized entropy*, preprint (2024), 2401.14443 [q-fin.RM].
- [1776] M. Jauregui and C. Tsallis, *Comentarios sobre a q-transformada de Fourier*, communicated at the 2nd Workshop of the National Institute of Science and Technology for Complex Systems (Rio de Janeiro, 1-5 March 2010).
- [1777] A. Plastino and M.C. Rocca, *Inversion of Umarov-Tsallis-Steinberg's q-Fourier Transform and the complex-plane generalization*, Physica A **391**, 4740-4747 (2012).
- [1778] A. Plastino and M.C. Rocca, *q-Fourier Transform and its inversion-problem*, Milan J. Math. **80** (1), 243-249 (2012).
- [1779] A. Plastino and M.C. Rocca, *Reflections on the q-Fourier transform and the q-Gaussian function*, Physica A **392** (18), 3952-3961 (2013).
- [1780] A. Plastino and M. C. Rocca, *q-Fourier Transform: reconciling Hilhorst with Umarov-Tsallis-Steinberg*, preprint (2013), 1301.3518 [math-ph].
- [1781] M. Przystalski, *A note on q-weak law of large numbers*, Phys. Lett. A **374**, 123-125 (2009).
- [1782] M.A.S. Trindade, *Laws of large numbers for q-dependent random variables and nonextensive statistical mechanics*, Internat. J. Modern Phys. B **31**, 1750117 (2017) (13 pages), doi: 10.1142/S021797921750117X
- [1783] M.A.S. Trindade, S. Floquet and L.M.S. Filho, *Portfolio theory, information theory and Tsallis statistics*, Physica A (2019), 1811.07237 [q-fin.ST].
- [1784] D. Nedela, *Simple entropy rule for systemic risk reduction in portfolio selection framework*, 26th European Scientific Conference of Doctoral Students (November 10-11, 2022).
- [1785] A. Cichocki, S. Cruces, A. Sarmiento and T. Tanaka, *Generalized exponentiated gradient algorithms and their application to on-line portfolio selection*, preprint (2024), 2406.00655 [cs.LG].
- [1786] S.G. Chortane and K. Naoui, *The end of mean-variance? Tsallis entropy revolutionises portfolio optimisation in cryptocurrencies*, J. Risk Financial Manag. **18**, 77 (2025).
- [1787] G. Ruiz and C. Tsallis, *Towards a large deviation theory for strongly correlated systems*, Phys. Lett. A **376**, 2451-2454 (2012).
- [1788] H. Touchette, *Comment on "Towards a large deviation theory for strongly correlated systems"*, Phys. Lett. A **377** (5), 436-438 (2013).
- [1789] G. Ruiz and C. Tsallis, *Reply to Comment on "Towards a large deviation theory for strongly correlated systems"*, Phys. Lett. A **377**, 491-495 (2013).
- [1790] G. Ruiz and C. Tsallis, *Emergence of q-statistical functions in a generalized binomial distribution with strong correlations*, J. Math. Phys. **56**, 053301 (2015) (12 pages).
- [1791] J. Naudts and H. Suyari, *Large deviation estimates involving deformed exponential functions*, Physica A **436**, 716-728 (2015).
- [1792] U. Tirnakli, C. Tsallis and N. Ay, *Approaching a large deviation theory for complex systems*, Nonlinear Dynamics **106**, 2537-2546 (2021), doi: 10.1007/s11071-021-06904-3
- [1793] U. Tirnakli, M. Marques and C. Tsallis, *Entropic extensivity and large deviations in the presence of strong correlations*, Physica D **431**, 133132 (2022).
- [1794] M. Marques Soares Filho, *Extensividade entropica e grandes desvios na presenca de correlacoes nao locais*, Master Thesis (2023).
- [1795] D.J. Zamora and C. Tsallis, *Probabilistic models with nonlocal correlations: Numerical evidence of q-large deviation theory*, Physica A **608**, 128275 (2022).
- [1796] L. Montrucchio and G. Pistone, *A class of non-parametric deformed exponential statistical models*, Geometric Structures of Information 15-35 (2018).
- [1797] H. Suyari and A.M. Scarfone, *α -divergence derived as the generalized rate function in a power-law system*, Proceedings of 2014 International Symposium on Information Theory and Its Applications, ISITA 2014, Article number 6979817, Pages 130-134 (Melbourne, Australia; 26 to 29 October 2014; Category number CFP1405E-CDR; Code 109700).
- [1798] R.C. Venkatesan and A. Plastino, *Reconciliation between the Tsallis maximum entropy principle and large deviation theory*, preprint (2013), 1303.0444 [cond-mat.stat-mech].

- [1799] R.C. Venkatesan and A. Plastino, *Invertible mappings and the large deviation theory for the q -maximum entropy principle*, preprint (2013), 1303.4211 [cond-mat.stat-mech].
- [1800] C. Tsallis and S.M.D. Queiros, *Nonextensive statistical mechanics and central limit theorems I - Convolution of independent random variables and q -product*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 8-20 (New York, 2007).
- [1801] S.M.D. Queiros and C. Tsallis, *Nonextensive statistical mechanics and central limit theorems II - Convolution of q -independent random variables*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 21-33 (New York, 2007).
- [1802] C. Vignat and A. Plastino, *Central limit theorem, deformed exponentials and superstatistics*, preprint (2007) 0706.0151 [cond-mat.stat-mech].
- [1803] C. Vignat and A. Plastino, *Central limit theorem and deformed exponentials*, J. Phys. A **40**, F969-F978 (2007).
- [1804] C. Vignat and A. Plastino, *Why is the detection of q -Gaussian behavior such a common behavior?*, Physica A **388**, 601-608 (2009).
- [1805] C. Vignat and A. Plastino, *Geometry of the central limit theorem in the nonextensive case*, Phys. Lett. A **373**, 1713-1718 (2009).
- [1806] C. Vignat and P.W. Lambertini, *Carinena orthogonal polynomials are Jacobi polynomials*, preprint (2009), 0902.0451 [math.CA].
- [1807] A. Plastino and M.C. Rocca, *q -Statistics of N classical harmonic oscillators*, preprint (2017), 1702.04806 [cond-mat.stat-mech].
- [1808] L.S. Lima, *A new representation for the nonlinear classical oscillator*, Eur. Phys. J. B **90**, 180 (2017), doi: 10.1140/epjb/e2017-80255-8
- [1809] M. Balamurugan, R. Chakrabarti and R. Jagannathan, *An extension of the Bernoulli polynomials inspired by the Tsallis statistics*, preprint (2016), 1612.07496 [math-ph].
- [1810] A. Guerrero, P. Sanchez-Moreno and J.S. Dehesa, *Information-theoretic lengths of Jacobi polynomials*, J. Phys. A **43**, (30), 305203 (2010).
- [1811] R.C. Sftcu, *Tsallis and Renyi divergences of generalized Jacobi polynomials*, Physica A **460**, 131-138 (2016), doi: <http://dx.doi.org/10.1016/j.physa.2016.04.017>
- [1812] R.C. Sftcu, S.C. Sftcu and V. Preda, *On Tsallis and Kaniadakis divergences*, Mathematical Physics, Analysis and Geometry **25**, 7 (2022).
- [1813] R.C. Sftcu, S.C. Sftcu and V. Preda, *Some properties of weighted Tsallis and Kaniadakis divergences*, Entropy **24**, 1616 (2022).
- [1814] R.C. Sftcu, S.C. Sftcu and V. Preda, *Discrete entropies of Chebyshev polynomials*, Mathematics **12**, 1046 (2024).
- [1815] R.C. Sftcu, E.G. Robe-Voinea and F. Serban, *An alternate measure of the cumulative residual Sharma-Taneja-Mittal entropy*, Analele Stiintifice ale Universitatii Ovidius Constanta: Seria Matematica **33** (2), 125-142 (2025).
- [1816] J.S. Dehesa, A. Guerrero and P. Sanchez-Moreno, *Entropy and complexity analysis of the D -dimensional rigid rotator and hyperspherical harmonics*, J. Math. Chem. **53**, 573-589 (2015), doi: 10.1007/s10910-014-0435-9
- [1817] P. Sanchez-Moreno, J.S. Dehesa, A. Zarzo and A. Guerrero, *Renyi entropies, L_q norms and linearization of powers of hypergeometric orthogonal polynomials by means of multivariate special functions*, Appl. Math. Computation **223**, 25-33 (2013).
- [1818] J.S. Dehesa, A. Guerrero, J.L. Lopez and P. Sanchez-Moreno, *Asymptotics ($p \rightarrow \infty$) of L_p -norms of hypergeometric orthogonal polynomials*, J. Math. Chem. **52**, 283-300 (2014), doi: 10.1007/s10910-013-0262-4
- [1819] S.A. Khan and R. Jagannathan, *On certain Appell polynomials and their generalizations based on the Tsallis q -exponential*, Bull. Malays. Math. Sci. Soc. (2022), doi: 10.1007/s40840-022-01292-2
- [1820] J.A. Adell and S. Nkonkobe, *A unified generalization of Touchard and Fubini polynomial extensions*, Integers **23** (2023).
- [1821] A.I. Aptekarev, J.S. Dehesa, P. Sanchez-Moreno and D.N. Tulyakov, *Renyi entropy of the infinite well potential in momentum space and Dirichlet-like trigonometric functionals*, J. Math. Chem. **50**, 1079-1090 (2012).
- [1822] A. Jellal and A. Merdaci, *Entropies for coupled harmonic oscillators and temperature*, preprint (2019), 1902.07645 [quant-ph].

- [1823] A. Boumali, F. Serdouk and S. Dilmi, *Superstatistical properties of the one-dimensional Dirac oscillator*, Physica A **553**, 124207 (2020).
- [1824] S. Siouane, A. Boumali and A. Guvendi, *Superstatistical properties of the Dirac oscillator with Gamma, Lognormal, and F Distributions*, Theoretical and Mathematical Physics **219** (1), 673-687 (2024).
- [1825] S. Siouane and A. Boumali, *On the superstatistical properties of the Klein-Gordon oscillator using Gamma, Log, and F distributions*, Journal of Low Temperature Physics (2024).
- [1826] S. Siouane, *Les proprietes superstatistiques des oscillateurs quantiques*, Doctor Thesis (Universite Echahid Cheikh Larbi Tebessi -Tebessa- Faculte des Sciences Exactes et Sciences de la Nature et de la Vie, Algeria, 2024).
- [1827] A. Boumali, F. Serdouk and S. Dilmi, *Reply on "Comments on superstatistical properties of the one-dimensional Dirac oscillator by Abdelmalek Boumali et al."*, preprint (2020), 2006.09915 [cond-mat.stat-mech].
- [1828] M. Labidi, A. Boumali and A.N. Ikot, *Superstatistics of the one-dimensional Klein-Gordon oscillator with energy-dependent potentials*, Revista Mexicana de Fisica **66** (5), 671-682 (2020).
- [1829] F. Serdouk, A. Boumali, A. Makhlof, and M.L. Benkhedir, *Solutions of q-deformed multiple-trapping model for charge carrier transport from time-of-flight transient photo-current in amorphous semiconductors*, Revista Mexicana de Fisica **66** (5), 643-655 (2020).
- [1830] Y. Zheng, *Nonextensive Fermi statistical theory for the carriers and its applications in complex semiconductor*, Eur. Phys. J. Plus **136**, 711 (2021).
- [1831] E. Keshavarzi, M. Sabzehzari and M. Eliasi, *Quantum vibrational partition function in the non-extensive Tsallis framework*, Physica A **389**, 2733-2738 (2010).
- [1832] J.A. Marsh, M.A. Fuentes, L.G. Moyano and C. Tsallis, *Influence of global correlations on central limit theorems and entropic extensivity*, Physica A **372**, 183-202 (2006).
- [1833] A. Provata, *Nonextensive block entropy statistics of Cantor fractal sets*, Physica A **381**, 148-154 (2007).
- [1834] C. Tsallis, *Occupancy of phase space, extensivity of S_q , and q-generalized central limit theorem*, Physica A **365**, 7-16 (2006).
- [1835] C. Tsallis, *On the extensivity of the entropy S_q , the q-generalized central limit theorem and the q-triplet*, in *Complexity and Nonextensivity: New Trends in Statistical Mechanics*, eds. S. Abe, M. Sakagami and N. Suzuki, Prog. Theor. Phys. Suppl. **162**, 1-9 (2006).
- [1836] U. Tirnakli, C. Beck and C. Tsallis, *Central limit behavior of deterministic dynamical systems*, Phys. Rev. E **75**, 040106(R) (2007) (4 pages).
- [1837] U. Tirnakli, C. Tsallis and C. Beck, *A closer look at time averages of the logistic map at the edge of chaos*, Phys. Rev. E **79**, 056209 (2009) (6 pages).
- [1838] P. Grassberger, *Proposed central limit behavior in deterministic dynamical systems*, Phys. Rev. E **79**, 057201 (2009) (3 pages).
- [1839] U. Tirnakli, C. Tsallis and C. Beck, *Comment on "Proposed central limit behavior in deterministic dynamical systems"*, preprint (2009), 0906.1262 [cond-mat.stat-mech].
- [1840] C. Tsallis and U. Tirnakli, *Nonadditive entropy and nonextensive statistical mechanics - Some central concepts and recent applications*, J. Phys. C Series **201**, 012001 (2010) (15 pages).
- [1841] O. Afsar and U. Tirnakli, *Generalized Huberman-Rudnick scaling law and robustness of q-Gaussian probability distributions*, EPL **101**, 20003 (2013) (6 pages).
- [1842] O. Afsar and U. Tirnakli, *Energy distributions of Frenkel-Kontorova-type atomic chains: Transition from conservative to dissipative dynamics*, Physica D **470**, 134375, (2024).
- [1843] R.W.S. Pessoa and E.P. Borges, *Generalising the logistic map through the q-product*, J. Phys. C Conference Series **285**, 012042 (2011) (12 pages).
- [1844] C. Tsallis and E.P. Borges, *Time evolution of nonadditive entropies: The logistic map*, Chaos, Solitons and Fractals **171**, 113431 (2023).
- [1845] C. Tsallis and E.P. Borges, *Nonlinear dynamical systems: Time reversibility versus sensitivity to the initial conditions*, Chaos, Solitons and Fractals **182**, 114743 (2024).
- [1846] O. Afsar and U. Tirnakli, *Probability densities for the sums of iterates of the sine-circle map in the vicinity of the quasi-periodic edge of chaos*, Phys. Rev. E **82**, 046210 (2010) (5 pages).
- [1847] O. Afsar and U. Tirnakli, *Relationships and scaling laws among correlation, fractality, Lyapunov divergence and q-Gaussian distributions*, Physica D **272**, 18-25 (2014).
- [1848] O. Afsar, *Dinamik sistemler icin merkezzel limit teoremleri ve karmasiklik analizi*, Doctor Thesis (Ege University, Izmir, 2013).
- [1849] G. Livadiotis, *High density nodes in the chaotic region of 1D discrete maps*, Entropy **20**, 24 (2018) (21 pages), doi:10.3390/e20010024

- [1850] M.A. Fuentes and A. Robledo, *Stationary distributions of sums of marginally chaotic variables as renormalization group fixed points*, J. Phys. C Series **201**, 012002 (2010) (7 pages).
- [1851] M.A. Fuentes and A. Robledo, *Renormalization group structure for sums of variables generated by incipiently chaotic maps*, J. Stat. Mech. P01001 (2010) (13 pages).
- [1852] A. Diaz-Ruelas, M.A. Fuentes and A. Robledo, *Scaling of distributions of sums of positions for chaotic dynamics at band-splitting points*, EPL **108**, 20008 (2014) (5 pages), doi: 10.1209/0295-5075/108/20008
- [1853] L.A. Maslov and V.I. Chebotarev, *Modeling statistics and kinetics of the natural aggregation structures and processes with the solution of generalized logistic equation*, Physica A **468**, 691-697 (2017), doi: <http://dx.doi.org/10.1016/j.physa.2016.10.057>
- [1854] E.G.D. Cohen, *Boltzmann and Einstein: Statistics and dynamics – An unsolved problem*, Boltzmann Award Lecture at Statphys-Bangalore-2004, Pramana **64**, 635 (2005).
- [1855] T. Wada, *Thermodynamic stabilities of the generalized Boltzmann entropies*, Physica A **340**, 126 (2004).
- [1856] S. Abe and A.K. Rajagopal, *The second law in nonextensive quantum thermostatistics for small systems*, Physica A **340**, 50 (2004).
- [1857] R.M. Yulmetyev, N.A. Emelyanova and F.M. Gafarov, *Dynamical Shannon entropy and information Tsallis entropy in complex systems*, Physica A **341**, 649 (2004).
- [1858] N.R. Khusnutdinov, R.M. Yulmetyev and N.A. Emelyanova, *Dynamic Tsallis entropy for simple model systems*, Acta Physica Polonica A **109**, 199-217 (2006).
- [1859] G. Kaniadakis, M. Lissia and A.M. Scarfone, *Two-parameter deformations of logarithm, exponential, and entropy: A consistent framework for generalized statistical mechanics*, Phys. Rev. E **71**, 046128 (2005).
- [1860] T. Wada and A.M. Scarfone, *Connections between Tsallis' formalisms employing the standard linear average energy and ones employing the normalized q -average energy*, Phys. Lett. A **335**, 351 (2005).
- [1861] T. Wada and A.M. Scarfone, *A non self-referential expression of Tsallis' probability distribution function*, Eur. Phys. J. B **47**, 557-561 (2005).
- [1862] A.M. Scarfone and T. Wada, *Equivalence among different formalisms in the Tsallis entropy framework*, Physica A **384**, 305-317 (2007).
- [1863] V.M. Ilic, A.M. Scarfone and T. Wada, *On the equivalence between four versions of thermostatistics based on strongly pseudo-additive entropies*, preprint (2019), 1905.10533 [math-ph].
- [1864] H. Suyari, *The unique non self-referential q -canonical distribution and the physical temperature derived from the maximum entropy principle in Tsallis statistics*, in *Complexity and Nonextensivity: New Trends in Statistical Mechanics*, eds. M. Sakagami, N. Suzuki and S. Abe, Prog. Theor. Phys. Suppl. **162**, 79-86 (2006).
- [1865] A.G. Bashkurov, *Maximum Renyi entropy principle for systems with power-law Hamiltonians*, Phys. Rev. Lett. **93**, 130601 (2004).
- [1866] A.P. Majtey, P.W. Lamberti and A. Plastino, *A monoparametric family of metrics for statistical mechanics*, Physica A **344**, 547 (2004).
- [1867] F. Brouers and O. Sotolongo-Costa, *Prior measure for nonextensive entropy*, preprint (2004) [cond-mat/0410738].
- [1868] R. Hanel and S. Thurner, *Derivation of power-law distributions within standard statistical mechanics*, Physica A **351**, 260 (2005).
- [1869] S. Thurner and R. Hanel, *Maximum entropy approach to central limit distributions of correlated variables*, preprint (2008), 0804.3477 [cond-mat.stat-mech].
- [1870] R. Hanel and S. Thurner, *On the derivation of power-law distributions within classical statistical mechanics far from the thermodynamic limit*, Physica A **365**, 162-166 (2006).
- [1871] R. Hanel and S. Thurner, *Generalized Boltzmann factors and the maximum entropy principle: Entropy for complex systems*, Physica A **380**, 109-114 (2007).
- [1872] S. Thurner and R. Hanel, *Entropies for complex systems: generalized-generalized entropies*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 68-75 (New York, 2007).
- [1873] S. Thurner and R. Hanel, *Generalized-generalized entropies and limit distributions*, Braz. J. Phys. **39**, 413-416 (2009).
- [1874] W. Li, Q.A. Wang and A. Le Mehaute, *A possible entropy pseudoadditivity of nonextensive thermostatistics for heterogeneous systems containing different q 's*, preprint (2004).
- [1875] S. Abe and G.B. Bagci, *Necessity of q -expectation value in nonextensive statistical mechanics*, Phys. Rev. E **71**, 016139 (2005).
- [1876] S. Abe, *Why q -expectation values must be used in nonextensive statistical mechanics*, Astrophys. Space Sci. **305**, 241-245 (2006).

- [1877] G.B. Bagci, *Klimontovich's S theorem in nonextensive formalism and the problem of constraints*, preprint (2007), 0705.2053 [cond-mat.stat-mech].
- [1878] T. Oikonomou and G.B. Bagci, *The maximization of Tsallis entropy with complete deformed functions and the problem of constraints*, Phys. Lett. A **374**, 2225-2229 (2010).
- [1879] T. Oikonomou and G.B. Bagci, *Complete versus incomplete definitions of the deformed logarithmic and exponential functions*, preprint (2009) 0907.4067 [cond-mat.stat-mech].
- [1880] T. Oikonomou and G.B. Bagci, *A note on the definition of deformed exponential and logarithm functions*, J. Math. Phys. **50**, 103301 (2009) (9 pages).
- [1881] G.B. Bagci and T. Oikonomou, *Do Tsallis distributions really originate from the finite baths?*, Phys. Rev. E (2013), in press.
- [1882] T. Oikonomou and G.B. Bagci, *Entropy maximization, normalization and the generalized entropies*, preprint (2016), 1605.01528 [cond-mat.stat-mech].
- [1883] G.B. Bagci, U. Tirnakli, *Self-organization in nonadditive systems with external noise*, Int. J. Bifur. Chaos **19** (12), 4247-4252 (2009).
- [1884] Z.Zh. Zhanabaeva, Y.T. Kozhagulova and S.A. Khokhlov, *Informational and entropic criteria of self-organization*, preprint (2016), arxiv 1610.00446
- [1885] G.B. Bagci, *Nonadditive open systems and the problem of constraints*, Int. J. Mod. Phys. B **22**, 3381-3396 (2008).
- [1886] B.H. Lavenda, *Information and coding discrimination of pseudo-additive entropies*, Open Systems and Information Dynamics **11**, 257 (2004).
- [1887] D.C.C. de Souza, P.D.S. de Lima, J.M. de Araujo and G. Corso, *Time-frequency analysis with the q-Gaussian W transform*, Physica A **665**, 130462 (2025).
- [1888] R. Onofrio and B. Sundaram, *Relationship between nonlinearities and thermalization in classical open systems: The role of the interaction range*, Phys. Rev. E **105**, 054122 (2022).
- [1889] B.I. Squarer, C. Presilla and R. Onofrio, *Enhancement of fusion reactivities using non-Maxwellian energy distributions*, Phys. Rev. E **109**, 025207 (2024).
- [1890] G.A. Tsekouras and C. Tsallis, *Generalized entropy arising from a distribution of q-indices*, Phys. Rev. E **71**, 046144 (2005).
- [1891] H. Alzer and R.A.C. Ferreira, *Concavity and generalized entropy*, Applied Mathematics E-Notes, **21**, 37-43 (2021).
- [1892] A. Dukkipati, M.N. Murty and S. Bhatnagar, *Kullback-Leibler entropy minimization in nonextensive thermostatics*, preprint (2005) [math-ph/0501025].
- [1893] A. Plastino and E.M.F. Curado, *The mutual co-implication of thermodynamics' first and second law*, preprint (2004) [cond-mat/0412336].
- [1894] C. Ou and J. Chen, *Nonextensibility of energy in Tsallis' statistics and the zeroth law of thermodynamics*, preprint (2005) [cond-mat/0502491].
- [1895] C.J. Ou and J.C. Chen, *Nonextensive thermostatic properties of a q-generalized Fermi system*, Eur. Phys. J. B **43**, 271-277 (2005).
- [1896] Y. Li, *Thermodynamics of generalized Fermi systems in a harmonic trap*, J. Phys.: Conf. Ser. **2148**, 012012 (2022).
- [1897] R.R. Parwani, *An information-theoretic link between spacetime symmetries and quantum linearity*, Annals of Physics **315**, 419 (2005).
- [1898] M. Masi, *A step beyond Tsallis and Renyi entropies*, Phys. Lett. A **338**, 217 (2005).
- [1899] M. Masi, *On the q-parameter spectrum of generalized information-entropy measures with no cut-off prescriptions*, Phys. Lett. A **357**, 288-294 (2006).
- [1900] M. Masi, *Generalized information-entropy measures and Fisher information*, preprint (2006) [cond-mat/0611300].
- [1901] G.L. Ferri, S. Martinez and A. Plastino, *Equivalence of the four versions of Tsallis' statistics*, JSTAT- Journal of Statistical Mechanics: Theory and Experiment 1742-5468/05/P04009 (2005).
- [1902] T. Oikonomou and G.B. Bagci, *Impossible mission: Entropy maximization with escort averages*, preprint (2017), 1704.04721 [cond-mat.stat-mech].
- [1903] T. Oikonomou, K. Kaloudis and G.B. Bagci, *The q-exponentials do not maximize the Renyi entropy*, Physica A **578**, 126126 (2021).
- [1904] R.K. Niven, *Constrained forms of the Tsallis entropy function and local equilibria*, preprint (2005) [cond-mat/0503263].

- [1905] C.J. Keylock, *Simpson diversity and the Shannon-Wiener index as special cases of a generalized entropy*, *Oikos* **109**, 203 (2005).
- [1906] L. Jost, *Entropy and diversity*, *Oikos* **113**, 363-375 (2006).
- [1907] L. Jost, *What do we mean by diversity? - The path towards quantification*, *Metode Science Studies Journal* (2018).
- [1908] L. Jost, P. DeVries, T. Walla, H. Greeney, A. Chao and C. Ricotta, *Partitioning diversity for conservation analyses*, *Diversity and Distributions* **16**, 65-76 (2010).
- [1909] E. Marcon, B. Herault, C. Baraloto and G. Lang, *The decomposition of Shannon's entropy and a confidence interval for beta diversity*, *Oikos* **121**, 516-522 (2012).
- [1910] E. Marcon, Z. Zhang and B. Herault, *The decomposition of similarity-based diversity and its bias correction*, preprint (2014), hal-00989454 (11 May 2014).
- [1911] E. Marcon, *Measures de la biodiversité*, preprint (2015).
- [1912] C. Richard-Hansen, G. Jaouen, T. Denis, O. Brunaux, E. Marcon and S. Guïtet, *Landscape patterns influence communities of medium-to large-bodied vertebrates in undisturbed terra firme forests of French Guiana*, *J. Tropical Ecology* **31** (5), 423-436 (2015).
- [1913] R. Sandlerisky, N. Petrzehik, T. Jargalsaikhan and I. Shironiya, *Multispectral remote sensing data application in modelling non-extensive Tsallis thermodynamics for mountain forests in Northern Mongolia*, *Entropy* **25**, 1653 (2023).
- [1914] R.B. Sandlerisky, N.M. Petrzehik, T. Jargalsaikhan and I.I. Shironiya, *Thermodynamic parameters of Khubsugul Mountain forests (Khordol-Sardag, Mongolia)*, *Biology Bulletin* **50** (2), S226-S238 (2023).
- [1915] V. Ignatenko, A. Surkov and S. Koltcov, *Random forests with parametric entropy based information gains for classification and regression problems*, *Peer J Computer Science* (2024).
- [1916] T.A. Bellingan, S. Hugo, M.H. Villet and O.L.F. Weyl, *Season and environment modulate aquatic invertebrates' responses to trout and indigenous fishes in three South African mountain streams*, *Front. Environ. Sci.* **10**, 1004939 (2022).
- [1917] R.B. Sandlerisky, Y.G. Puizachenko, A.N. Krenke and I.I. Shironiya, *Land cover thermodynamic characteristics defined by remote multispectral data based on nonextensive statistical mechanics*, in *Landscape Patterns in a Range of Spatio-Temporal Scales*, 111-118 (Springer, 2020).
- [1918] J. Naudts and E. van der Straeten, *The grand-canonical ensemble in generalized thermostatistics*, *J. Stat. Mech. - Theory and Experiment* P12002 (December 2004).
- [1919] D.B. Saakian, *Error threshold in optimal coding, numerical criteria, and classes of universalities for complexity*, *Phys. Rev. E* **71**, 016126 (2005).
- [1920] S. Abe, *Temperature of nonextensive systems: Tsallis entropy as Clausius entropy*, *Physica A* **368**, 430-434 (2006).
- [1921] R. Uzdin, *Generalized Clausius inequalities for small systems - higher order heat flows and their related information measures*, preprint (2016), 1609.05742 [quant-ph].
- [1922] R. Uzdin, *Additional energy-information relations in thermodynamics of small systems*, *Phys. Rev. E* **96**, 032128 (2017).
- [1923] A.M. Teweldeberham, A.R. Plastino and H.G. Miller, *On the cut-off prescriptions associated with power-law generalized thermostatistics*, *Phys. Lett. A* **343**, 71 (2005).
- [1924] A. Poino, *A theorem on the equilibrium thermodynamics of Hamiltonian systems*, *Physica A* **359**, 162-176 (2006).
- [1925] C. Vignat and A. Plastino, *Stochastic invertible mappings for Tsallis distributions*, *C.R. Physique* **7**, 442-448 (2006).
- [1926] A.M. Scarfone, *Canonical quantization of classical systems with generalized entropies*, *Reports Math. Phys.* **55**, 169 (2005).
- [1927] A.M. Scarfone, *Canonical quantization of nonlinear many-body systems*, *Phys. Rev. E* **71**, 051103 (2005) (15 pages).
- [1928] C. Vignat and A. Plastino, *Density operators that extremize Tsallis entropy and thermal stability effects*, *Physica A* **361**, 139-160 (2006).
- [1929] O. Sotolongo-Costa, A. Gonzalez and F. Brouers, *Generalized Non-extensive Statistical Distributions*, preprint (2005), [cond-mat/0505525].
- [1930] A. Daffertshofer and A.R. Plastino, *Landauer's principle and the conservation of information*, *Phys. Lett. A* **342**, 213-216 (2005).
- [1931] S. Curilef, A.R. Plastino, R.S. Wedemann and A. Daffertshofer, *Landauer's principle and non-equilibrium statistical ensembles*, *Phys. Lett. A* **372**, 2341-2345 (2008).

- [1932] A.S. Parvan, *Microcanonical ensemble extensive thermodynamics of Tsallis statistics*, Phys. Lett. A **350**, 331-338 (2006).
- [1933] A.S. Parvan, *Self-consistent thermodynamics for the Tsallis statistics in the grand canonical ensemble: Nonrelativistic hadron gas*, Eur. Phys. J. A **51**, 108 (2015) (14 pages), doi: 10.1140/epja/i2015-15108-x
- [1934] A.S. Parvan, *Equivalence of the phenomenological Tsallis distribution to the transverse momentum distribution of q -dual statistics*, European Phys. J. A **56** (4), 106 (2020).
- [1935] T. Bhattacharyya, M. Rybczynski, G. Wilk and Z. Wlodarczyk, *A harmonic oscillator in nonadditive statistics and a novel transverse momentum spectrum in high-energy collisions*, Phys. Lett. B **867**, 139588 (2025).
- [1936] A.S. Parvan, *Hadron transverse momentum distributions in the Tsallis statistics with escort probabilities*, J. Phys. G: Nucl. Part. Phys. **50**, 125002 (2023).
- [1937] A.S. Parvan and T. Bhattacharyya, *Hadron transverse momentum distributions of the Tsallis normalized and unnormalized statistics*, European Physical Journal A **56** (2), 72 (2020).
- [1938] T. Bhattacharyya and A.S. Parvan, *Analytical results for the classical and quantum Tsallis hadron transverse momentum spectra: the zeroth order approximation and beyond*, preprint (2020), 2007.00424 [nucl-th].
- [1939] D. Granziol and S. Roberts, *An information and field theoretic approach to the grand canonical ensemble*, preprint (2017), 1703.10099 [cond-mat.stat-mech].
- [1940] F. Sattin, *Non-extensive entropy from incomplete knowledge of Shannon entropy*, Physica Scripta **71**, 443 (2005).
- [1941] A.M. Teweldeberhan, A.R. Plastino and H.G. Miller, *On the cut-off prescriptions associated with power-law generalized thermostatics*, Phys. Lett. A **343**, 71 (2005).
- [1942] T. Furuta, *Reverse inequalities involving two relative operator entropies and two relative entropies*, Linear Algebra and Its Applications **403**, 24 (2005).
- [1943] A. Lavagno, A.M. Scarfone and P.N. Swamy, *q -deformed structures and generalized thermodynamics*, Rep. Math. Phys. **55**, 423 (2005).
- [1944] S. Furuichi, *Trace inequalities in nonextensive statistical mechanics*, Linear Algebra and its Applications **418**, 821-827 (2006).
- [1945] N. Bebiano, R. Lemos, J. da Providencia and G. Soares, *Trace inequalities for logarithms and powers of J -Hermitian matrices*, Linear Algebra and its Applications **432**, 3172-3182 (2010).
- [1946] N. Chouaieb, B. Iannazzo and M. Moakher, *Geometries on the cone of positive-definite matrices derived from the power potential and their relation to the power means*, preprint (2021), 2102.10279 [math.DG].
- [1947] G.L. Gilardoni, *On Pinsker's and Vajda's type inequalities for Csiszar's f -divergences*, IEEE Transactions on Information Theory **56** (11), 5377-5386 (2010).
- [1948] A.E. Rastegin, *Bounds of the Pinsker and Fannes types on the Tsallis relative entropy*, Math. Phys. Anal. Geom. **16**, 213-228 (2013), DOI 10.1007/s11040-013-9128-z
- [1949] B. Lavenda, *Mean entropies*, Open Systems and Information Dynamics **12**, 289 (2005).
- [1950] T. Wada and A.M. Scarfone, *The Boltzmann temperature and Lagrange multiplier in nonextensive thermostatics*, in *Complexity and Nonextensivity: New Trends in Statistical Mechanics*, eds. M. Sakagami, N. Suzuki and S. Abe, Prog. Theor. Phys. Suppl. **162**, 37-44 (2006).
- [1951] R. Piasecki, *Extended quasi-additivity of Tsallis entropies*, Physica A **366**, 221-228 (2006).
- [1952] M. Portesi, A. Plastino and F. Pennini, *Information measures based on Tsallis' entropy and geometric considerations for thermodynamic systems*, Physica A **365**, 173-176 (2006).
- [1953] M.T. Martin, A. Plastino and O.A. Rosso, *Generalized statistical complexity measures: Geometrical and analytical properties*, Physica A **369**, 439-462 (2006).
- [1954] A. Plastino and E.M.F. Curado, *Equivalence between maximum entropy principle and enforcing $dU = TdS$* , Phys. Rev. E **72**, 047103 (2005) (3 pages).
- [1955] C.J. Ou, Z.F. Huang, J.C. Chen, A. El Kaabouchi, L. Nivanen, A. Le Mehaute and Q.P.A. Wang, *A basic problem in the correlations between statistics and thermodynamics*, Chaos, Solitons and Fractals **41**, 2313-2318 (2009).
- [1956] S. Abe, *Generalized Stosszahlansatz and associated H -theorem in nonextensive statistical mechanics*, Mathematics and Computers in Simulation **72**, 72-78, (2006).
- [1957] D.H.E. Gross, *Reconciliation of statistical mechanics and astro-physical statistics. The errors of conventional canonical thermostatics*, preprint (2005) [astro-ph/0511716].
- [1958] F. Gulminelli, *Phase coexistence in nuclei*, Annales de Physique **29**, 1-121 (2004).
- [1959] H. Babacan and O. Kayacan, *Calculation of generalized level densities for nuclei in mass region $20 < A < 50$* , Mathematical and Computational Applications, **15** (2), 230-239 (2010).

- [1960] C. Tsallis, *Nonextensive statistical mechanics and nonlinear dynamics*, in *Interdisciplinary aspects of Turbulence*, eds. W. Hillebrandt and F. Kupka, Lecture Notes in Physics **756**, 21-48 (Springer, Berlin, 2008).
- [1961] M. Portesi, F. Pennini and A. Plastino, *Geometrical aspects of a generalized statistical mechanics*, Physica A **373**, 273-282 (2007).
- [1962] M. Portesi, *Information geometry for physical systems using generalized measures of distance*, communication at XV Conference on Nonequilibrium Statistical Mechanics and Nonlinear Physics (4-8 December 2006, Mar del Plata, Argentina).
- [1963] J. Skilling, *Failures of information geometry*, in *Bayesian inference and maximum entropy methods in science and engineering (MAXENT 2014)*, eds. A. MohammadDjafari and F. Barbaresco, AIP Conference Proceedings **1641**, 27-42 (2015), doi: 10.1063/1.4905961
- [1964] M. Asadi, N. Ebrahimi and E.S. Soofi, *Connections of Gini, Fisher, and Shannon by Bayes risk under proportional hazards*, J. Applied Probability **54** (4), 1027-1050 (2017).
- [1965] R. Davis and N. Sebastian, *Maximization of Mathai's entropy under the constraints of generalized Gini and Gini mean difference indices and its applications in insurance*, preprint (2022),
- [1966] N. Sebastian, J. Joseph and Princy T., *Type 1 Topp-Leone q-exponential distribution and its applications*, RT&A **17** (3), 69 (2022).
- [1967] T.S. Biro and Z. Neda, *Gintropy: Gini index based generalization of entropy*, Entropy **22**, 879 (2020), doi: 10.3390/e22080879
- [1968] T.S. Biro, A. Telcs, M. Jozsa and Z. Neda, *Gintropic scaling of scientometric indexes*, Physica A **618**, 128717 (2023).
- [1969] T.S. Biro, A. Telcs and A. Jakovac, *Analogies and relations between non-additive entropy formulas and gintropy*, Entropy **26**, 185 (2024).
- [1970] T.S. Biro, *The history of entropy – from Clausius to AI*, XVI. Tudomány - es Technikatörténeti konferencia (2023).
- [1971] S. Kumar and S. Kumar, *A Generalization of Gini Simpson index under fuzzy environment*, Advances in Mathematics: Scientific Journal **9** (8), 5443-5454 (2020), doi: 10.37418/amsj.9.8.15
- [1972] M. Kayid, S. Izadkhah and A.M. Abouammoh, *Proportional reversed hazard rates weighted frailty model*, Physica A **528**, 121308 (2019).
- [1973] M. Asadi, N. Ebrahimi, O. Kharazmi and E. Soofi, *Mixture models, Bayes Fisher information, and divergence measures*, IEEE Transactions Information Theory **65**, 2316-2321 (2018).
- [1974] O. Kharazmi, N. Balakrishnan and H. Jamali, *Cumulative residual q-Fisher information and Jensen-cumulative residual χ^2 divergence measures*, Entropy **24**, 341 (2022).
- [1975] O. Kharazmi, J.E. Contreras-Reyes and N. Balakrishnan, *Optimal information, Jensen-RIG function and α -Onicescu's correlation coefficient in terms of information generating functions*, Physica A **609**, 128362 (2023).
- [1976] M. Portesi, A. Plastino and F. Pennini, *Information geometry and phase transitions*, Int. J. Mod. Phys. B **20**, 5250-5253 (2006).
- [1977] A. Ohara, *Geometry of distributions associated with Tsallis statistics and properties of relative entropy minimization*, Phys. Lett. A **370**, 184-193 (2007).
- [1978] A. Ohara, H. Matsuzoe and S. Amari, *A dually flat structure on the space of escort distributions*, J. Phys. C Series **201**, 012012 (2010) (8 pages).
- [1979] A. Ohara, *Conformal flattening for deformed information geometries on the probability simplex*, Entropy **20**, 186 (2018) (13 pages), doi: 10.3390/e20030186
- [1980] A. Ohara, *Conformal flattening on the probability simplex and its applications to Voronoi partitions and centroids*, Geometric Structures of Information 51-68 (2018).
- [1981] F. Nielsen, *On Voronoi diagrams and dual Delaunay complexes on the information-geometric Cauchy manifolds*, preprint (2020), 2006.07020 [cs.CG].
- [1982] F. Nielsen, *On Voronoi diagrams on the information-geometric Cauchy manifolds*, Entropy **22**, 713 (2020), doi: 10.3390/e22070713
- [1983] H. Matsuzoe, *A sequence of escort distributions and generalizations of expectations on q-exponential family*, Entropy **19**, 7 (2017) (13 pages), doi: 10.3390/e19010007
- [1984] S. Amari, A. Ohara and H. Matsuzoe, *Geometry of deformed exponential families: Invariant, dually-flat and conformal geometries*, Physica A **391** (18), 4308-4319 (2012).
- [1985] A. Ohara, H. Matsuzoe and S. Amari, *Conformal geometry of escort probability and its applications*, Modern Phys. Lett. B **26** (10), 1250063 (2012) (14 pages).

- [1986] S. Amari, *Information geometry of positive measures and positive-definite matrices: Decomposable dually flat structure*, Entropy **16**, 2131-2145 (2014), doi:10.3390/e16042131
- [1987] P.A. Morales and F.E. Rosas, *Generalization of the maximum entropy principle for curved statistical manifolds*, Phys. Rev. Research **3**, 033216 (2021).
- [1988] H. Matsuzoe, *Construction of geometric divergence on q -exponential family*, Mathematics of Distances and Applications (2012).
- [1989] H. Matsuzoe, **Hessian structures on deformed exponential families and their conformal structures**, Differential Geometry and its Applications **35**, Supplement, 323-333 (2014).
- [1990] A.M. Scarfone, H. Matsuzoe and T. Wada, *A study of Renyi entropy based on the information geometry formalism*, J. Phys. A: Math. Theor. **53**, 145003 (2020).
- [1991] S. Amari, *Differential geometry derived from divergence functions: Information geometry approach*, Mathematics of Distances and Applications (2012).
- [1992] S. Amari, *Information geometry derived from divergence functions*, communicated in the Conference *Information Geometry and its Applications*, (2 to 6 August 2008, Leipzig).
- [1993] T. Kurose, S. Yoshizawa and S. Amari, *Optimal transportation plans with escort entropy regularization*, Information Geometry (2021), doi: 10.1007/s41884-021-00058-2
- [1994] S. Amari and A. Ohara, *Geometry of q -exponential family of probability distributions*, Entropy **13**, 1170-1185 (2011).
- [1995] M. Hirano and H. Nagahama, *Memory of fracture in information geometry*, Chaos, Solitons and Fractals **189**, 115608 (2024).
- [1996] T. Wada and H. Matsuzoe, *Conjugate representations and characterizing escort expectations in information geometry*, Entropy **19**, 309 (2017), doi: 10.3390/e19070309
- [1997] D. Felice and N. Ay, *Canonical divergence for flat α -connections: Classical and quantum*, Entropy **21**, 831 (2019), doi: 10.3390/e21090831
- [1998] K.V. Harsha and K.S. Subrahmanian Moosath, *Dually flat geometries of the deformed exponential family*, Physica A **433**, 136-147 (2015).
- [1999] F. Nielsen and R. Nock, *On Renyi and Tsallis entropies and divergences for exponential families*, J. Phys. A: Math. and Theo. **45**, 3 (2012).
- [2000] F. Nielsen and R. Nock, *A closed-form expression for the Sharma-Mittal entropy of exponential families*, J. Phys. A: Math. Theor. **45**, 032003 (2012).
- [2001] F. Nielsen, *On a variational definition for the Jensen-Shannon symmetrization of distances based on the information radius*, Entropy **23**, 464 (2021), doi: 10.3390/e23040464
- [2002] M. Elhoseiny and A. Elgammal, *Generalized twin Gaussian processes using Sharma-Mittal divergence*, Mach. Learn. **100**, 399-424 (2015), doi: 10.1007/s10994-015-5497-9
- [2003] B.N. Tiwari, V. Chandra and S. Banerjee, *A thermodynamic geometric study of Renyi and Tsallis entropies*, preprint (2010), 1008.2853 [cond-mat.stat-mech].
- [2004] S. Furuichi, *On trace inequalities related to skew informations and generalized relative entropies*, communicated in the Conference *Information Geometry and its Applications*, (2 to 6 August 2008, Leipzig).
- [2005] J. Naudts, *The generalized exponential family in statistical physics: A framework for microcanonical phase transitions*, communicated in the Conference *Information Geometry and its Applications*, (2 to 6 August 2008, Leipzig).
- [2006] G. Pistone, *Marginal polytope of a deformed exponential family*, preprint (2011), 1112.5123 [math.ST].
- [2007] G. Pistone, *Nonparametric information geometry*, preprint (2013), 1306.0480 [math.ST].
- [2008] G. Pistone, *Information geometry of the probability simplex: A short course*, Nonlinear Phenomena in Complex Systems **23** (2), 221-242 (2020).
- [2009] C. Vignat, *Orthogonal polynomials and geometry of the quantum harmonic oscillator on constant curvature surfaces*, communicated in the Conference *Information Geometry and its Applications*, (2 to 6 August 2008, Leipzig).
- [2010] A. Ohara and T. Wada, *Information geometry on q -Gaussian densities and behaviors of solutions to related diffusion equations*, J. Phys. A **43**, 035002 (2010)(18 pages).
- [2011] S. Amari and A. Cichocki, *Information geometry of divergence functions*, Bulletin of the Polish Academy of Sciences - Technical Sciences **58** (1), 183-195 (2010).
- [2012] A. Cichocki and S. Amari, *Families of Alpha- Beta- and Gamma- divergences: Flexible and robust measures of similarities*, Entropy **12**, 1532-1568 (2010).
- [2013] A. Ohara, *Geometric study for the Legendre duality of generalized entropies and its application to the porous medium equation*, Eur. Phys. J. B **70**, 15-28 (2009).

- [2014] Q.A. Wang, L. Nivanen and A. Le Mehaute, *A composition of different q nonextensive systems with the normalized expectation based on escort probability*, preprint (2006) [cond-mat/0601255].
- [2015] A. Olemskoi and S. Kokhan, *Effective temperature of self-similar time series*, *Condensed Matter Physics* **8**, 761-772 (2005).
- [2016] A.I. Olemskoi, *Generalized thermostatics based on multifractal phase space*, preprint (2006) [cond-mat/0601665].
- [2017] J. Dec, M. Dolina, S. Drozd, R. Kluszczynski, J. Kwapien and T. Stanisz, *Exploring word-adjacency networks with multifractal time series analysis techniques*, *Entropy* **27**, 356 (2025).
- [2018] A. S. Parvan, *Extensive statistical mechanics based on nonadditive entropy: Canonical ensemble*, *Phys. Lett. A* **360**, 26-34 (2006).
- [2019] A.S. Parvan and T.S. Biro, *Thermodynamical limit in non-extensive and Renyi statistics*, preprint (2006) [cond-mat/0607190].
- [2020] C. Ou and J. Chen, *Two long-standing problems in Tsallis' statistics*, *Physica A* **370**, 525-529 (2006).
- [2021] L. Velazquez and F. Guzman, *Thermo-Statistical description of the Hamiltonian non extensive systems: The reparametrization invariance*, preprint (2006) [cond-mat/0604291].
- [2022] L. Velazquez and F. Guzman, *Thermo-Statistical description of the Hamiltonian non extensive systems: The selfsimilarity scaling laws*, preprint (2006) [cond-mat/0604290].
- [2023] J. Naudts, *Parameter estimation in non-extensive thermostatics*, *Physica A* **365**, 42-49 (2006).
- [2024] P. Harremoës, *Interpretations of Renyi entropy and divergences*, *Physica A* **365**, 57-62 (2006).
- [2025] P. Harremoës, *Projections maximizing Tsallis entropy*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 90-95 (New York, 2007).
- [2026] M. Campisi and G.B. Bagci, *Tsallis ensemble as an exact orthode*, *Phys. Lett. A* **362**, 11-15 (2007).
- [2027] M. Campisi, *Thermodynamics with generalized ensembles: The class of dual orthodes*, *Physica A* **385**, 501-517 (2007).
- [2028] F. Canfora, L. Parisi, G. Vilasi, *Regge theory and statistical mechanics*, *Phys. Lett. B* **638**, 85-88 (2006).
- [2029] P.W. Ayers, *Information theory, the shape function, and the Hirshfeld atom*, *Theoretical Chemistry Accounts* **115**, 370-378 (2006).
- [2030] M.X. Luo and X. Wang, *Catalytic entropy principles*, preprint (2021), 2104.03452 [quant-ph].
- [2031] F. Heidar-Zadeh, I. Vinogradov, P.W. Ayers, *Hirshfeld partitioning from non-extensive entropies*, *Theor. Chem. Acc.* **136**, 54 (2017), doi:10.1007/s00214-017-2077-z
- [2032] C. Vignat and A. Plastino, *Estimation in a fluctuating medium and power-law distributions*, *Phys. Lett. A* **360**, 415-418 (2007).
- [2033] A.M. Scarfone, *Thermal and mechanical equilibrium among weakly interacting systems in generalized thermostatics framework*, *Phys. Lett. A* **355**, 404-412 (2006).
- [2034] A. Figueiredo, M.A. Amato and T. M. da Rocha Filho, *On the statistical interpretation of generalized entropies*, *Physica A* **367**, 191-206 (2006).
- [2035] T. S. Biro and P. Van, *Zeroth law compatibility of nonadditive thermodynamics*, *Phys. Rev. E* **83** (6), 061147 (2011) (7 pages).
- [2036] A. Bravetti, C. Gruber, C.S. Lopez-Monsalvo and F. Nettel, *The zeroth law in quasi-homogeneous thermodynamics and black holes*, preprint (2017), 1702.03360 [gr-qc].
- [2037] J. Roder, *Comparison of Kerr and dilaton black hole shadows: Impact of non-thermal emission*, Master Thesis (Institut für Theoretische Physik, Johann Wolfgang Goethe-Universität Frankfurt am Main, 2021).
- [2038] L.F. Escamilla-Herrera, C. Gruber, V. Pineda-Reyes and H. Quevedo, *Statistical mechanics of the self-gravitating gas in the Tsallis framework*, *Phys. Rev. E* **99**, 022108 (2019).
- [2039] A. Caticha and A. Giffin, *Updating Probabilities*, preprint (2006) [physics/0608185].
- [2040] A. Caticha, *Entropy, information, and the updating of probabilities*, *Entropy* **23**, 895 (2021).
- [2041] A. Giffin, *Maximum entropy: The universal method for inference*, preprint (2009), 0901.2987 [physics.data-an].
- [2042] K.D. Sen and J. Katriel, *Information entropies for eigendensities of homogeneous potentials*, *J. Chem. Phys.* **125**, 074117 (2006) (4 pages).
- [2043] E.A. Drzazga, R. Szczesniak, I.A. Domagalska, A.P. Durajski and M. Kostrzewa, *Non-parametric application of Tsallis statistics to systems consisting of M hydrogen molecules*, *Physica A* **518**, 1-12 (2019), doi: 10.1016/j.physa.2018.11.050
- [2044] N. Mukherjee and A.K. Roy, *Information-entropic measures for non-zero l states of confined hydrogen-like ions*, *Eur. Phys. J. D* **72**, 118 (2018).

- [2045] M. Bassi and K.L. Baluja, *Moments of probability density of Hydrogen atom in a cage*, Indian J. Phys. (2022), doi: 10.1007/s12648-022-02463-4
- [2046] A. Plastino, M.C. Rocca and G.L. Ferri, *Resolving the partition function's paradox of the hydrogen atom*, Physica A **534** 122169 (2019).
- [2047] K. Kikuchi and H. Akatsuka, *Reconsideration of temperature determined by the excited-state population distribution of hydrogen atoms based on Tsallis entropy and its statistics in hydrogen plasma in non-equilibrium state*, Entropy **25**, 1400 (2023).
- [2048] L.L. Sales, F.C. Carvalho and H.T.C.M. Souza, *Saha ionization for non-equilibrium states: an application to primordial hydrogen recombination*, preprint (2025), 2505.08972 [astro-ph.CO].
- [2049] C. Vignat, A. Plastino, A.R. Plastino and J.S. Dehesa, *Quantum potentials with q-Gaussian ground states*, Physica A **391**, 1068-1073 (2012).
- [2050] A. Plastino and A.R. Plastino, *Chapter 6 - Inference approach to ground states of quantum systems*, Handbook of Statistics **47**, 121-134 (2022).
- [2051] J.S. Dehesa, *Momentum disequilibrium and quantum entanglement of Rydberg multidimensional states*, Eur. Phys. J. Plus **136**, 454 (2021), doi:10.1140/epjp/s13360-021-01453-5
- [2052] J.S. Dehesa, *Spherical-symmetry and spin effects on the uncertainty measures of multidimensional quantum systems with central potentials*, Entropy **23**, 607 (2021).
- [2053] J.S. Dehesa, *Renyi entropies of multidimensional oscillator and hydrogenic systems with applications to highly excited Rydberg states*, Entropy **24**, 1590 (2022).
- [2054] D. Puertas-Centeno, N.M. Temme, I.V. Toranzo and J.S. Dehesa, *Entropic uncertainty measures for large dimensional hydrogenic systems*, J. Math. Phys. **58**, 103302 (2017) (17 pages).
- [2055] R.G. Iagar and D. Puertas-Centeno, *Through and beyond moments, entropies and Fisher information measures: new informational functionals and inequalities*, preprint (2025), 2505.21015 [math-ph].
- [2056] A. Namdari and Z. Li, *A review of entropy measures for uncertainty quantification of stochastic processes*, Advances in Mechanical Engineering **11** (6), 1-14 (2019), doi: 10.1177/1687814019857350
- [2057] D. Puertas-Centeno, I. V. Toranzo and J. S. Dehesa, *Exact Renyi entropies of D-dimensional harmonic systems*, Eur. Phys. J. Special Topics **227**, 345-352 (2018).
- [2058] D. Puertas-Centeno, *Complexity and entropic uncertainty of quantum systems*, Doctor Thesis (Universidad de Granada, 2018).
- [2059] D. Puertas-Centeno, *Differential-escort transformations and the monotonicity of the LMC-Renyi complexity measure*, Physica A **518**, 177-189 (2019).
- [2060] G.H.E. Alshabeeb and A.K. Arof, *Calculation on the ground state quantum potentials for the ZnS_xSe_{1-x} ($0 < x < 1$)*, in *Advanced Engineering Materials and Modeling*, A. Tiwari, N. A. Murugan, and R. Ahuja, Eds., 193-202 (2016, Scrivener Publishing).
- [2061] S. Zozor and C. Vignat, *On classes of non-Gaussian asymptotic minimizers in entropic uncertainty principles*, Physica A **375**, 499-517 (2007).
- [2062] S. Zozor and J.F. Bercher, *Φ -Informational measures: Some results and interrelations*, Entropy **23**, 911 (2021).
- [2063] D. Puertas-Centeno and S. Zozor, *Some informational inequalities involving generalized trigonometric functions and a new class of generalized moments*, J. Phys. A: Math. Theor. **58**, 165002 (2025).
- [2064] G. Xu, X. Xu and X. Wang, *Generalized entropic uncertainty principles on the complex signals in terms of fractional Hilbert transform*, Optik **216**, 164966 (2020), doi: doi.org/10.1016/j.ijleo.2020.164966
- [2065] G. Xu, X. Xu and X. Wang, *Generalized uncertainty relations of Tsallis entropy on FrFT*, Signal, Image and Video Processing (2020), (8 pages), doi:10.1007/s11760-020-01716-1
- [2066] G. Xu, X. Xu and X. Wang, *Uncertainty relations of the complex signals from generalized Hilbert transform on LCT*, Signal, Image and Video Processing (2023), doi: 10.1007/s11760-023-02486-2
- [2067] A.V. Zhukova and S.V. Voronov, *Efficiency of the information theoretic objective functions in recurrent image registration procedures*, Radioengineering **9**, 11-16 (2016).
- [2068] S.V. Voronov and I.V. Voronov, *Efficiency analysis of information-theoretic measures in image registration*, Radioengineering **6**, ? (2015) 32-36
- [2069] S. Zozor, M. Portesi, P. Sanchez-Moreno and J.S. Dehesa, *Position-momentum uncertainty relations based on moments of arbitrary order*, Phys. Rev. A **83**, 052107 (2011) (13 pages).
- [2070] S. Zozor, G.M. Bosyk and M. Portesi, *General entropic uncertainty relations for N-level systems*, preprint (2013), 1311.5602 [quant-ph].
- [2071] S. Zozor, G.M. Bosyk and M. Portesi, *General entropy-like uncertainty relations in finite dimensions*, J. Phys. A: Math. Theor. **47**, 495302 (2014) (29 pages), doi:10.1088/1751-8113/47/49/495302

- [2072] S. Zozor, G.M. Bosyk, M. Portesi, T.M. Osan and P.W. Lamberti, *Beyond Landau-Pollak and entropic inequalities: geometric bounds imposed on uncertainties sums*, in *Bayesian inference and maximum entropy methods in science and engineering (MAXENT 2014)*, eds. A. MohammadDjafari and F. Barbaresco, AIP Conference Proceedings **1641**, 181-188 (2015), doi: 10.1063/1.4905977
- [2073] S. Zozor and J.M. Brossier, *deBruijn identities: from Shannon, Kullback-Leibler and Fisher to Salicru, Csizar and generalized Fisher informations*, preprint (2014).
- [2074] S. Zozor and J.M. Brossier, *deBruijn identities: from Shannon, Kullback-Leibler and Fisher to generalized phi-entropies, phi-divergences and phi-Fisher informations*, in *Bayesian inference and maximum entropy methods in science and engineering (MAXENT 2014)*, eds. A. MohammadDjafari and F. Barbaresco, AIP Conference Proceedings **1641**, 522-529 (2015), doi: 10.1063/1.4906018
- [2075] S. Zozor and J.M. Brossier, *deBruijn identities: from Shannon, Kullback-Leibler and Fisher to generalized Φ -entropies, Φ -divergences and Φ -Fisher informations*, preprint (2014).
- [2076] J. Riba and F. de Cabrera, *A Proof of de Bruijn identity based on generalized Price's theorem*, IEEE ISIT, 2509-2513 (2019).
- [2077] L.E. Riveaud, D. Mateos, S. Zozor and P.W. Lamberti, *Generalized divergences from generalized entropies*, Physica A **510**, 68-76 (2018).
- [2078] S. Kundu, K. Wagh and P. Mandayam, *Quantifying incompatibility beyond entropic uncertainty*, preprint (2015), 1510.04093 [quant-ph].
- [2079] S. Kundu, *Prediction of velocity-dip-position over entire cross section of open channel flows using entropy theory*, Environ Earth Sci. **76**, 363 (2017), doi:10.1007/s12665-017-6695-5
- [2080] Z. Zhu, P. Hei, J. Dou and D. Peng, *Evaluating different methods for determining the velocity-dip position over the entire cross section and at the centerline of a rectangular open channel*, Entropy **22**, 605 (2020), doi: 10.3390/e22060605
- [2081] S. Kundu, *Derivation of Hunt equation for suspension distribution using Shannon entropy theory*, Physica A **488**, 96-111 (2017), doi: <http://dx.doi.org/10.1016/j.physa.2017.07.007>
- [2082] S. Kundu, *Derivation of different suspension equations in sediment-laden flow from Shannon entropy*, Stoch. Environ Res. Risk Assess (2017) (14 pages), doi: 10.1007/s00477-017-1455-3
- [2083] N. Ahamed and S. Kundu, *Application of the fractional entropy for one-dimensional velocity distribution with dip-phenomenon in open-channel turbulent flows*, Stochastic Environmental Research and Risk Assessment (2022).
- [2084] N. Ahamed and S. Kundu, *Fractional entropy-based models of one-dimensional velocity distributions in partially filled and fully filled pipe flows*, Stochastic Environmental Research and Risk Assessment (2024).
- [2085] M. Haghbin, A. Sharafati, S.B.H.S. Asadollah and D. Motta, *Developing a generic relation for predicting sediment pick-up rate using symbolic soft computing techniques*, Environmental Science and Pollution Research (2022).
- [2086] G.L. Ferri, *Termodinamica no extensiva y estadísticas generalizadas*, Doctor Thesis (Universidad Nacional de La Pampa, Argentina, October 2006).
- [2087] F.A. Bais and J.D. Farmer, *Information theory in the light of thermodynamics, statistical mechanics and nonlinear dynamics*, in *The Physics of Information*, preprint (2006).
- [2088] S. Asgarani and B. Mirza, *Extensivity and nonextensivity of two-parameter entropies*, Physica A **377**, 58-66 (2007).
- [2089] S. Asgarani and B. Mirza, *Quasi-additivity of Tsallis entropies and correlated subsystems*, Physica A **379**, 513-522 (2007).
- [2090] E.V. Vakarin and J.P. Badiali, *Maximum entropy approach to power-law distributions in coupled dynamic-stochastic systems*, Phys. Rev. E **74**, 036120 (2006) (5 pages).
- [2091] C.J. Wang, Q.F. Lin, Y.G. Yao, K.L. Yang, M.Y. Tian and Y. Wang, *Dynamics of a stochastic system driven by cross-correlated sine-Wiener bounded noises*, Nonlinear Dyn. (2018), doi: 10.1007/s11071-018-4669-0
- [2092] M. Campisi, *On the limiting cases of nonextensive thermostatistics*, Phys. Lett. A **366**, 335-338 (2007).
- [2093] A.R. Plastino, A. Plastino and B.H. Soffer, *Ambiguities in the forms of the entropic functional and constraints in the maximum entropy formalism*, Phys. Lett. A **363**, 48-52 (2007).
- [2094] M. Marino, *Power-law distributions and equilibrium thermodynamics*, preprint (2006) [cond-mat/0605644].
- [2095] M. Marino, *A generalized thermodynamics for power-law statistics*, Physica A **386**, 135-154 (2007).
- [2096] M. Masi, *On the extended Kolmogorov-Nagumo information-entropy theory, the $q \rightarrow 1/q$ duality and its possible implications for a non-extensive two dimensional Ising model*, Physica A **377**, 67-78 (2007).

- [2097] V.N. Borodikhin, *Two-dimensional disordered Ising model within nonextensive statistics*, Physics of Metals and Metallography, **118** (6), 524-527 (2017) [Russian: Fizika Metallov i Metallovedenie **118** (6), 554-557 (2017)].
- [2098] V.N. Borodikhin, *Dynamic critical behavior of the two-dimensional Ising model with nonextensive statistics*, Phys. Rev. E **102**, 012116 (2020).
- [2099] V.V. Ignatyuk and A.P. Moina, *Ising model in the Renyi statistics: the finite size effects*, Condensed Matter Physics **27**, (4), 43603 (2025).
- [2100] W.F. Lu, T. Cai and C.K. Kim, *A variational perturbation approximation method in Tsallis non-extensive statistical physics*, Physica A **378**, 255-272 (2007).
- [2101] S. Furuichi and M. Abdel-Aty, *Tsallis entropies and their theorems, properties and applications*, Chapter 1 of *Aspects of Optical Sciences and Quantum Information*, ed. M Abdel-Aty (Research Signpost, 2007), in press.
- [2102] G.B. Bagci, *The physical meaning of Renyi relative entropies*, preprint (2007) [cond-mat/0703008].
- [2103] M.A. Kumar and R. Sundaresan, *Minimization problems based on a parametric family of relative entropies I: Forward projection*, IEEE Transactions on Information Theory **61** (9), 5063-5080 (2015), 10.1109/TIT.2015.2449312, 1410.2346 [cs.IT].
- [2104] M.A. Kumar and R. Sundaresan, *Minimization problems based on relative α -entropy I: Forward projection*, IEEE Transactions on Information Theory **61** (9), 5063-5080 (2015), doi: 10.1109/TIT.2015.2449311
- [2105] M.A. Kumar and R. Sundaresan, *Relative α -entropy minimizers subject to linear statistical constraints*, 2015 21st National Conference on Communications, NCC 2015, 13 April 2015, Article number 7084835; 2015 21st National Conference on Communications, NCC 2015; Indian Institute of Technology Bombay Mumbai; India; 27 February 2015 through 1 March 2015; Category number CFP1542J-ART; Code 111913
- [2106] M.A. Kumar and R. Sundaresan, *Relative α -entropy minimizers subject to linear statistical constraints*, p2015 Twenty First National Conference on Communications (NCC), IEEE (2015).
- [2107] E. Akturk, G. B. Bagci and R. Sever, *Is Sharma-Mittal entropy really a step beyond Tsallis and Renyi entropies?*, preprint (2007) [cond-mat/0703277].
- [2108] B. Canturk, T. Oikonomou and G.B. Bagci, *The parameter space and third law of thermodynamics for the Borges-Roditi, Abe and Sharma-Mittal entropies*, Internat. J. Modern Phys. B (2018), doi: 10.1142/S0217979218502740
- [2109] T. Oikonomou, *Properties of the "nonextensive Gaussian" entropy*, Physica A **381**, 155-163 (2007).
- [2110] T. Oikonomou, *Tsallis, Renyi and nonextensive Gaussian entropy derived from the respective multinomial coefficients*, Physica A **386**, 119-134 (2007).
- [2111] A.S. Parvan, *Critique of multinomial coefficients method for evaluating Tsallis and Renyi entropies*, Physica A **389**, 5645-5649 (2010).
- [2112] T. Oikonomou, *Comments on "Critique of Tsallis entropy derived from generalized multinomial coefficients" by A.S. Parvan*, Physica A **390**, 781-784 (2011).
- [2113] T. Oikonomou, *From Boltzmann-Gibbs ensemble to generalized ensembles*, preprint (2007), 0712.2310 [cond-mat.stat-mech].
- [2114] F.A. Bais and J.D. Farmer, *The physics of information*, Santa Fe Institute Working paper ITFA-2007-37 (2007), 64 pages; in *The Handbook on the Philosophy of Information*, eds. J. van Benthem and P. Adriaans (2008).
- [2115] N.G. de Almeida, *Formal equivalence between Tsallis and extended Boltzmann-Gibbs statistics*, Physica A **387**, 2745-2749 (2008).
- [2116] N.G. de Almeida, *On a heuristic point of view related to quantum nonequilibrium statistical mechanics*, Physica A **387**, 5772-5777 (2008).
- [2117] L. Guo, J. Du and Z. Liu, *The property of κ -deformed statistics for a relativistic gas in a electromagnetic field: κ parameter and κ -distribution*, Phys. Lett. A **367**, 431-435 (2007).
- [2118] M. Gell-Mann and J.B. Hartle, *Quasiclassical coarse graining and thermodynamic entropy*, Phys. Rev. A **76**, 022104 (2007) (16 pages).
- [2119] S.S. Feitosa, J.M. Sousa, V.F. Araujo and P.C. Assis Jr., *Alguns aspectos da evolucao conceitual da entropia*, communicated at the XXV EFNNE, Encontro de Fisicos do Norte e Nordeste (Natal, 15-20 October 2007).
- [2120] R.G. Zaripov, *Changes in the entropy and the Tsallis difference information during spontaneous decay and self-organization of nonextensive systems*, Russian Physics Journal **44**, 1159 (2001).
- [2121] R.G. Zaripov, *Change in the information difference during evolution of nonextensive systems in the space of control parameters*, Russian Physics Journal, **47**, 647 (2004).
- [2122] R.G. Zaripov, *Evolution of the q-entropy and energy dissipation during irreversible processes in nonextensive systems*, Russian Physics Journal **49**, 157 (2006).

- [2123] R.G. Zaripov, *Elementary particle physics and field theory - Mapping of averages in nonextensive thermodynamics*, Russian Physics Journal **54** (12), 1324-1332 (2012) (Russian Original No. 12, December, 2011).
- [2124] R.G. Zaripov, *I-theorem and self-organization in the van der Pol generator*, J. Phys.: Conf. Series **394**, 012009 (2012) (6 pages).
- [2125] R.G. Zaripov, *Group, geometry and algebra of nonextensive entropies in complex systems*, J. Phys.: Conf. Series **394**, 012001 (2012) (10 pages).
- [2126] R.G. Zaripov, *Kinetic equation in nonextensive statistical mechanics. The H-theorem*, Russian Phys. J. **56** (1), 36-42 (2013) (Russian Original No. 1, January 2013).
- [2127] R.G. Zaripov, *Geometric representation of the entropy group in nonextensive statistical mechanics*, Russian Phys. J., **57**, 1-15 (2014) (Russian Original No. 1, January, 2014).
- [2128] R. G. Zaripov, *Geometric representation of the group of entropy vectors in non extensive statistical mechanics*, Russian Physics J. **57** (7), 861-869 (2014) (Russian Original No. 7, July, 2014), doi: 10.1007/s11182-014-0318-3
- [2129] R.G. Zaripov, *On Self-organizing during transition from a laminar to a turbulent flow for nonextensive systems*, Technical Physics **61** (6), 822-825 (2016) (Russian Original Zhurnal Tekhnicheskoi Fiziki **86** (6), 24-27 (2016)).
- [2130] R. Ranjan and S. Menon, *Two level simulation of Schmidt number effect on passive scalar transport in wall-bounded turbulent flows*, Phys. Fluids **33**, 035124 (2021), doi: 10.1063/5.0039871
- [2131] R.G. Zaripov, *Changes in the entropy and information difference during self-organization of nonextensive systems in parastatistics*, Russian Physics J. **60** (5), 789-796 (2017) (Russian Original No. 5, May, 2017), doi: 10.1007/s11182-017-1140-5
- [2132] A.V. Blank, N.A. Suhareva and M.V. Tsyganov, *Q-parametric estimations for the turbulent characteristics of a thermodynamically inhomogeneous non-stationary optical path*, 26th International Symposium on Atmospheric and Ocean Optics, Atmospheric Physics **11560**, 1156011 (2020), doi: 10.1117/12.2574989
- [2133] J. Wang, W. Zhong and H. Zhang, *Characterization of flow regimes in fluidized beds by information entropy analysis of pressure fluctuations*, Canadian J. Chemical Engineering **95**, 578-588 (2017), doi: 10.1002/cjce.22684
- [2134] C.S. Daw and J. Halow, *Statistical analysis of axial flotsam particle mixing in bubbling fluidized beds*, Ind. Eng. Chem. Res. (2017) (34 pages), doi: 10.1021/acs.iecr.7b03547
- [2135] O.V. Yushchenko, A. Yu. Badalyan and T.I. Zhylenko, *Field theory of the non-additive systems*, 22nd Int. Crimean Conference “Microwave and Telecommunication Technology” (CriMiCo’2012), (10-14 September 2012, Sevastopol, Crimea, Ukraine).
- [2136] O.V. Yushchenko, T.I. Zhylenko and M.A. Rudenko, *Analysis of the nanoparticles ensemble motion including non-extensive properties*, NAP-2017, IEEE 7th International Conference on Nanomaterials: Applications and Properties (2017) (5 pages).
- [2137] E.M.F. Curado and A. Plastino, *Information theory link between MaxEnt and a key thermodynamic relation*, Physica A **386**, 155-166 (2007).
- [2138] B. van Rooyen and M.D. Reid, *Conjugate priors for generalized MaxEnt families*, preprint (2013).
- [2139] G. Wilk and Z. Włodarczyk, *Example of a possible interpretation of Tsallis entropy*, Physica A **387**, 4809-4813 (2008).
- [2140] S. Lopez-Rosa, J.C. Angulo, J.S. Dehesa and R.J. Yanez, *Existence conditions and spreading properties of extreme entropy D-dimensional distributions*, Physica A **387**, 2243-2245 (2008).
- [2141] S. Lopez-Rosa, J.C. Angulo and J.S. Dehesa, *Spreading measures of information-extremizer distributions: applications to atomic electron densities in position and momentum spaces*, Eur. Phys. J. D **51**, 321-329 (2009).
- [2142] S. Lopez-Rosa, J. Montero, P. Sanchez-Moreno, J. Venegas and J.S. Dehesa, *Position and momentum information-theoretic measures of a D-dimensional particle-in-a-box*, J. Math. Chem. **49**, 971-994 (2011).
- [2143] S.H. Patil and K.D. Sen, *Scaling properties of net information measures for superpositions of power potentials: Free and spherically confined cases*, Phys. Lett. A, **370**, 354-360 (2007).
- [2144] S.R. Williams and D.J. Evans, *Statistical mechanics of time independent nondissipative nonequilibrium states*, J. Chem. Phys. **127**, 184101 (2007) (13 pages).
- [2145] G.B. Bagci, A. Arda and R. Sever, *Quantum mechanical treatment of the problem of constraints in non-extensive formalism revisited*, Mod. Phys. Lett. B **21**, 981-985 (2007).
- [2146] R. Niven and H. Suyari, *Combinatorial basis and non-asymptotic form of the Tsallis entropy function*, Eur. Phys. J. B **61**, 75-82 (2008).

- [2147] X. Jiang, *Contributions to statistical distribution theory with applications*, Doctor Thesis (School of Mathematics, University of Manchester, 2018).
- [2148] J.C. do Nascimento, *Rational hyperbolic discounting*, preprint (2019), 1910.05209 [econ.GN].
- [2149] G. Dattoli, S. Licciardi, B. Germano and M.R. Martinelli, *q-Functions and distributions, operational and umbral methods*, Mathematics **9**, 2664 (2021).
- [2150] C.A.S. Reis and R.V. Silva Junior, *A new non-conformable derivative based on Tsallis's q-exponential function*, Intermaths **2** (2) (2021), doi: 10.22481/intermaths.v2i2.10101
- [2151] T. Jonas and H.S. Bakouch, *The generalized Omega function and its connection with some probability distributions*, Mediterr. J. Math. **19**, 250 (2022).
- [2152] F. Hansen, *Geometric properties for a class of deformed trace functions*, Ann. Funct. Anal. **15**, 54 (2024).
- [2153] S. Furuichi and F. Hansen, *On reduced Tsallis relative entropy*, preprint (2023), 2312.03778 [quant-ph].
- [2154] O. Ben Mrad, A. Masmoudi and Y. Slaoui, *Some properties of q-Gaussian distributions*, Communications in Statistics - Theory and Methods (2023), doi: 10.1080/03610926.2023.2244097
- [2155] O. Ben Mrad, A. Masmoudi and Y. Slaoui, *The discrete q-Gaussian distribution $N_q(\mu, \sigma^2)$: Properties and parameters estimation*, Phys. Lett. A **493**, 129249 (2024).
- [2156] M. Ray and R. Shanker, *A compound of exponential and Shanker distribution with an application*, Journal of Scientific Research **67** (4), 39 (2023).
- [2157] M.S. Bispo and C.B. Zeller, *Estimacao robusta para a distribuicao Skew-t*, Proceeding Series of the Brazilian Society of Computational and Applied Mathematics **10** (1) (2023).
- [2158] P. Pandiyan and M. Sakthivel, *A stochastic model for weighted Loai distribution with properties and its applications*, International Journal of Mathematics and Statistics Invention (IJMSI) **12** (1), 11-32 (2024).
- [2159] A.M. Mathai and H.J. Haubold, *Pathway to fractional integrals, fractional differential equations and the role of H-function*, preprint (2024), arxiv [cond-mat.stat-mech].
- [2160] A.M. Mathai and H.J. Haubold, *On extended d - D kappa distribution*, preprint (2025), 2407.21532 [astro-ph.SR].
- [2161] A.A. Kabeer and D. Kumar, *Applications of Buschman-Fox H-function in nuclear physics*, Reports on Mathematical Physics **94** (2) (2024).
- [2162] H.J. Haubold, D. Kumar and A.A. Kabeer, *Fox's H-functions: A gentle introduction to astrophysical thermonuclear functions*, Axioms **13**, 532 (2024).
- [2163] M. Sbert, M. Chen, J. Poch, M. Feixas and S. Chen, *Entropies from f-divergences*, Modeling Decisions for Artificial Intelligence Conference, Lecture Notes in Computer Science, Springer LNAI **14986**, 47-60 (2024).
- [2164] Z. Liu, M. Barahona and R.L. Peach, *Information-Theoretic Measures on Lattices for High-Order Interactions*, preprint (2024), 2408.07533 [cs.IT].
- [2165] L. Yu, *Local optimality of dictator functions with applications to Courtade-Kumar conjecture*, preprint (2024), 2410.10147 [math.PR].
- [2166] L. Yu, *Local optimality of dictator functions with applications to Courtade-Kumar and Li-Medard conjectures*, preprint (2024).
- [2167] Y. Sekhmani, G.G. Luciano, S.K. Maurya, J. Rayimbaev, B. Pourhassan, M.K. Jasim and A. Rincon, *Exploring Tsallis thermodynamics for boundary conformal field theories in gauge/gravity duality*, Chinese Journal of Physics **92**, 894-914 (2024).
- [2168] Y. Sekhmani, B. Hazarika, P. Phukon, A. Landry, S.K. Maurya and J. Rayimbaev, *The D-dimensional charged AdS black holes solutions in polytropic dark energy from Barrow entropy*, Eur. Phys. J. C **85**, 666 (2025).
- [2169] M. Ray and R. Shanker, *A compound of exponential and Komal distributions with properties and application*, Biom. Biostat. Int. J. **13** (5), 147-152 (2024).
- [2170] L.M.A. Al-Zoubi, *Transmuted Mukherjee-Islam Distribution: A Generalization of Mukherjee-Islam Distribution*, J. Mathematics Research **9** (4), (2017), ISSN 1916-9795 E-ISSN 1916-9809 (Canadian Center of Science and Education).
- [2171] C. Subramanian, R. Shenbagaraja and A.A. Rather, *A new generalization of exponentiated Mukherjee-Islam distribution*, Journal of Information and Computational Science **9** (11), 86 (2019).
- [2172] A.A. Rather and C. Subramanian, *A new exponentiated distribution with engineering science applications*, J. Stat. Appl. Pro. **9** (1), 127-137 (2020), doi: 10.18576/jsap/090112
- [2173] H. Suyari, *Maximization of Tsallis entropy in the combinatorial formulation*, J. Phys. C Series **201**, 012018 (2010) (8 pages).
- [2174] E. Gselmann, *Hyperstability of a functional equation*, Acta Math. Hungar. **124**, 179-188 (2009).

- [2175] E. Gselmann, *Recent results on the stability of the parametric fundamental equation of information*, Acta Mathematica Academiae Paedagogicae Nyiregyhaziensis **25**, 65-84 (2009), www.emis.de/journals ISSN 1786-0091
- [2176] A.M. Mathai and H.J. Haubold, *Functions of Mittag-Leffler and Fox: The pathway model to Tsallis statistics and Beck-Cohen superstatistics*, preprint (2009), 0906.0243 [cond-mat.stat-mech].
- [2177] A.M. Mathai and H.J. Haubold, *Mittag-Leffler functions to pathway to Tsallis statistics*, communicated at the 2009 United Nations/NASA/ESA/JAXA Workshop on Basic Space Science and the International Heliophysical Year 2007 (Daejeon, 21-25 September 2009).
- [2178] M.A.F. dos Santos, *Mittag-Leffler functions in superstatistics*, Chaos, Solitons and Fractals **131**, 109484 (2020).
- [2179] S.K. Eastmond, *Nuclear disintegration: A comparison of the Mittag-Leffler and Tsallis functions*, preprint (2021).
- [2180] S.K. Eastmond, *A short survey of time machines*, preprint (2022).
- [2181] S.K. Eastmond, *A comparative analysis of generalized exponential decay*, preprint (2024).
- [2182] S.K. Eastmond, *Stretched exponential decay and growth via Tsallis q -logarithm*, preprint (2024).
- [2183] M.A.F. dos Santos, E.H. Colombo and C. Anteneodo, *Random diffusivity scenarios behind anomalous non-Gaussian diffusion*, Chaos, Solitons and Fractals **152**, 111422 (2021).
- [2184] M.A.F. dos Santos, L. Menon Junior and D. Cius, *Superstatistical approach of the anomalous exponent for scaled Brownian motion*, preprint (2022), 2206.07820 [cond-mat.stat-mech].
- [2185] S.M.D. Queiros, *One and two side generalisations of the log-Normal distribution by means of a new product definition*, preprint (2009).
- [2186] S.S. Nair and A. Kattuveetil, *Some remarks on the paper "On the q -type distributions"*, Proceedings of the Third UN/ESA/NASA Workshop on the International Heliophysical Year 2007 and Basic Space Science, Astrophysics and Space Science Proceedings, eds. H.J. Haubold and A.M. Mathai, DOI 10.1007/978-3-642-03325-4 (Springer-Verlag, Berlin, 2009), pages 11-16.
- [2187] D.P. Joseph and H.J. Haubold, *Extended reaction rate integral as solutions of some general differential equations*, Proceedings of the Third UN/ESA/NASA Workshop on the International Heliophysical Year 2007 and Basic Space Science, Astrophysics and Space Science Proceedings, eds. H.J. Haubold and A.M. Mathai, DOI 10.1007/978-3-642-03325-4 (Springer-Verlag, Berlin, 2009), pages 41-52, 1001.2292 [math-ph].
- [2188] F.S. Silva, D.M. Moreira and M.A. Moret, *Conformable Laplace transform of fractional differential equations*, preprint (2018).
- [2189] D.P. Joseph, *Multivariate extended Gamma distribution*, Axioms **6**, 11 (2017) (12 pages), doi:10.3390/axioms6020011
- [2190] A.M. Mathai, R.K. Saxena and H.J. Haubold, *The H -Function - Theory and Applications*, (Springer, Berlin, 2010).
- [2191] H.J. Haubold, D. Kumar, S.S. Nair and D.P. Joseph, *Special functions and pathways for problems in astrophysics: An essay in honor of A.M. Mathai*, Fractional Calculus and Applied Analysis **13**(2), 133-157 (2010).
- [2192] D. Kumar, *Some aspects of extended kinetic equation*, Axioms **4**, 412-422 (2015), doi:10.3390/axioms4030412
- [2193] S.S. Nair, *An overview of generalized Gamma Mittag-Leffler model and its Applications*, Axioms **4**, 365-384 (2015), doi:10.3390/axioms4030365
- [2194] N.M. Thomas, *On the ratios of pathway random variables*, Comm. Statistics - Theory and Methods **43** (23), 4972-4987 (2014).
- [2195] T. Princy, *Multicomponent reliability under pathway model*, RT and A **2** (78), 472 (2024).
- [2196] A.M. Mathai, *Some recent results connecting many areas*, communicated at the International Conference on Mathematical Sciences (3-5 January 2011, Pala-Kerala, India).
- [2197] P. Sanchez-Moreno, J.S. Dehesa, D. Manzano and R.J. Yanez, *Spreading lengths of Hermite polynomials*, J. Comput. Appl. Math. **233**, 2136-2148 (2010).
- [2198] D. Manzano Diosdado, *Information and entanglement measures in quantum systems with applications to atomic physics*, Doctor Thesis (Universidad de Granada, 2010)
- [2199] M. Jauregui and C. Tsallis, *New representations of π and Dirac delta using the nonextensive-statistical-mechanics q -exponential function*, J. Math. Phys. **51**, 063304 (2010).
- [2200] G. Sicuro and C. Tsallis, *q -Generalized representation of the d -dimensional Dirac delta and q -Fourier transform*, Phys. Lett. A **381** (32), 2583-2587 (2017), doi: 10.1016/j.physleta.2017.06.006
- [2201] W.S. Chung and H. Hassanabadi, *Modified Dirac delta function and modified Dirac delta potential in the quantum mechanics*, Eur. Phys. J. Plus **137**, 151 (2022), doi: 10.1140/epjp/s13360-022-02379-2

- [2202] W. Chung, H. Hassanabadi and A. Boumali, *Discrete analogue of Boltzmann factor and discrete thermodynamics*, Revista Mexicana de Fisica **69**, 011701 (2023).
- [2203] E. Mohammadikhabaz, B. Lari and H. Hassanabadi, *Room temperature quantum Hall effect in q -formalism*, Eur. Phys. J. Plus (2022) **137**, 655 (2022).
- [2204] E. Mohammadikhabaz, B. Lari and H. Hassanabadi, *Quantum Hall effect in q -formalism based on Fermi gas model*, Mod. Phys. Lett. A 2250126 (2022).
- [2205] E. Mohammadikhabaz, B. Lari and H. Hassanabadi, *Robustness of Tsallis statistics to describe relativistic electrons in Hartmann potential*, Eur. Phys. J. Plus **137**, 1282 (2022).
- [2206] W.S. Chung and A. Algin, *Microcanonical ensemble based on the superstatistics with the free Hamiltonian as a stochastic variable*, Eur. Phys. J. Plus **137**, 620 (2022).
- [2207] W.S. Chung and A. Algin, *Two quantum particles in one dimension involving the exchange operator*, Modern Physics Letters A 2350003 (2023) (18 pages), doi: 10.1142/S0217732323500037
- [2208] W.S. Chung and A. Algin, *κ -Deformed bosonic oscillators: Algebra, interpolating statistics, condensation and Debye crystal model*, International Journal of Theoretical Physics **64**, 106 (2025).
- [2209] C. Beck, *Superstatistics: Theoretical concepts and physical applications*, preprint (2022).
- [2210] T. Amdeberhan, D. Borwein, J.M. Borwein and A. Straub, *On formulas for π experimentally conjectured by Jauregui-Tsallis*, J. Math. Phys. **53**, 073708 (2012) (15 pages).
- [2211] A. Chevreuil, A. Plastino and C. Vignat, *On a conjecture about Dirac's delta representation using q -exponentials*, J. Math. Phys. **51**, 093502 (2010).
- [2212] H.T. Alyousif, *The use of Dirac generalized function to derive the PDF of the original data in the case of transforming to normality*, Nawroz University Journal **2** (2014) (9 pages).
- [2213] M. Mamode, *Integral representation of Dirac distribution using the Tsallis q -exponential function*, J. Math. Phys. **51**, 123509 (2010) (4 pages).
- [2214] A. Plastino and M.C. Rocca, *A direct proof of Jauregui-Tsallis' conjecture*, J. Math. Phys. **52**, 103503 (2011) (7 pages).
- [2215] A. Plastino and M.C. Rocca, *On the nature of the Tsallis-Fourier transform*, Mathematics **3**, 644-652 (2015), doi:10.3390/math3030644
- [2216] M. Jauregui and C. Tsallis, *q -generalization of the inverse Fourier transform*, Phys. Lett. A **375**, 2085-2088 (2011).
- [2217] M. Jauregui, C. Tsallis and E.M.F. Curado, *q -moments remove the degeneracy associated with the inversion of the q -Fourier transform*, J. Stat. Mech. P10016 (2011) (11 pages).
- [2218] M. Jauregui, *q -generalizacao da representacao da delta de Dirac em ondas planas e da transformada de Fourier inversa*, Master Thesis (Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro, 4 March 2011).
- [2219] F.D. Nobre, M.A. Rego-Monteiro and C. Tsallis, *Nonlinear generalizations of relativistic and quantum equations with a common type of solution*, Phys. Rev. Lett. **106**, 140601 (2011) (4 pages).
- [2220] F.D. Nobre, M.A. Rego-Monteiro and C. Tsallis, *Nonlinear q -generalizations of quantum equations: Homogeneous and nonhomogeneous cases - An Overview*, Entropy **19**, 39 (2017) (25 pages), doi:10.3390/e19010039
- [2221] P.R. Gordo, A. Pickering, D. Puertas-Centeno and E.V. Toranzo, *Generalized and new solutions of the NRT nonlinear Schroedinger equation*, Physica D **472**, 134515 (2025).
- [2222] M.A. Rego-Monteiro and E.M.F. Curado, *Multi-parametric nonlinear generalization of Klein-Gordon: Real and complex fields*, preprint (2024), 2412.13226 [quant-ph].
- [2223] M. Fuentes and S. Curilef, *Quantum evolution equations through statistical methods: From fluctuations to nonlinearity*, in *Special Collection: Advances in Mathematics and Physics: from Complexity to Machine Learning*, Chaos **35**, 023137 (2025).
- [2224] S.H. Mazharimousavi, *Note on classical field theory for the non-Hermitian Schrodinger equation with position-dependent masses*, Eur. Phys. J. Plus **136**, 807 (2021), doi: 10.1140/epjp/s13360-021-01822-0
- [2225] M.A. Rego-Monteiro, *Lorentzian solitary wave in a generalised nonlinear Schroedinger equation*, Phys. Lett. A **384**, 126132 (2020).
- [2226] M.A. Rego-Monteiro, *Generalized nonlinear Schrodinger equation: Conservation of energy and solitary-wave solutions*, J. Math. Phys. **61**, 052101 (2020), doi: doi.org/10.1063/5.0006799
- [2227] B. Khosropour, M. Eghbali and S. Ghorbanali, *q -nonlinear Schrodinger and q -nonlinear Klein-Gordon equations in the framework of GUP*, General Relativity and Gravitation **50**, 25 (2018).
- [2228] E.K. Lenzi, A.S.M. de Castro and R.S. Mendes, *Some nonlinear extensions for the Schrodinger equation*, Chinese Journal of Physics **66**, 74-81 (2020).
- [2229] E.K. Lenzi, L.R. Evangelista and L.R. da Silva, *Aspects of quantum statistical mechanics: Fractional and Tsallis approaches*, Mathematics **11**, 2777 (2023).

- [2230] L.R. Evangelista and E.K. Lenzi, *Nonlinear Fokker-Planck equations, H-Theorem and generalized entropy of a composed system*, Entropy **25**, 1357 (2023).
- [2231] A. Merad and M. Aouachria, *Scalar particle in new type of the extended uncertainty principle*, Few-Body Syst. **61**, 1 (2020).
- [2232] B.G. Costa and I.S. Gomez, *Bohmian mechanics and Fisher information for q-deformed Schrodinger equation*, Phys. Lett. A **382** (37), 2605-2612 (2018).
- [2233] I.S. Gomez, M.G.A. Santos, D.A. dos Santos and R. Thibes, *Partition function for position-dependent mass systems from superstatistics*, preprint (2025), 2503.16748 [cond-mat.stat-mech].
- [2234] B.G. da Costa, I.S. Gomez and M.A.F. dos Santos, *Non-additive quantum mechanics for a position-dependent mass system: Dirac delta and quasi-periodic potentials*, EPL **129**, 10003 (2020), doi: 10.1209/0295-5075/129/10003
- [2235] I.S. Gomez, B.G. da Costa and M.A.F. dos Santos, *Inhomogeneous Fokker-Planck equation from framework of Kaniadakis statistics*, Comm. Nonlinear Science and Numerical Simulation (2023), in press.
- [2236] I.S. Gomez, *Deformed random walk: Suppression of randomness and inhomogeneous diffusion*, Phys. Rev. E **107**, 034113 (2023).
- [2237] I.S. Gomez, *Deformed random walk: suppression of randomness and inhomogeneous diffusion*, comm. at Statistical Mechanics for Complexity (Rio de Janeiro, 2023).
- [2238] I.S. Gomez, D.R. de Jesus and R. Thibes, *Random walks with homotopic spatial inhomogeneities*, preprint (2025), 2502.14590 [math-ph].
- [2239] A. Merad, M. Aouachria, M. Merad and T. Birkandan, *Relativistic oscillators in new type of the extended uncertainty principle*, Internat. J. Modern Physics A **34** (32), 1950218 (2019) (17 pages).
- [2240] I.S. Gomez and E.P. Borges, *Algebraic structures and position-dependent mass Schrodinger equation from group entropy theory*, Lett. Mathematical Physics **111**, 43 (2021), doi: 10.1007/s11005-021-01387-0
- [2241] I.S. Gomez, M. Portesi and E.P. Borges, *Universality classes for the Fisher metric derived from relative group entropy*, Physica A **547**, 123827 (2020).
- [2242] B.G. Costa and E.P. Borges, *Nonlinear quantum mechanics in a q-deformed Hilbert space*, Phys. Lett. A **383**, 2729-2738 (2019).
- [2243] B.G. Costa, I.S. Gomez and E.P. Borges, *Inhomogeneous Fokker-Planck equation as an homogeneous one from deformed derivative framework*, preprint (2018), 1806.02764 [cond-mat.stat-mech].
- [2244] R.A. El-Nabulsi, *Some implications of position-dependent mass quantum fractional Hamiltonian in quantum mechanics*, Eur. Phys. J. Plus **134**, 192 (2019), doi: 10.1140/epjp/i2019-12492-6
- [2245] A.M.C. Souza and R.F.S. Andrade, *Extended-localized transition for a tight-binding model with mass position dependence*, Physica A **525**, 628-634 (2019).
- [2246] W.S. Chung and H. Hassanabadi, *q-Deformed quantum mechanics based on the q-addition*, Fortschr. Phys. **1800111** (2019), doi: 10.1002/prop.201800111
- [2247] W.S. Chung, H. Hassanabadi and B.C. Lutfuoglu, *α -boson gas model based on α -additive entropy*, J. Stat. Mech. **053101** (2021).
- [2248] W.S. Chung and H. Hassanabadi, *Fermi energy in the q-deformed quantum mechanics*, Mod. Phys. Lett. A, **2050074** (2010) (15 pages).
- [2249] W.S. Chung and H. Hassanabadi, *Blackbody radiation and Debye model based on q-deformed bosonic Newton oscillator algebra*, Mod. Phys. Lett. A **2050147** (2020), doi: 10.1142/S0217732320501473
- [2250] J.D. Castano-Yepes, J.M. Cabrera-Teran and C.F. Ramirez-Gutierrez, *Influence of thermal fluctuations on bosonic correlations and the ac Stark effect in two-level atoms: A superstatistical perspective*, Phys. Rev. E **111**, 034116 (2025).
- [2251] A. Algin and A.S. Arıkan, *Thermostatistical properties of the blackbody radiation and Debye crystal model through Fibonacci oscillators*, Eur. Phys. J. Plus **137**, 1230 (2022).
- [2252] W.S. Chung and H. Hassanabadi, *The f-deformation I: f-deformed classical mechanics*, Reports on Mathematical Physics **85** (1) (2020).
- [2253] W.S. Chung, B.C. Lutfuoglu and H. Hassanabadi, *q-deformed coherent states for q-deformed photon by using the Tsallis' s q-deformed exponential function in the non-extensive thermodynamics*, Internat. J. Theor. Phys. (2021), doi: 10.1007/s10773-021-04736-w
- [2254] W.S. Chung, A.I. Goker and H. Hassanabadi, *Comparison of three types of superstatistics, superstatistic thermodynamic relations and paramagnet model*, Physica A **568**, 125729 (2021).
- [2255] J.D. Castano-Yepes and C.F. Ramirez-Gutierrez, *Superstatistics and quantum entanglement in the isotropic spin-1/2 XX dimer from a nonadditive thermodynamics perspective*, Phys. Rev. E **104**, 024139 (2021).

- [2256] H. Hassanabadi, M. de Montigny, W.S. Chung and P. Sedaghatnia, *Superstatistics of the Dunkl oscillator*, Physica A **580**, 126154 (2021).
- [2257] D. Nath, N. Ghosh and A.K. Roy, *Information theoretic measures in one-dimensional Dunkl oscillator*, J. Math. Phys. **65**, 083511 (2024), doi: 10.1063/5.0200405
- [2258] A. Halder, A.K. Roy and D. Nath, *Information theoretic measures within Schrodinger-Dunkl framework in spherical coordinates*, preprint (2025), 2506.17447 [quant-ph].
- [2259] E. Mohammadikhabaz, B. Lari and H. Hassanabadi, *Relativistic particle in thermal non-equilibrium*, Physica A **593**, 126906 (2022).
- [2260] P.R.S. Carvalho, *Critical exponents and amplitude ratios of scalar nonextensive q -field theories*, Phys. Rev. D **98**, 085019 (2018).
- [2261] P.R.S. Carvalho, *Nonextensive statistical field theory*, Phys. Lett. B **830**, 137147 (2022).
- [2262] P.R.S. Carvalho, *Nonextensive percolation and Lee-Yang edge singularity from nonextensive $\lambda\Phi^3$ scalar field theory*, preprint (2022), 2203.15033 [hep-th].
- [2263] P.R.S. Carvalho, *Experimental validation of nonextensive statistical field theory: applications to manganites*, Phys. Lett. B **838**, 137683 (2023).
- [2264] T.F.A. Alves, J.F. da Silva Neto, F.W.S. Lima, G.A. Alves and P.R.S. Carvalho, *Is Kaniadakis κ -generalized statistical mechanics general?*, Phys. Lett. B (2023), in press, doi: 10.1016/j.physletb.2023.138005
- [2265] P.R.S. Carvalho, *On the completeness of the δ_{KLS} -generalized statistical field theory*, Eur. Phys. J. Plus **139**, 487 (2024).
- [2266] I.S. Gomez, *A generalized Vitali set from nonextensive statistics*, Reports on Mathematical Physics **83** (1), 61-70 (2019).
- [2267] I.S. Gomez, E.P. Borges and M. Portesi, *Fisher metric from relative entropy group*, preprint (2018), 1805.11157 [math-ph].
- [2268] A. Plastino and M.C. Rocca, *From the hypergeometric differential equation to a non linear Schrodinger one*, preprint (2015), 1505.01334 [quant-ph].
- [2269] A. Plastino and M.C. Rocca, *Hypergeometric connotations of quantum equations*, Physica A **450**, 435-443 (2016).
- [2270] A. Plastino and M.C. Rocca, *Hypergeometric foundations of Fokker-Planck like equations*, Phys. Lett. A **380**, 1900-1903 (2016).
- [2271] D.J. Zamora, M.C. Rocca, A. Plastino and G.L. Ferri, *Perturbative treatment of the non-linear q -Schrodinger and q -Klein-Gordon equations*, Entropy **19**, 21 (2017) (11 pages), doi:10.3390/e19010021
- [2272] D.J. Zamora, *On the divergences of nonextensive statistics and how to solve them*, Proceedings of the Conference on Complex Systems (7-11 December 2020).
- [2273] M. Mohammadi and M. Emadi, *Nonparametric tests of independence using copula-based Renyi and Tsallis divergence measures*, Stat. Optim. Inf. Comput. **11**, 949-962 (2023).
- [2274] C. Rogers, G. Saccomandi and L. Vergori, *Helmholtz-type solitary wave solutions in nonlinear elastodynamics*, Ricerche di Matematica (2019), doi: doi.org/10.1007/s11587-019-00464-w
- [2275] P.H. Chavanis, *Generalized Euler, Smoluchowski and Schrodinger equations admitting self-similar solutions with a Tsallis invariant profile*, Eur. Phys. J. Plus **134**, 353 (2019), doi: 10.1140/epjp/i2019-12706-y
- [2276] L.R. Evangelista, E.K. Lenzi, G. Barbero and A.M. Scarfone, *On the Einstein-Smoluchowski relation in the framework of generalized statistical mechanics*, Physica A (2024), in press.
- [2277] P.H. Chavanis, *Generalized equations in quantum mechanics and Brownian theory*, Symmetry **15**, 2195 (2023).
- [2278] S. Sargolzaeipor, H. Hassanabadi and W.S. Chung, *q -deformed superstatistics of the Schrodinger equation in commutative and noncommutative spaces with magnetic field*, Eur. Phys. J. Plus **133**, 125 (2018) (14 pages), doi: 10.1140/epjp/i2018-11827-1
- [2279] W.S. Chung, H. Hassanabadi and J. Kriz, *The q -deformed heat equation and q -deformed diffusion equation with q -translation symmetry*, Revista Mexicana de Fisica **68**, 060602 (2022).
- [2280] D. Nath and P. Ghosh, *A generalized statistical complexity based on Renyi entropy of a noncommutative anisotropic oscillator in a homogeneous magnetic field*, Internat. J. Mod. Phys. A **34**, 1950105 (2019) (16 pages).
- [2281] P. Ghosh and D. Nath, *Generalized quantum similarity index: An application to pseudoharmonic oscillator with isospectral potentials in 3D*, International J. Quantum Chemistry (2020), doi: 10.1002/qua.26517
- [2282] S. Sargolzaeipor, H. Hassanabadi and W.S. Chung, *Superstatistics with different kinds of distributions in the deformed formalism*, Eur. Phys. J. Plus **133**, 125 (2018), doi: 10.1140/epjp/i2018-11962-7

- [2283] J.D. Zamora, M.C. Rocca, A. Plastino and G.L. Ferri, *Dimensionally regularized Tsallis' statistical mechanics and two-body Newton's gravitation*, Physica A **497**, 310-318 (2018).
- [2284] F. Pennini, A. Plastino and M.C. Rocca, *Classical statistical mechanics' treatment of gravitation: a review*, preprint (2019).
- [2285] F. Pennini, A. Plastino, M. Rocca and G. Ferri, *A review of the classical canonical ensemble Treatment of Newton's gravitation*, Entropy **21**, 677 (2019), doi: 10.3390/e21070677
- [2286] A. Plastino, D. Monteoliva and M.C. Rocca, *Tsallis' statistics for long range interactions: Gravity*, Physica A (2022), in press.
- [2287] A. Plastino, *Entropic aspects of nonlinear partial differential equations: Classical and quantum mechanical perspectives*, Entropy **19**, 166 (2017) (3 pages), doi:10.3390/e19040166
- [2288] A. Plastino and M.C. Rocca, *Quantum q-field theory: q-Schrodinger and q-Klein-Gordon Fields*, preprint (2017), 1702.03549 [hep-th].
- [2289] F.D. Nobre and A.R. Plastino, *A family of nonlinear Schrodinger equations admitting q-plane wave*, Phys. Lett. A **381**, 2457-2462 (2017), doi: <http://dx.doi.org/10.1016/j.physleta.2017.05.054>
- [2290] T.D. Frank, *Active and purely dissipative Nambu systems in general thermostistical settings described by nonlinear partial differential equations involving generalized entropy measures*, Entropy **19**, 8 (2017) (21 pages), doi:10.3390/e19010008
- [2291] F.D. Nobre and M.A. Rego-Monteiro, *Non-Hermitian PT symmetric hamiltonian with position-dependent masses: Associated Schroedinger equation and finite-norm solutions*, Braz. J. Phys. **45**, 79-88 (2015).
- [2292] I. V. Toranzo, A.R. Plastino, J.S. Dehesa and A. Plastino, *Quasi-stationary states of the NRT nonlinear Schrodinger equation*, Physica A **392**, 3945-3951 (2013).
- [2293] I.V. Toranzo, J.S. Dehesa and P. Sanchez-Moreno, *Frequency moments, L_q norms and Renyi entropies of general hypergeometric polynomials*, J. Math. Chem. **52**, 1372-1385 (2014), doi: 10.1007/s10910-014-0317-1
- [2294] I.V. Toranzo and J.S. Dehesa, *Renyi, Shannon and Tsallis entropies of Rydberg hydrogenic systems*, EPL **113**, 48003 (2016) (6 pages), doi: 10.1209/0295-5075/113/48003
- [2295] I.V. Toranzo, A. Martinez-Finkelshtein and J.S. Dehesa, *Heisenberg-like uncertainty measures for D-dimensional hydrogenic systems at large D*, J. Math. Phys. **57**, 082109 (2016) (21 pages).
- [2296] D. Puertas-Centeno, I.V. Toranzo and J.S. Dehesa, *Renyi entropies for multidimensional hydrogenic systems in position and momentum spaces*, J. Stat. Mech. 073203 (2018).
- [2297] I.V. Toranzo, D. Puertas-Centeno and J.S. Dehesa, *Entropic properties of D-dimensional Rydberg systems*, Physica A **462**, 1197-1206 (2016), doi: <http://dx.doi.org/10.1016/j.physa.2016.06.144>
- [2298] J.S. Dehesa, I.V. Toranzo and D. Puertas-Centeno, *Entropic measures of Rydberg-like harmonic states*, Int. J. Quantum Chem. **117**, 48-56 (2017).
- [2299] D. Puertas-Centeno, I.V. Toranzo and J.S. Dehesa, *Heisenberg and entropic uncertainty measures for large-dimensional harmonic systems*, Entropy **19**, 164 (2017) (19 pages), doi: 10.3390/e19040164
- [2300] D. Puertas-Centeno, I.V. Toranzo and J.S. Dehesa, *biparametric Fisher-Renyi complexity measure and its application to the multidimensional blackbody radiation*, J. Stat. Mech. 043408 (2017) (12 pages).
- [2301] D. Puertas-Centeno, I.V. Toranzo and J.S. Dehesa, *Biparametric complexities and the generalized Planck radiation law*, J. Phys. A **50** (50), 505001 (2017).
- [2302] I.V. Toranzo, *Entanglement, complexity and entropic properties of quantum systems*, Doctor Thesis (Universidad de Granada, 2017).
- [2303] S. Zozor, D. Puertas-Centeno and J.S. Dehesa, *On generalized Stam inequalities and Fisher-Renyi complexity measures*, Entropy **19**, 493 (2017) (31 pages), doi: 10.3390/e19090493
- [2304] H. Yang, Z.Y. Ding, D. Wang, H. Yuan, X.K. Song, J. Yang, C.J. Zhang and L. Ye, *Experimental certification of the steering criterion based on a general entropic uncertainty relation*, Phys. Rev. A **101**, 022324 (2020).
- [2305] F.D. Nobre, M.A. Rego-Monteiro and C. Tsallis, *A Generalized nonlinear Schroedinger equation: Classical field-theoretic approach*, EPL **97**, 41001 (2012) (5 pages).
- [2306] F.D. Nobre and A.R. Plastino, *Generalized nonlinear Proca equation and Its free-particle solutions*, Eur. Phys. J. C **76** (6), 343 (2016) (8 pages), doi: 10.1140/epjc/s10052-016-4196-4
- [2307] A.R. Plastino and C. Tsallis, *Nonlinear Schrodinger equation in the presence of uniform acceleration*, J. Math. Phys. **54** (4), 041505 (2013) (6 pages).
- [2308] A. Abdikian, J. Tamang and A. Saha, *Electron-acoustic supernonlinear waves and their multistability in the framework of the nonlinear Schrodinger equation*, Commun. Theor. Phys. **72**, 075502 (2020)(10 pages), doi: 10.1088/1572-9494/ab8a20
- [2309] J. Tamang and A. Saha, *Dynamical properties of nonlinear ion-acoustic waves based on the nonlinear Schrodinger equation in a multi-pair nonextensive plasma*, Z. Naturforsch. 2020 (11 pages).

- [2310] A. Khan, A. Farooq, A.A. Abid, M.S. Hussain, W.X. Ma and S.M. Shaaban, *Exploring non-Maxwellian distributions effects on modulational instability and rogue wave triplets in ion-acoustic plasmas*, Solitons and Fractals **195**, 116262 (2025).
- [2311] J. Tamang, B. Pradhan and A. Saha, *Stable oscillation and chaotic motion of the dust-acoustic waves for the KdV-Burgers equation in a four-component dusty plasma*, IEEE Transactions on Plasma Science **48** (11), 3982 (2020).
- [2312] R. Khanam and S.N. Barman, *The formation of ion-acoustic solitary waves in a plasma having nonextensive nonextensive electrons and positrons*, East European Journal of Physics **4**, 518-525 (2024).
- [2313] B.R. Andrew, L. Guazzotto, U. Konopka, L. Matthews, H. Truell and E.G. Kostadinova, *Anisotropic anomalous diffusion in microgravity dusty plasma. Part one: Nonequilibrium statistical analysis*, preprint (2024), 2411.15705 [physics.plasm-ph].
- [2314] J. Tamang, M. Pradhan and P.K. Prasad, *Bifurcation of small amplitude*, Proceedings of the 2nd International Conference on Nonlinear Dynamics and Applications **1**, 210-222 (2024).
- [2315] L. Mandi and P. Chatterjee, *Dust-acoustic multi-solitons and shock in a polarized space dusty plasma using Darboux transformation*, Proceedings of the 2nd International Conference on Nonlinear Dynamics and Applications **1**, 160-171 (2024).
- [2316] R.A. Shahein and A.A. Al-Raddadi, *Bifurcation analysis of Van der Pol-Mathieu equation for the dust grain charge with regularized κ -distributed electron-ion*, Modern Physics Letters B 2550049 (2025).
- [2317] Z. Liu, *Effects of nonextensive electrons on dust-ion acoustic waves in a collisional dusty plasma with negative ions*, Entropy **25**, 1363 (2023).
- [2318] R. Kaur, G. Slathia and N.S. Saini, *Higher order shock wave structures and phase plane analysis in multicomponent dusty plasma*, EPL (2023), in press.
- [2319] R. Kaur, G. Slathia, M. Kaur and N.S. Saini, *Higher corrections to nonlinear structures in a polarized space dusty plasma*, Plasma Physics Reports **49** (1), 148-156 (2023).
- [2320] M. Rahman and S.N. Barman, *Existence of small amplitude KDV and MKDV solitons in a magnetized dusty plasma with q -nonextensive distributed electrons*, East European Journal of Physics **2**, 74-89 (2024).
- [2321] A. Palit, A. Roy and S. Raut, *Qualitative studies of the influence of damping and external periodic force on ion-acoustic waves in a magnetized dusty plasma through modified ZK equation*, Brazilian J. Physics (2022) **52**, 110 (2022), doi: 10.1007/s13538-022-01083-x
- [2322] P. Akter, M.G. Hafez and R. Sakthivel, *Propagation of dust-ion Acoustic shocks in unmagnetized four species dusty plasmas having double index generalized distributed electrons*, Brazilian Journal of Physics **54**, 181 (2024).
- [2323] M.G. Hafez, P. Akter, K. Chettri, R. Sakthivel and A. Saha, *Nonlinear propagation of ion-acoustic waves along with their bifurcation analysis in a negative ion plasma in the presence of quartic nonlinearity*, Physics of Fluids **36**, 077170 (2024).
- [2324] S. Roy, S. Raut and R.R. Kairi, *Nonlinear analysis of the ion-acoustic solitary and shock wave solutions for non-extensive dusty plasma in the framework of modified Korteweg-de Vries-Burgers equation*, Pramana - J. Phys. **96**, 67 (2022).
- [2325] S. Chaudhuri, A.R. Chowdhury and K.R. Chowdhury, *On the effect of incoherence in a polarized dusty plasma and Wigner stability*, Phys. Scr. **97**, 125601 (2022).
- [2326] T. Abbaszadeh and H. Zahed, *Investigation of dust ion-acoustic wave dispersion properties in the dusty plasma with q -distribution*, Plasma Res. Express **3**, 025012 (2021).
- [2327] M. Rahman and S.N. Barman, *Nonlinear dust ion acoustic solitary waves propagation in a magnetized plasma with Tsallis electron distribution*, International Journal of Mathematics and Computer in Engineering **3** (2), 223-240 (2025).
- [2328] M.M. Zhao, *Numerical investigation on nonlinear ion-acoustic waves in a nonextensive plasma: Fractional model*, Chinese J. Engineering Mathematics **37** (4) (2020), doi: 10.3969/j.issn.1005-3085.2020.04.011
- [2329] S. Basnet, R.R. Pokhrel and R. Khanal, *Characteristics of magnetized dusty plasma sheath with two ion species and q -nonextensive electrons*, 13th International Conference on Plasma Science and Applications (ICPSA-2020).
- [2330] O. Jdaini, A. Missaoui, M. El Bojaddaini, M. El Kaouini and H. Chatei, *Comparative analysis of plasma sheath characteristics in one-dimensional and three-dimensional velocity spaces governing nonextensive electron density*, Contributions to Plasma Physics (2025), doi: 10.1002/ctpp.202400094
- [2331] O. Jdaini, A. Missaoui, M. El Bojaddaini, M. El Kaouini and H. Chatei, *Investigation of magnetized plasma sheath in the presence of non-extensive electrons and ionization source*, in Proceedings of the Fourth International Conference on Electronic Engineering and Renewable Energy Systems, Vol. 2 (2024).

- [2332] A.K. Shaw, D. Sharma, S. Kar and P.V. Subhash, *Impact of two group of electrons in an equilibrium steady-state multicomponent magnetized plasma sheath*, 3rd International Conference on Plasma Theory and Simulations (PTS-2023), (India, September 21-23, 2023).
- [2333] Z. Eljabiri, O. El Ghani, I. Driouch and H. Chatei, *Total secondary emission effect on the complex plasma sheath with superextensive electrons*, J. Plasma Phys. **90**, 905900506 (2024).
- [2334] L. Chen, Y. Yang, Y. An, P. Duan, S. Sun, Z. Cui, Z. Kan and W. Gao, *Modeling of magnetized collisional plasma sheath with nonextensive electron distribution and ionization source*, Plasma Sci. Technol. **25**, 035003 (2023).
- [2335] L. Chen, Y. An, C. Tan, P. Duan, Z. Cui, J. Chen and L. Zhou, *Properties of collisional plasma sheath with ionization source term and two-temperature electrons in an oblique magnetic field*, J. Phys. D: Appl. Phys. **57** (28), 285204 (2024).
- [2336] L. Chen, C.Q. Tan, Z.J. Cui, P. Duan, Y.H. An and J.Y. Chen and L.N. Zhou, *Multi-ion magnetized sheath properties with non-extensive electron distribution*, Acta Phys. Sin. **73**, (5), 055201 (2024) [In Chinese].
- [2337] S.B. Thapa, S. Basnet and R. Khanal, *Dust charge fluctuation and ion acoustic wave propagation in dusty plasma with q -nonextensive hot and Maxwellian cold electrons*, AIP Advances **12**, 085205 (2022).
- [2338] M.M. Hatami, *Investigation of sheath properties in a warm plasma with two kappa-distributed electrons and monoenergetic electron beam*, Scientific Reports **12**, 4654 (2022).
- [2339] M.M. Hatami, *Effects of electron temperature on ion-acoustic solitons and double layers in nonextensive plasmas*, Waves in Plasma **31**, 427-433 (2023).
- [2340] M. Eghbali, M. Khalid and A. Kabir, *Nonlinear electrostatic excitations in magnetized plasma with monoenergetic electron beam*, Arabian Journal for Science and Engineering (2023), doi: 10.1007/s13369-023-07941-3
- [2341] A. Fornara, R. Appleby and G. Sterbini, *Impact of crab cavity RF noise on the transverse beam profiles in the HL-LHC*, 14th International Particle Accelerator Conference, Venice, Italy (2023).
- [2342] A. Saha, J. Tamang, G.C. Wu and S. Banerjee, *Superperiodicity, chaos and coexisting orbits of ion-acoustic waves in a four-component nonextensive plasma*, Commun. Theor. Phys. **72**, 115501 (2020), doi: 10.1088/1572-9494/aba256
- [2343] F.E.M. Silveira, M.H. Benetti, I.L. Caldas and K.N.M.M. Santos, *Description limit for soliton waves due to critical scaling of electrostatic potential*, Phys. Plasmas **28**, 092115 (2021).
- [2344] A.R. Plastino, A.M.C. Souza, F.D. Nobre and C. Tsallis, *Stationary and uniformly accelerated states in nonlinear quantum mechanics*, Phys. Rev. A **90**, 062134 (2014) (10 pages).
- [2345] A.R. Plastino and C. Tsallis, *Dissipative effects in nonlinear Klein-Gordon dynamics*, EPL **113**, 50005 (2016) (5 pages), doi: www.epljournal.org doi: 10.1209/0295-5075/113/50005
- [2346] A.R. Plastino and R.S. Wedemann, *Nonlinear wave equations related to nonextensive thermostatics*, Entropy **19** (2), 60 (2017) (13 pages), doi:10.3390/e19020060 (2017).
- [2347] A. Plastino and M.C. Rocca, *Classical field-theoretical approach to the non-linear q -Klein-Gordon equation*, EPL **116**, 41001 (2016) (4 pages).
- [2348] T. Bountis and F.D. Nobre, *Travelling-wave and separated variable solutions of a nonlinear Schroedinger equation*, J. Math. Phys. **57**, 082106 (2016) (14 pages).
- [2349] S. Curilef, A.R. Plastino and A. Plastino, *Tsallis' maximum entropy ansatz leading to exact analytical time dependent wave packet solutions of a nonlinear Schroedinger equation*, Physica A **392**, 2631-2642 (2013).
- [2350] F. Pennini, A.R. Plastino and A. Plastino, *Pilot wave approach to the NRT nonlinear Schroedinger equation*, Physica A **403**, 195-205 (2014), doi: http://dx.doi.org/10.1016/j.physa.2014.02.021
- [2351] C. Rogers, *On a coupled nonlinear Schroedinger system: A Ermakov connection*, Studies in Applied Mathematics **00**, 1-19 (2013, Massachusetts Institute of Technology), DOI: 10.1111/sapm.12027
- [2352] C. Rogers and W.K. Schief, *On q -Gaussian integrable Hamiltonian reductions in anisotropic magnetogasdynamics*, Acta Appl. Math. (2014), in press, doi: 10.1007/s10440-014-9926-8
- [2353] C. Rogers and B. Malomed, *On Madelung systems in nonlinear optics. A reciprocal invariance*, preprint (2018), 1805.04595 [nlin.PS].
- [2354] R.N. Costa Filho, M.P. Almeida, G.A. Farias and J.S. Andrade, *Displacement operator for quantum systems with position-dependent mass*, Phys. Rev. A **84**, 050102(R) (2011) (4 pages).
- [2355] R.N. Costa Filho, J.P.M. Braga, J.H.S. Lira, J.S. Andrade Jr., *Extended uncertainty from first principles*, Phys. Lett. B **755**, 367-370 (2016), doi: http://dx.doi.org/10.1016/j.physletb.2016.02.035
- [2356] F.A. Brito, F.F. Santos and J.R.L. Santos, *Harmonic oscillators from displacement operators and thermodynamics*, Physica A **516**, 78-89 (2019).
- [2357] S.H. Mazharimousavi, *Revisiting the displacement operator for quantum systems with position-dependent mass*, Phys. Rev. A **85**, 034102 (2012) (4 pages).

- [2358] M.A. Rego-Monteiro and F.D. Nobre, *Classical field theory for a non-Hermitian Schroedinger equation with position-dependent masses*, Phys. Rev. A **88**, 032105 (2013) (6 pages).
- [2359] M.A. Rego-Monteiro and F.D. Nobre, *Nonlinear quantum equations: Classical field theory*, J. Math. Phys. **54**, 103302 (2013) (9 pages), doi: 10.1063/1.4824129
- [2360] M. Vubangsi, M. Tchoffo and L.C. Fai, *Position-dependent effective mass system in a variable potential: displacement operator method*, Phys. Scr. **89**, 025101 (2014) (5 pages), doi:10.1088/0031-8949/89/02/025101
- [2361] B.G. da Costa and E.P. Borges, *Generalized space and linear momentum operators in quantum mechanics*, J. Math. Phys. **55**, 062105 (2014) (10 pages), doi: http://dx.doi.org/10.1063/1.4884299
- [2362] B.G. da Costa and I.S. Gomez, *Information-theoretic measures for a position-dependent mass system in an infinite potential well*, Physica A **541**, 123698 (2020).
- [2363] E.P. Borges and B.G. da Costa, *Deformed mathematical objects stemming from the q-logarithm function*, Axioms **11**, 138 (2022).
- [2364] E.P. Borges, T. Kodama and C. Tsallis, *Along the lines of nonadditive entropies: q-prime numbers and q-zeta functions*, Entropy **24**, 60 (2022), doi: 10.3390/e24010060
- [2365] A. Thomas, *Infinitesimal modular group: q-deformed sl_2 and Witt algebra*, Symmetry, Integrability and Geometry: Methods and Applications **20**, 053 (2024).
- [2366] H.J. Haubold, *Henri Poincare's comment on calculus and Albert Einstein's comment on entropy: Mathematical physics on the tenth anniversary of Axioms*, Axioms **12**, 83 (2023).
- [2367] R.N. Costa Filho, G. Alencar, B.-S. Skagerstam and J.S. Andrade Jr., *Morse potential derived from first principles*, EPL **101**, 10009 (2013) (4 pages).
- [2368] H. Hassanabadi, W.S. Chung, S. Zare and S.B. Bhardwaj, *Q-deformed Morse and oscillator potential*, Advances High Energy Physics, 1730834 (2017) (4 pages), doi: 10.1155/2017/1730834
- [2369] S. Sargolzaeipor, H. Hassanabadi, W.S. Chung, *Superstatistics properties of q-deformed Morse potential in one dimension*, Physica A **508**, 740-747 (2018), doi: 10.1016/j.physa.2018.05.125
- [2370] O.B. Abia, *Equacao de Duffin-Kemmer-Petiau: Representacoes e aplicacoes ao oscilador harmonico bidimensional num campo magnetico transverso e ao potencial de Morse*, Master Thesis (Universidade Federal da Bahia, 2020).
- [2371] I.S. Gomez, E.S. Santos and O. Abia, *Morse potential in relativistic contexts from generalized momentum operator and non-minimal coupling*, preprint (2020), 2005.01250 [math-ph].
- [2372] I.S. Gomez, E.S. Santos and O. Abia, *Morse potential in relativistic contexts from generalized momentum operator: Schottky anomalies, Pekeris approximation and mapping*, Modern Physics Letters A (2021).
- [2373] Y. Zheng, *The generalized Schottky model of thermionic emission in complex metal with nonextensive quantum statistics*, Eur. Phys. J. Plus **138**, 42 (2023).
- [2374] S. Sargolzaeipor, H. Hassanabadi, W.S. Chung, *Superstatistics of two electrons quantum dot*, Modern Physics Letters A **34**, 1950023 (2019) (9 pages), doi: 10.1142/S0217732319500238
- [2375] W.S. Chung and H. Hassanabadi, *Statistical physics when the heat bath is large but finite*, Physica A **532**, 121720 (2019).
- [2376] A.N. Ikot, U.S. Okorie, C.A. Onate, M.C. Onyeaju and H. Hassanabadi, *q-deformed superstatistics thermodynamics in the presence of minimal length quantum mechanics*, Canadian J. Phys. **97** (10), 1161-1166 (2019).
- [2377] C.O. Edet, E.B. Ettah, S.A. Aljunid, R. Endut, N. Ali, A.N. Ikot and M. Asjad, *Global quantum information-theoretic measures in the presence of magnetic and Aharonov-Bohm (AB) fields*, Symmetry **14**, 976 (2022).
- [2378] E. Omugbe, O.E. Osafire, I.J. Njoku, A. Jahanshir, C.O. Edet, I.B. Okon, E.S. Eyube, C.A. Onate, R. Horchani, E.S. William and A.N. Ikot, *Information-theoretic measures and thermodynamic properties under magnetic and Aharonov-Bohm flux fields*, Eur. Phys. J. D **77**, 143 (2023).
- [2379] C.A. Onate, L.S. Adebisi and D.T. Bankole, *Eigensolutions and theoretic quantities under the nonrelativistic wave equation*, J. Theor. Computational Chemistry **19** (2), 2050007 (2020) (14 pages).
- [2380] C.A. Onate and M.C. Onyeaju, *Entropic system in the relativistic Klein-Gordon Particle*, J. Nig. Soc. Phys. Sci. **3**, 165-171 (2021).
- [2381] S. Kim, W.S. Chung and H. Hassanabadi, *q-deformed Gamma function, q-deformed probability distributions and q-deformed statistical physics based on Tsallis' s q-exponential function*, Eur. Phys. J. Plus **134**, 572 (2019).
- [2382] E. Omugbe, O.E. Osafire, I.B. Okon, E.S. Eyube, E.P. Inyang, U.S. Okorie, A. Jahanshir and C.A. Onate, *Non-relativistic bound state solutions with α -deformed Kratzer-type potential using the super-symmetric WKB method: application to theoretic-information measures*, Eur. Phys. J. D **76**, 72 (2022).

- [2383] U.S. Okorie, A.N. Ikot, G.J. Rampho and R. Sever, *Superstatistics of modified Rosen-Morse potential with Dirac delta and uniform distributions*, Commun. Theor. Phys. **71**, 1246-1252 (2019).
- [2384] B.G. da Costa and E.P. Borges, *A position-dependent mass harmonic oscillator and deformed space*, J. Mathematical Physics, **59** (4), 042101 (2018).
- [2385] Z. Haba, *Non-linear relativistic diffusions*, Physica A **390**, 2776-2786 (2011).
- [2386] T. Suzuki and R. Takahashi, *Degenerate parabolic equation with critical exponent derived from the kinetic theory, I, Generation of the weak solution*, Advances in Differential Equations **14** (5-6), 433-476 (2009).
- [2387] T. Suzuki and R. Takahashi, *Degenerate parabolic equation with critical exponent derived from the kinetic theory, II, Blowup threshold*, Differential and Integral Equations **22**, (11-12), 1153-1172 (2009).
- [2388] T. Suzuki and R. Takahashi, *Degenerate parabolic equation with critical exponent derived from the kinetic theory, IV, Structure of the blowup set*, Advances in Differential Equations **15** (9-10), 853-892 (2010).
- [2389] J.I. Fujii, *Path of quasi-means as a geodesic*, Linear Algebra and its Applications **434**, 542-558 (2011).
- [2390] E. Gselmann, *Entropy functions and functional equations*, Mathematical Communications **16** (2), 347-357 (2011).
- [2391] T. Suzuki and R. Takahashi, *Degenerate parabolic equation with critical exponent derived from the kinetic theory, III, epsilon-Regularity*, Differential and Integral Equations **25** (3-4), 223-250 (2012).
- [2392] S.M.D. Queiros, *On generalisations of the log-Normal distribution by means of a new product definition in the Kapteyn process*, Physica A **391**, 3594-3606 (2012).
- [2393] *Reference function: q-Gaussian*,
<http://reference.wolfram.com/mathematica/ref/TsallisQGaussianDistribution.html>
- [2394] *Reference function: q-exponential*,
<http://reference.wolfram.com/mathematica/ref/TsallisQExponentialDistribution.html>
- [2395] N. Ding, S.V.N. Vishwanathan, M. Warmuth and V.S. Denchev, *T-logistic regression for binary and multiclass classification*, J. Machine Learning Research **05** (1-55) (2013) (6 pages).
- [2396] S. Chlailly, D. Ratha, P. Lozou and A. Marinoni, *On measures of uncertainty in classification*, IEEE Journal of Latex Class Files **14** (8), (2015).
- [2397] B.C. Dharmani, *is-entropy: A novel uncertainty measure for image segmentation*, Springer LNNS **480**, 448-457 (2022).
- [2398] K. Zhang, M. He, L. Dong and C. Ou, *The application of Tsallis entropy based self-adaptive algorithm for multi-threshold image segmentation*, Entropy **26**, 777 (2024).
- [2399] S. Rashwan and H.M. Helal, *A modified maximum entropy algorithm for sea-land segmentation*, Internat. J. Intelligent Systems and Applications in Engineering **10** (4), 105-110 (2022).
- [2400] Q. Kou, J. Xiong, M. Sun and C. Ou, *A Non-extensive entropy-based adaptive multi-threshold image segmentation algorithm*, IEEE 5th International Conference on Pattern Recognition and Artificial Intelligence, 838 (2022).
- [2401] M. Beechey, K.G. Kyriakopoulos and S. Lambotharan, *Evidential classification and feature selection for cyber-threat hunting*, Knowledge-Based Systems (2021), in press, doi: 10.1016/j.knosys.2021.107120
- [2402] M. Elhoseiny, K. Yi and M. Elfeki, *CIZSL++: Creativity inspired generative zero-shot learning*, preprint (2021), IEEE Transactions on Pattern Analysis and Machine Learning, 2101.00173 [cs.CV].
- [2403] P.S. Dodds, J.R. Minot, M.V. Arnold, T. Alshaabi, J.L. Adams, D.R. Dewhurst, A.J. Reagan and C.M. Danforth, *Probability-turbulence divergence: A tunable allotaxonomic instrument for comparing heavy-tailed categorical distributions*, preprint (2020), 2008.13078 [physics.soc-ph].
- [2404] M. Biehl, N. Caticha, M. Oppen and T. Villmann, *Statistical Physics of learning and inference*, in M. Verleysen, Ed., Proc. European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning (2019, Ciaco).
- [2405] Y. Kanzawa, *Tsallis entropy-based fuzzy latent semantics analysis*, J. Advanced Computational Intelligence and Intelligent Informatics **24** (1), 58-64 (2020).
- [2406] Y. Cao, J. Lu and Y. Lu, *Exponential decay of Renyi divergence under Fokker-Planck equations*, J. Stat. Phys. (2019), doi: doi.org/10.1007/s10955-019-02339-8
- [2407] S. Duplij, *A "q-deformed" generalization of the Hosszu-Gluskin theorem*, preprint (2013), 1309.1134 [math.RA].
- [2408] A.H. Khammar and S. Baratpour, *Stochastic comparisons of generalized residual entropy of order statistics*, in *The First Seminar on Reliability Theory and its Applications*, 69-72 (Department of Statistics University of Isfahan, Isfahan, Iran and Ordered and Spatial Data Center of Excellence Ferdowsi University of Mashhad, Iran, 27-28 May, 2015).
- [2409] S. Benmahmoud, *A new class of fractional cumulative residual entropy - Some theoretical results*, Journal of Telecommunications and Information Technology **1**, 25 (2023).

- [2410] V. Kumar, *Characterization results based on dynamic Tsallis cumulative residual entropy*, Communications in Statistics - Theory and Methods (2016), doi: 10.1080/03610926.2016.1179757
- [2411] M.S. Mohamed, *On cumulative residual Tsallis entropy and its dynamic version of concomitants of generalized order statistics*, Communications in Statistics-Theory and Methods (2020), doi: 10.1080/03610926.2020.1777306
- [2412] T.M. Jawa, N. Fatima, N. Sayed-Ahmed, R. Aldallal and M.S. Mohamed, *Residual and past discrete Tsallis and Renyi entropy with an application to softmax function*, Entropy **24**, 1732 (2022).
- [2413] J. Zhang, Y. Guo, L. Zhou, L. Wang, W. Wu and D. Shen, *Constructing hierarchical attentive functional brain networks for early AD diagnosis*, Medical Image Analysis **94**, 103137 (2024).
- [2414] R.R. Mostafa, A.M. Khedr, Z. Al Aghbari, I. Afyouni, I. Kamel and N. Ahmed, *Medical image segmentation approach based on hybrid adaptive differential evolution and crayfish optimizer*, Computers in Biology and Medicine **180**, 109011 (2024).
- [2415] R.L.M. Sales Filho, E.L. Drogue, I.D. Lins and M.C. Moura, *Stress-strength reliability estimation based on q -exponential distribution*, Proceedings of the 25th European Safety and Reliability Conference, ESREL, 1201-1208, Code 139809 (Zurich, 7 to 10 September 2015).
- [2416] I.D. Lins, E.L. Drogue, R.L.M. Sales Filho and M.C. Moura, *Estimation for the parameters of the q -Weibull distribution by maximum likelihood and particle swarm optimization*, Proceedings of the 25th European Safety and Reliability Conference, ESREL, 1315-1322, Code 139809 (Zurich, 7 to 10 September 2015).
- [2417] F. Litian, Z. Hu, Q. Ling, H. Li, H. Qi and H. Chen, *Reliability analysis of computed tomography equipment using the q -Weibull distribution*, Engineering Reports (2023).
- [2418] E.M. Assis, C.L.S. Figueiroa Filho, G.C. Lima, G.M.O Salles and A. Pinto, *Comparison between maintenance policies based on q -Weibull and Weibull models*, International Journal of Quality and Reliability Management (2021), in press, doi: 10.1108/IJQRM-09-2019-0283
- [2419] M. Xu, J.W. Herrmann and E.L. Drogue, *Modeling dependent series systems with q -Weibull distribution and Clayton copula*, Applied Mathematical Modelling **94**, 117-138 (2021), doi: 10.1016/j.apm.2020.12.042
- [2420] J. Zhang, K. Gao, Y. Li and Q. Zhang, *Maximum likelihood estimation methods for copula models*, Computational Economics (2021), in press, doi: 10.1007/s10614
- [2421] E.M. de Assis, C.L.S. Figueiroa Filho, G.A.C. Lima, L.A.N. Costa and G.M.O. Salles, *Machine learning and q -Weibull applied to reliability analysis in hydropower sector*, IEEE Access (2020), doi: 10.1109/ACCESS.2020.3036819
- [2422] N. Abbas, *On examining complex systems using the q -Weibull distribution in classical and Bayesian paradigms*, J. Statistical Theory and Applications (2020), in press.
- [2423] R.S. Ferreira and P.C.A. da Silva, *q -Weibull distributions describing commercial service routes*, Physica A (2019), in press.
- [2424] F. Reyes-Santias, J.C. Reboredo, E. Machado de Assis, M.A. Rivera-Castro, *Does length of hospital stay reflect power-law behavior? A q -Weibull density approach*, Physica A **568**, 125618 (2021).
- [2425] Tanmay Mukherjee, Bibudhendu and P.D. Senapati, *Performance evaluation of composite fading channels using q -Weibull distribution*, Progress in Advanced Computing and Intelligent Engineering **1198**, 317-324 (2020, Springer).
- [2426] A.S. Hassan and R.S. Alharbi, *Different estimation methods for the unit inverse exponentiated Weibull distribution*, Communications for Statistical Applications and Methods **30** (2), 191-213 (2023).
- [2427] S. Surina, *Information theoretic thresholding techniques based on particle swarm optimization*, Doctor Thesis (University of Louisiana, 2018).
- [2428] A. Wunna, M.K. Naik, R. Panda, B. Jena and A. Abraham, *A novel interdependence based multilevel thresholding technique using adaptive equilibrium optimizer*, Engineering Applications Artificial Intelligence **94**, 103836 (2020).
- [2429] M.K. Naik, R. Panda, A. Wunna, B. Jena and A. Abraham, *A leader Harris hawks optimization for 2-D Masi entropy-based multilevel image thresholding*, Multimedia Tools and Applications (2021), doi: 10.1007/s11042-020-10467-7
- [2430] S. Wang and J. Fan, *Image thresholding method based on Tsallis entropy correlation*, Multimedia Tools and Applications (2024), doi: 10.1007/s11042-024-19332-3
- [2431] F.S. Gharehchopogh and T. Ibriki, *An improved African vultures optimization algorithm using different fitness functions for multi-level thresholding image segmentation*, Multimedia Tools and Applications (2023).
- [2432] A. Unlu, *Development of a web-based tool for multi-level image thresholding*, Master Thesis (Konya University, Turkey, 2024).

- [2433] Q. Den, Z. Shi and C. Ou, *Self-adaptive image thresholding within nonextensive entropy and the variance of the gray-level distribution*, Entropy **24**, 319 (2022), doi: 10.3390/e24030319
- [2434] J. Nombo, *Improving image quality in electrical capacitance tomography using OTSU thresholding*, Tanzania Journal of Engineering and Technology **44** (1), 289-304 (2025).
- [2435] H. Mohammadi, S. Gupta and S. Sharma, *A large-scale performance study of entropy-based image thresholding techniques using new SAD metric*, Pattern Analysis and Applications (2022), doi: 10.1007/s10044-022-01121-z
- [2436] Z.D. Guo et al, *Geometric entropic exploration*, preprint (2021), 2101.02055 [cs.LG].
- [2437] A. Wunnavu, M.K. Naik, R. Panda, B. Jena and A. Abraham, *A differential evolutionary adaptive Harris hawks optimization for two dimensional practical Masi entropy-based multilevel image thresholding*, Journal of King Saud University - Computer and Information Sciences Journal (2020), in press.
- [2438] M. Xu, *Using the q -Weibull distribution for reliability engineering modeling and applications*, Doctor Thesis (University of Maryland, College Park, 2019).
- [2439] R. Vila and M.N. Cankaya, *A bimodal Weibull distribution: Properties and inference*, preprint (2020), 2012.01238 [stat.ME].
- [2440] R. Vila, L. Alfaia, A.F.B. Menezes, M.N. Cankaya and M. Bourguignon, *A model for bimodal rates and proportions*, Journal Applied Statistics (2022), doi: 10.1080/02664763.2022.2146661, 2108.07934 [stat.ME].
- [2441] R. Vila, L. Alfaia, A.F.B. Menezes, M.N. Cankaya and M. Bourguignon, *Supplementary material: A model for bimodal rates and proportions*, preprint (2022).
- [2442] I.D. Lins, M.C. Moura, E.L. Droguett and T.L. Correa, *Combining generalized renewal processes with non-extensive entropy-based q -distributions for reliability applications*, Entropy **20**, 223 (2018), doi:10.3390/e20040223
- [2443] F. Zhang, H.K.T. Ng and Y. Shi, *On alternative q -Weibull and q -extreme value distributions: Properties and Applications*, Physica A **490**, 1171-1190 (2018).
- [2444] S. Suresh and S. Lal, *Multilevel thresholding based on chaotic Darwinian particle swarm optimization for segmentation of satellite images*, Applied Soft Computing J. **55**, 503-522 (2017).
- [2445] M.R.B. Dias, A.O. Castro Junior, C.P. Dias, S.A. Carvalho, J.A.O. Huguenin and L. Silva, *Detection of surface roughness variation using Tsallis segmentation*, communicated at Encontro Nacional Fisica Estatistica (Brazil, November 2021).
- [2446] S. Singh, N. Mittal, D. Thakur, H. Singh, D. Oliva and A. Demin, *Nature and biologically inspired image segmentation techniques*, Archives of Computational Methods in Engineering (2021), doi: 10.1007/s11831-021-09619-1
- [2447] A. Priya, R.K. Agrawal and B. Rana, *Fusion-based multilevel thresholding for image segmentation using evolutionary algorithm*, IEEE (2023).
- [2448] H. Jia, C. Lang, D. Oliva, W. Song and X. Peng, *Dynamic Harris Hawks optimization with mutation mechanism for satellite image segmentation*, Remote Sens. **11**, 1421 (2019), doi: 10.3390/rs11121421
- [2449] C. Liu, R. Zhao and M. Pang, *A fully automatic segmentation algorithm for CT lung images based on random forest*, Med. Phys. (2020), in press.
- [2450] S. Benbelkacem, A. Oulefki, S. Agaian, T. Trongtirakul, D. Aouam, N. Zenati-Henda and K. Amara, *Lung infection region quantification, recognition, and virtual reality rendering of CT scan of COVID-19*, Proc. SPIE 11734, Multimodal Image Exploitation and Learning (2021), doi: 10.1117/12.2587757
- [2451] P. Pandiyan and R. Jothika, *A new generalization of Samade distribution with properties and its application to lung cancer data*, JAMSI **20** (1), 17 (2024).
- [2452] M. Sakthivel and P. Pandiyan, *A new model of mixture distribution using a survival analysis of cancer patients*, Brazilian Journal of Biometrics **43**, 1-29 (2025).
- [2453] H. Dlugas, X. Zhang and S. Kim, *Comparative analysis of continuous similarity measures for compound identification in mass spectrometry-based metabolomics*, Chemometrics and Intelligent Laboratory Systems **263**, 105417 (2025).
- [2454] M. Sakthivel and P. Pandiyan, *Stochastic modeling on mixture distribution with application to using cancer survival data*, Journal of Mathematics and Applied Statistics **2** (1), (2024).
- [2455] M. Sakthivel and P. Pandiyan, *Stochastic modelling on new mixture distribution with properties and their application*, International Journal of Mathematics, Statistics, and Computer Science **2**, (2024).
- [2456] M. Sakthivel and P. Pandiyan, *A stochastic model of mixture distribution: Properties and its applications*, Journal of Probability and Statistical Science **22** (1), 1-15 (2024).
- [2457] H.H. Ahmad, E.M. Almetwally, M. Elgarhy and D.A. Ramadan, *On unit exponential Pareto distribution for modeling the recovery rate of COVID-19*, Processes **11**, 232 (2023).

- [2458] E. Cardoso, H.A. Risch, L.P. Laheras, V. Luiz, P.S. Rodrigues, G.A. Wachs-Lopes, *Image stitching using non-extensive statistics*, IEEE XV Workshop de Visao Computacional (2019), doi: 10.1109/WVC.2019.8876939
- [2459] T.M. Thanh, P.T. Hiep and T.M. Tam, *A new spatial q-log domain for image watermarking*, International Journal of Intelligent Information Processing (IJIIP) **5** (1), 12 (2014).
- [2460] V. Rajinikanth, S.C. Satapathy, S.L. Fernandes and S. Nachiappan, *Entropy based segmentation of tumor from brain MR images – a study with teaching learning based optimization*, Pattern Recognition Letters **94**, 87-95 (2017).
- [2461] M. Chouksey and R.K. Jha, *A multiverse optimization based colour image segmentation using variational mode decomposition*, Expert Systems with Applications **171**, 114587 (2021).
- [2462] T. Trongtirakul, K. Panetta, A.M. Grigoryan and S.S. Agaian, *A novel entropy-based approach for thermal image segmentation using multilevel thresholding*, Entropy **27**, 526 (2025).
- [2463] V. Rajinikanth and S.C. Satapathy, *Segmentation of ischemic stroke lesion in brain MRI based on social group optimization and Fuzzy-Tsallis entropy*, Arabian J. Science Engineering **43** (8), 4365-4378 (2018), doi: 10.1007/s13369-017-3053-6
- [2464] P. Asthana, M. Hanmandlu and S. Vashisth, *Classification of brain tumor from magnetic resonance images using probabilistic features and possibilistic Hanman-Shannon transform classifier*, International Journal of Imaging Systems and Technology 1-15 (2021), doi: 10.1002/ima.22619
- [2465] K. Revanth, T.D. Varsha shree, N.S.M. Raja and V. Rajinikanth, *Computational investigation of stroke lesion segmentation from flair/DW modality MRI*, IEEE Fourth International Conference on Biosignals, Images and Instrumentation (2018).
- [2466] R. Pugalenth, M.P. Rajakumar, J. Ramya and V. Rajinikanth, *Evaluation and classification of the brain tumor MRI using machine learning technique*, Control Engineering and Applied Informatics **21** (4), 12-21 (2019).
- [2467] K.S. Manic, N. Al Shibli and R. Al Sulaimi, *SGO and Tsallis entropy assisted segmentation of abnormal regions from brain MRI*, Journal of Engineering Science and Technology - 9th EURECA 2017 Special Issue September 52-62 (2018).
- [2468] N.S.M. Raja, S.L. Fernandes, N. Dey, S.C. Satapathy and V. Rajinikanth, *Contrast enhanced medical MRI evaluation using Tsallis entropy and region growing segmentation*, J. Ambient Intelligence and Humanized Computing (2018), doi: 10.1007/s12652-018-0854-8
- [2469] V. Rajinikanth, S.L. Fernandes, B. Bhushan, Harisha and N.R. Sunder, *Segmentation and analysis of brain tumor using Tsallis entropy and regularised level set*, Proceedings of 2nd International Conference on Micro-Electronics, Electromagnetics and Telecommunications, 313-321, in Lecture Notes in Electrical Engineering book series **434** (2017).
- [2470] V. Rajinikanth, S. Kadry, R.G. Crespo and E. Verdu, *A study on RGB image multi-thresholding using Kapur/Tsallis entropy and Moth-Flame algorithm*, Internat. J. Interactive Multimedia and Artificial Intelligence **7** (2), 163-171 (2021).
- [2471] V. Rajinikanth, S. Kadry, D. Taniar, K. Kamalanand, M.A. Elaziz and K.P. Thanaraj, *Detecting epilepsy in EEG signals using synchro-extracting-transform (SET) supported classification technique*, Journal of Ambient Intelligence and Humanized Computing (2022), doi: 10.1007/s12652-021-03676-x
- [2472] A. Suresh, A. Suresh, R. Reshmi, R.A. Rajam and M. Hemalatha, *Extraction and Evaluation of Brain Tumor from MRI using Tsallis Entropy and Level set*, Proceedings of the IEEE International Conference on Recent Trends in Electrical, Control and Communication, art. 8625658, 251-255 (2019).
- [2473] V. Rajinikanth, N.S.M. Raja and D. Kamalanand, *Firefly algorithm assisted segmentation of tumor from brain MRI using Tsallis function and Markov random field*, Control Engineering and Applied Informatics **19** (3), 97-106 (2017).
- [2474] R. Chaturvedi, A. Sharma, A. Bhargava, J. Rajpurohit and P. Gothwal, *Multi-level segmentation of fruits using modified firefly algorithm*, Food Analytical Methods (2022), doi: 10.1007/s12161-022-02290-7
- [2475] L. Sturtewagen, H. van Mil and E. van der Linden, *Complexity, uncertainty, and entropy: Applications to food sensory perception and other complex phenomena*, Entropy **27**, 191 (2025).
- [2476] R.A. Rajam, P. Deepa and R. Reshmi, *A soft-computing approach to segment tumour region from Brain MRI*, Internat. J. of Pure and Applied Mathematics **117** (20), 131-139 (2017).
- [2477] H.R.R. Sedehi, R. Khordad and B. Vaseghi, *Tumor microenvironmental influences on tumor growth using non-extensive entropy*, Indian J. Phys. (2020), doi: 10.1007/s12648-020-01924-y
- [2478] M. Hua and Y. Wu, *Transition and basin stability in a stochastic tumor growth model with immunization*, Chaos, Solitons and Fractals (2022), in press.

- [2479] M. Mahdy and D.S. Eltelbany, *Application of entropy measures to a failure times of electrical components models*, Pakistan J. Statistics and Operation Research Vol.XIII (4), 909-930 (2017).
- [2480] G.P. Papaioannou, C. Dikaiakos, A. Dramountanis, D.S. Georgiadis and P.G. Papaioannou, *Using nonlinear stochastic and deterministic (chaotic tools) to test the EMH of two electricity markets; the case of Italy and Greece*, preprint (2017), arxiv 1711.10552
- [2481] E. Kushta, F. Memaj and G. Trushaj, *Cost analysis on cost of consumers in terms of small markets. (Case study, Vlora)*, UBT International Conference, 143-152 (2020).
- [2482] E. Kushta and M. Ramosaco, *Anticipation of dynamics and identification of potential factor variables: A case study*, preprint (2023).
- [2483] E. Kushta and M. Ramosaco, *Analysis of seasonal discounts in small markets using statistical methods*, International Journal of Applied Mathematics, Computational Science and Systems Engineering **5**, 171 (2023).
- [2484] E. Kushta, E. Vuka, D. Prenga and I. Dika, *Investigating Statistical Features of the FX Bid Ask Series in a Small Economy with a Sizeable Informal Economy*, Journal of Human, Earth, and Future **5** (1), 19-33 (2024).
- [2485] N.S.M. Raja, P.R.V. Lakshmi and K.P. Gunasekaran, *Firefly Algorithm-Assisted Segmentation of Brain Regions Using Tsallis Entropy and Markov Random Field*, Innovations in Electronics and Communication Engineering, 229-237, in Lecture Notes in Networks and Systems book series **7** (Springer, 2017).
- [2486] A. Sharma, R. Chaturvedi, S. Kumar and U.K. Dwivedi, *Multi-level image thresholding based on Kapur and Tsallis entropy using firefly algorithm*, J. Interdisciplinary Mathematics **23** (2), 563-571 (2020), doi: 10.1080/09720502.2020.1731976
- [2487] A. Sharma, R. Chaturvedi and A. Bhargava, *A novel opposition based improved firefly algorithm for multilevel image segmentation*, Multimedia Tools and Applications (2022), in press, doi: 10.1007/s11042-022-12303-6
- [2488] M. Muthuvel, B. Thangaraju and G. Chinnasamy, *Microcalcification cluster detection using multiscale products based Hessian matrix via the Tsallis thresholding scheme*, Pattern Recognition Letters **94**, 127-133 (2017).
- [2489] S. Baratpour and A.H. Khammar, *Results on Tsallis entropy of order statistics and record values*, Istatistik: J. Turkish Statistical Association **8** (3), 60-73 (2015), doi: issn1300-4077—15—3—60—73
- [2490] Z. Zamani, O. Kharazmi and N. Balakrishnan, *Information generating function of record values*, Mathematical Methods of Statistics **31** (3), 120-133 (2022).
- [2491] B. Dangi and I. Kumar, *Quantile Tsallis entropy and its dynamic forms for record statistics*, Int. J. Inf. Technol. (2025).
- [2492] A.H. Khammar, S.M.A. Jahanshahi, *On weighted cumulative residual Tsallis entropy and its dynamic version*, Physica A **491**, 678-692 (2018), doi: 10.1016/j.physa.2017.09.079
- [2493] S.M. Sunoj, A.S. Krishnan and P.G. Sankaran, *A quantile-based study of cumulative residual Tsallis entropy measures*, Physica A **494**, 410-421 (2018), doi: 10.1016/j.physa.2017.12.058
- [2494] D.C. Raju, S.M. Sunoj and G. Rajesh, *Some reliability properties of bivariate cumulative residual Tsallis entropy*, Journal of Statistical Theory and Practice **14**, 63 (2020).
- [2495] D.C. Raju, S.M. Sunoj and G. Rajesh, *Bivariate cumulative Tsallis past entropy: Properties and applications*, American J. Mathematical and Management Sciences (2022), doi: 10.1080/01966324.2022.2163210
- [2496] A.S. Krishnan, S.M. Sunoj and P.G. Sankaran, *Quantile-based reliability aspects of cumulative Tsallis entropy in past lifetime*, Metrika (2018) (22 pages), doi: 10.1007/s00184-018-0678-8
- [2497] Y. Zhang, P. Shang, J. He, and H. Xiong, *Cumulative Tsallis entropy based on power spectrum of financial time series*, Chaos **29**, 103118 (2019).
- [2498] Y. Shi, Y. Wu and P. Shang, *Research on weighted Havrda-Charvat's entropy in financial time series*, Physica A **572**, 125914 (2021), doi: 10.1016/j.physa.2021.125914
- [2499] Y. Zhang and P. Shang, *Cumulative Tsallis entropy based on multi-scale permuted distribution of financial time series*, Physica A **548**, 124388 (2020), doi: doi.org/10.1016/j.physa.2020.124388
- [2500] Z. Wang and P. Shang, *Generalized entropy plane based on multiscale weighted multivariate dispersion entropy for financial time series*, Chaos, Solitons and Fractals (2020), in press, doi: 10.1016/j.chaos.2020.110473
- [2501] S.D. Silver, M. Raseta and A. Bazarova, *Dynamics of phase transitions in expectations for financial markets: An agent-based, multicomponent model*, J. Behavioral Finance (2020), doi: 10.1080/15427560.2020.1848838
- [2502] B.J. Zubillaga, M.F.B. Granha, A.L.M. Vilela, C. Wang, K.P. Nelson and H.E. Stanley, *Three-state opinion dynamics for financial markets on complex networks*, preprint (2024), 2404.18709 [physics.soc-ph].
- [2503] K. da Costa, *Anomaly detection in global financial markets with graph neural networks and nonextensive entropy*, preprint (2023), 2308.02914 [cs.AI].

- [2504] R. Zang, H. Guo, J. Yang, J. Liu, Z. Li, T. Zheng, X. Shi, L. Zheng and B. Zhang, *MLAD: A unified model for multi-system log anomaly detection*, preprint (2024), 2401.07655 [cs.SE].
- [2505] C. Han, H. Hilger, E. Mix, P.C. Bottcher, M. Reyers, C. Beck, D. Witthaut and L.R. Gorjao, *Complexity and persistence of price time series of the european electricity spot market*, preprint (2021), 2112.03031 [q-fin.ST].
- [2506] V. Kumar and Rekha, *A quantile approach of Tsallis entropy for order statistics*, Physica A **503**, 916-928 (2018).
- [2507] M. Bukal, *A family of fourth-order q-logarithmic equations*, J. Math. Anal. Appl. **438**, 142-161 (2016).
- [2508] M. Bukal, *The concavity of generalized entropy powers*, preprint (2022), 2202.12527 [cs.IT].
- [2509] J. Du, *Property of Tsallis entropy and principle of entropy increase*, preprint (2008), 0802.3424.
- [2510] J. Carrete, L.M. Varela and L.J. Gallego, *Microcanonical equations for the Tsallis entropy*, preprint (2008), 0802.3600 [cond-mat.stat-mech].
- [2511] Q.A. Wang, *Probability distribution and entropy as a measure of uncertainty*, J. Phys. A **41**, 065004 (2008) (8 pages).
- [2512] Y. Schreiber and A. Chudnovsky, *J-measure of uncertainty (JMU) for specified probability distribution*, preprint (2019),
- [2513] G. Wilk and Z. Wlodarczyk, *Example of the possible interpretation of Tsallis entropy*, preprint (2008), 0711.3348 [cond-mat.stat-mech].
- [2514] J.L.Du, *Property of Tsallis entropy and principle of entropy increase*, Bull. Astr. Soc. India **35**, 691-696 (2007).
- [2515] H. Hasegawa, *Effects of correlated variability on information entropies in nonextensive systems*, Phys. Rev. E **78**, 021141 (2008) (10 pages).
- [2516] V. Badescu, *Physical temperature and pressure in fully nonextensive statistical thermodynamics*, Advances in Complex Systems **11**, 43-54 (2008).
- [2517] L. Liu and J. Du, *Energy fluctuations and the ensemble equivalence in Tsallis statistics*, Physica A **387**, 5417-5421 (2008).
- [2518] Z.H. Feng and L.Y. Liu, *Energy fluctuation and correlation in Tsallis statistics*, Physica A **389**, 237-241 (2010).
- [2519] L.Y. Liu and L.Q. Wei, *Energy fluctuations in unnormalized Tsallis statistics*, Mod. Phys. Lett. B **25** (21), 1761-1768 (2011).
- [2520] R. Guo and J. Du, *Energy distribution and energy fluctuation in Tsallis statistics*, Physica A **391**, 2853-2859 (2012).
- [2521] Y. Zheng and J. Du, *The equivalence of isothermal and non-isothermal power law distributions with temperature duality*, Physica A **427**, 113-121 (2015).
- [2522] Y. Zheng and J. Du, *Theoretical self-consistency in nonextensive statistical mechanics with parameter transformation*, Communications in Theoretical Physics **73**, 125601 (2021).
- [2523] Y. Zheng, *Dual interpretations of the nonextensive statistical thermodynamics with parameter transformation*, Eur. Phys. J. Plus **135**, 359 (2020), doi: doi.org/10.1140/epjp/s13360-020-00363-2
- [2524] J.-P. Bercher, *On some entropy functionals derived from Rényi information divergence*, Information Sciences **178**, 2489-2506 (2008).
- [2525] J.-P. Bercher, *Source coding with escort distributions and Rényi entropy bounds*, Phys. Lett. A **373**, 3235-3238 (2009).
- [2526] F. Chapeau-Blondeau, A. Delahaies and D. Rousseau, *Source coding with Tsallis entropy*, Electronics Lett. **47** (3), (3 February 2011).
- [2527] J.-P. Bercher, *Comment on "Source coding with Tsallis entropy"*, Electronics Lett. **47** (10) (2011) (1 page).
- [2528] F. Chapeau-Blondeau, A. Delahaies and D. Rousseau, *Reply to "Comment on 'Source coding with Tsallis entropy'"*, Electronics Lett. **47** (10) (2011) (1 page).
- [2529] F. Chapeau-Blondeau, A. Delahaies and D. Rousseau, *Tsallis entropy measure of noise-aided information transmission in a binary channel*, Phys. Lett. A **375**, 2211-2219 (2011).
- [2530] F. Chapeau-Blondeau, *Tsallis entropy for assessing quantum correlation with Bell-type inequalities in EPR experiment*, Physica A **414**, 204-215 (2014), doi: http://dx.doi.org/10.1016/j.physa.2014.07.053
- [2531] C. Vignat and J.F. Bercher, *Geometric aspects of the non-extensive statistical theory*, in *Bayesian Inference and Maximum Entropy Methods in Science and Engineering*, AIP Conference Proceedings **1193**, 170-175 (2009).
- [2532] A.S. Hassan, N. Alsadat, O.S. Balogun and B.A. Helmy, *Bayesian and non-Bayesian estimation of some entropy measures for a Weibull distribution*, AIMS Mathematics, **9** (11), 32646-32673 (2024).

- [2533] C. Song and S.T. Xia, *Bayesian linear regression with Student-t assumptions*, preprint (2016), 1604.04434 [cs.LG].
- [2534] C. Song and S.T. Xia, *Nonextensive information theoretical machine*, preprint (2016), 1604.06153 [cs.LG].
- [2535] M. Tuntapthai, *Approximations of normal distribution by its q -generalizations*, Songklanakarin J. Sci. Technol. **43** (4), 1169-1176 (2021).
- [2536] E. Ruli, N. Sartori and L. Ventura, *Approximate Bayesian computation with proper scoring rules*, preprint (2014).
- [2537] V. Mameli and L. Ventura, *Higher-order asymptotics for scoring rules*, Journal of Statistical Planning and Inference **165**, 13-26 (2015).
- [2538] F. Giummole and V. Mameli, *Asymptotic minimum scoring rule prediction*, Electronic J. Statistics **12**, 2401-2429 (2018), doi: 10.1214/18-EJS1454
- [2539] K. Tadaki, *The Tsallis entropy and the Shannon entropy of a universal probability*, IEEE Internat. Symp. on Information Theory Proceed. **1-6**, 2111-2115 (2008), 0805.0154 [cs.IT].
- [2540] S.G. Abaimov, *Application of classical statistical mechanics to multifractals and dynamical systems*, preprint (2008), 0805.0347.
- [2541] C. Ou, W. Li, J. Du, F. Tsobnang, J. Chen, A. Le Mehaute and Q.A. Wang, *Possible canonical distributions for finite systems with nonadditive energy*, Physica A **387**, 5761-5767 (2008).
- [2542] S. Abe, *Instability of q -expectation value*, preprint (2008), 0806.3934 [cond-mat.stat-mech].
- [2543] S. Abe, *Instability of q -averages in nonextensive statistical mechanics*, Europhys. Lett. **84**, 60006 (2008) (6 pages).
- [2544] R. Hanel, S. Thurner and C. Tsallis, *On the robustness of q -expectation values and Rényi entropy*, Europhys. Lett. **85**, 20005 (2009).
- [2545] A. Cabo, *Is the Tsallis q -mean value instable?*, preprint (2010), 1010.5825 [cond-mat.stat-mech].
- [2546] S. Abe, *Generalized molecular chaos hypothesis and H-theorem: Problem of constraints and amendment of nonextensive statistical mechanics*, Phys. Rev. E **79**, 041116 (2009) (6 pages).
- [2547] S. Abe, *Anomalous behavior of q -averages in nonextensive statistical mechanics*, J. Stat. Mech. P07027 (2009).
- [2548] J.F. Lutsko, J.P. Boon and P. Grosfils, *Is the Tsallis entropy stable?*, Europhys. Lett. **86**, 40005 (2009) (6 pages).
- [2549] J.F. Lutsko and J.P. Boon, *Questioning the validity of non-extensive thermodynamics for classical Hamiltonian systems*, Europhys. Lett. **95**, 20006 (2011) (4 pages).
- [2550] R. Hanel and S. Thurner, *Stability criteria for q -expectation values*, Phys. Lett. A **373**, 1415-1420 (2009).
- [2551] G. Maksa, *The stability of the entropy of degree alpha*, J. Math. Anal. Appl. **346**, 17-21 (2008).
- [2552] E. Gselmann and G. Maksa, *Stability of the parametric fundamental equation of information for nonpositive parameters*, Aequationes Math. **78**, 271-282 (2009).
- [2553] E. Gselmann and G. Maksa, *A characterization of the relative entropies*, preprint (2013), 1307.0660 [math.CA].
- [2554] J. Carrete, L.M. Varela and L.J. Gallego, *Microcanonical equations obtained from the Tsallis entropy*, Physica A **387**, 6752-6758 (2008).
- [2555] T.S. Biro, *Abstract composition rule for relativistic kinetic energy in the thermodynamical limit*, Europhys. Lett. **84**, 56003 (2008).
- [2556] G. De Nittis, P. Lorenzoni and A. Moro, *Integrable multi-phase thermodynamic systems and Tsallis' composition rule*, J. Physics: Conference Series **482**, 012009 (2014) (8 pages), doi:10.1088/1742-6596/482/1/012009
- [2557] P. Guha, *The κ -deformed Calogero-Leyvraz Lagrangians and applications to integrable dynamical systems*, Entropy **24**, 1673 (2022).
- [2558] T.S. Biro, *Statistical power-law tails in high energy phenomena*, Eur. Phys. J. A **40**, 255-256 (2009).
- [2559] J. Naudts, *The q -exponential family in statistical physics*, Central Eur. J. Phys. **7**, 405-413 (2009).
- [2560] J. Naudts, *The q -exponential family in statistical physics*, J. Phys. C Series **201**, 012003 (2010) (11 pages).
- [2561] C.J. Ou, A. El Kaabouchi, J.C. Chen, A. Le Mehaute and A.Q. Wang, *Generalized measurement of uncertainty and the maximizable entropy*, Mod. Phys. Lett. B **24** (9), 825-831 (2010).
- [2562] Z. Huang, C. Ou, A. Le Mehaute, Q.A. Wang, J. Chen, *Inherent correlations between thermodynamics and statistic physics in extensive and nonextensive systems*, Physica A **388**, 2331-2336 (2009).
- [2563] R.C. Venkatesan and A. Plastino, *Deformed statistics formulation of the information bottleneck method*, IEEE International Symposium on information Theory **1-4**, 1323-1327 (2009).
- [2564] Th. Oikonomou and U. Tirnakli, *Generalized entropic structures and non-generality of Jaynes' formalism*, Chaos, Solitons and Fractals **42**, 3027-3034 (2009).

- [2565] G.B. Bagci and U. Tirnakli, *On the way towards a generalized entropy maximization procedure*, Phys. Lett. A **373**, 3230-3234 (2009).
- [2566] C. Tsallis, *Nonadditive entropy: the concept and its use*, in *Statistical Power Law Tails in High Energy Phenomena*, ed. T.S. Biro, Eur. Phys. J. A **40**, 257-266 (2009).
- [2567] D.C. Brody and D.W. Hook, *Information geometry in vapour-liquid equilibrium*, J. Phys. A - Math. and Theor. **42**, 023001 (2009).
- [2568] A. Boer and S. Dumitru, *First order phase transitions in nanoscopic systems*, Romanian J. Phys. **53**, 1039-1044 (2008).
- [2569] V. Jain, *Levitated optomechanics at the photon recoil limit*, Doctor Thesis (ETH, Zurich, 2017)
- [2570] A. Boer, *Monte Carlo simulation of the two-dimensional Potts model using nonextensive statistics*, Physica A **390**, 4203-4209 (2011).
- [2571] S. Amari, *q-information geometry: q-exponential family and q-divergence*, preprint (2009).
- [2572] S. Amari, *α -divergence is unique, belonging to both f-divergence and Bregman divergence classes*, IEEE Transactions on Information Theory **55**, 4925-4931 (2009).
- [2573] R. Brekelmans and F. Nielsen, *Variational representations of annealing paths: Bregman information under monotonic embedding*, Information Geometry **7**, 193-228 (2024).
- [2574] T. Wada, *Generalized log-likelihood functions and Bregman divergences*, J. Math. Phys. **50**, 113301 (2009) (7 pages).
- [2575] W. Azizian, F. Iutzeler, J. Malick and P. Mertikopoulos, *On the rate of convergence of Bregman proximal methods in constrained variational inequalities*, preprint (2022), 2211.08043 [math.OC].
- [2576] W. Azizian, F. Iutzeler, J. Malick and P. Mertikopoulos, *The rate of convergence of Bregman proximal methods: Local geometry vs. regularity vs. sharpness*, preprint (2023).
- [2577] G. Noarov, S. Mallick, T. Wang, S. Joshi, Y. Sun, Y. Xie, M. Yu and E. Dobriban, *Foundations of top-k decoding for language models*, preprint (2025), 2505.19371 [cs.AI].
- [2578] M. Broniatowski and W. Stummer, *A precise bare simulation approach to the minimization of some distances. II. Further foundations*, 2402.08478 [cs.IT].
- [2579] A. Khammar and H.A. Noughabi, *On differential Renyi's-Tsallis divergence measure and its applications*, Journal of Statistical Computation and Simulation (2022).
- [2580] H. Lanteri, *Divergences. scale invariant divergences. Applications to linear inverse problems - N.M.F. - Blind deconvolution*, preprint (2020), 2003.01411 [math.OC].
- [2581] J. Pitrik and D. Virostek, *On the joint convexity of the Bregman divergence of matrices*, Lett. Math. Phys. (2015) **105**, 675-692 (2015), doi: 10.1007/s11005-015-0757-y
- [2582] D. Reem, S. Reich and A. De Pierro, *Re-examination of Bregman functions and new properties of their divergences*, Optimization (2018), doi: 10.1080/02331934.2018.1543295
- [2583] T. Kanamori and H. Fujisawa, *Affine invariant divergences associated with composite scores and its applications*, preprint (2013), 1305.2473 [math.ST].
- [2584] H. Fujisawa, *Normalized estimating equation for robust parameter estimation*, Electronic J. Statistics **7**, 1587-1606 (2013), ISSN: 1935-7524, DOI: 10.1214/13-EJS817
- [2585] A. Gecchele, *Renyi entropy estimation via affine transformations of generalized means*, preprint (2025).
- [2586] S. Amari, *Information geometry of q-entropy and q-exponential family*, communicated at the Research Institute of Mathematical Science Workshop on Mathematical Aspects of Generalized Entropies and their Applications (7-9 July 2009, Kyoto).
- [2587] S. Amari and A. Ohara, *Geometry of q-exponential family of probability distributions*, Entropy **13**, 1170-1185 (2011).
- [2588] A.M. Scarfone and T. Wada, *Legendre structure of κ -thermostatistics revisited in the framework of information geometry*, J. Phys. A: Math. Theor. **47**, 275002 (2014) (17 pages), doi:10.1088/1751-8113/47/27/275002
- [2589] T. Wada and A.M. Scarfone, *Information geometry on the κ -thermostatistics*, Entropy **17**, 1204-1217 (2015), doi:10.3390/e17031204
- [2590] S.-I. Ohta and A. Takatsu, *Displacement convexity of generalized relative entropies*, Advances in Mathematics **228**, 1742-1787 (2011).
- [2591] A. Takatsu, *Change the coefficients of conditional entropies in extensivity*, preprint (2020), 2011.08370 [math-ph].
- [2592] G. Loaiza and H.R. Quiceno, *A q-exponential statistical Banach manifold*, J. Math. Anal. Appl. **398**, 466-476 (2013).
- [2593] H. Quiceno Echavarria, *A Riemannian geometry in the q-exponential Banach manifold induced by q-divergences*, Geometric Science of Information, Lecture Notes in Computer Science **8085**, 737-742 (2013).

- [2594] R.F. Vigelis, D.C. de Souza and C.C. Cavalcante, *New metric and connections in statistical manifolds*, Geometric Science of Information, Lecture Notes in Computer Science **9389**, 222-229 (2015).
- [2595] R.F. Vigelis, L.H.F. de Andrade and C.C. Cavalcante, *A family of statistical divergences based on quasiarithmetic means*, preprint (2018), 1810.09503 [cs.IT].
- [2596] J.B. Barreto, D.A. Oliveira, R.F. Vigelis and I.C. de Paula Jr, *Identificacao de lesoes periapicais em exames de radiografia utilizando clusterizacao baseada na ϕ -divergencia e algoritmos de classificacao*, XXXVIII Simposio Brasileiro de Telecomunicacoes e Processamento de Sinais - SBrT 2020 (22-25 de Novembro de 2020, Florianopolis, SC, Brazil).
- [2597] M. Sakamoto and H. Matsuzoe, *A generalization of independence and multivariate Student's t -distributions*, Geometric Science of Information, Lecture Notes in Computer Science **9389**, 740-749 (2015).
- [2598] R.C. Venkatesan and A. Plastino, *Scaled Bregman divergences in a Tsallis scenario*, Physica A **390**, 2749-2758 (2011).
- [2599] R. Brekelmans and F. Nielsen, *Rho-Tau Bregman information and the geometry of annealing paths*, preprint (2022), 2209.07481v1 [cs.LG].
- [2600] R.C. Venkatesan and A. Plastino, *Generalized Kullback-Leibler divergence minimization within a scaled Bregman framework*, Phys. Lett. A **375**, 4237-4243 (2011).
- [2601] V.H. Nguyen, *Improved L_p -mixed volume inequality for convex bodies*, J. Math. Anal. Appl. **431**, 1045-1053 (2015).
- [2602] S. Eguchi, *Projective Tsallis entropy and its application to robust statistics*, communicated at the Research Institute of Mathematical Science Workshop on Mathematical Aspects of Generalized Entropies and their Applications (7-9 July 2009, Kyoto).
- [2603] S. Eguchi, O. Komori and S. Kato, *Projective power entropy and the maximum entropy distributions*, in *Tsallis Entropy*, Special Issue of *Entropy*, ed. A. Anastasiadis, Entropy **13**, 1746-1764 (2011).
- [2604] S. Eguchi and S. Kato, *Entropy and divergence associated with power function and the statistical application*, Entropy **12**, 262-274 (2010).
- [2605] A. Ohara and S. Eguchi, *Group invariance of information geometry on q -Gaussian distributions induced by Beta-divergence*, Entropy **15**, 4732-4747 (2013), doi:10.3390/e15114732
- [2606] S. Eguchi and O. Komori, *Path connectedness on a space of probability density functions*, in *Geometric Science of Information*, Lecture Notes in Computer Science **9389**, 615-624 (2015).
- [2607] S. Eguchi, O. Komori and A. Ohara, *Duality of maximum entropy and minimum divergence*, Entropy **16**, 3552-3572 (2014), doi:10.3390/e16073552
- [2608] S. Eguchi, O. Komori and A. Ohara, *Duality in a maximum generalized entropy model*, in it Bayesian inference and maximum entropy methods in science and engineering (MAXENT 2014), eds. A. MohammadDjafari and F. Barbaresco, AIP Conference Proceedings **1641**, 297-304 (2015), doi: 10.1063/1.4905991
- [2609] S. Wu, S. Yu and K. Molmer, *Entropic uncertainty relation for mutually unbiased bases*, Phys. Rev. A **79**, 022104 (2009) (5 pages).
- [2610] J. Naudts, *Generalised exponential families and associated entropy functions*, Entropy **10**, 131-149 (2008).
- [2611] G. Ferri, F. Olivares, F. Pennini, A. Plastino, R. Anel and M. Casas, *Deformed generalization of the semiclassical entropy*, Entropy **10**, 240-247 (2008).
- [2612] F. Pennini, A. Plastino, G.L. Ferri et al, *Information, deformed kappa-Wehrl entropies and semiclassical delocalization*, Entropy **11**, 32-41 (2009).
- [2613] A.M. Kowalski, A. Plastino and M. Casas, *Generalized complexity and classical-quantum transition*, Entropy **11**, 111-123 (2009).
- [2614] S.M.D. Queiros, *On the effectiveness of a binless entropy estimator for generalised entropic forms*, preprint (2009).
- [2615] J.L. Du, *A new form of Tsallis distribution based on the probabilistically independent postulate*, Chin. Phys. B **19** (7), 070501 (2010) (5 pages).
- [2616] Y. Zheng and J.L. Du, *Nonextensive thermodynamic relations based on the assumption of temperature duality*, Continuum Mech. Thermodyn. **28**, 1791-1805 (2016), doi: 10.1007/s00161-016-0510-5
- [2617] S. Sharma, A. Krishnamachari and Karmeshu, *Validity of Jaynes' entropy concentration theorem: Tsallis and other generalized entropy measures*, preprint (2009).
- [2618] A.K. Singh and Karmeshu, *Power law behavior of queue size: Maximum entropy principle with shifted geometric mean constraint*, IEEE Comm. Lett. (2014) (4 pages), in press.
- [2619] O. Kafri, *A comment on nonextensive statistical mechanics*, J. of Economics Library **3** (4) (2016).
- [2620] C.G. Chakrabarti, I. Chakrabarti and K. Ghosh, *The maximum entropy principle: A generalized constraint-based entropy*, Mod. Phys. Lett. B **23**, 1715-1721 (2009).

- [2621] C.G. Chakrabarti and K. Ghosh, *Tsallis entropy: Axiomatic characterization and application*, Mod. Phys. Lett. B **23**, 2771-2781 (2009).
- [2622] T. Wada and A.M. Scarfone, *Finite difference and averaging operators in generalized entropies*, J. Phys. C Series **201**, 012005 (2010) (8 pages).
- [2623] T. Yamano, *Universality of thermodynamical Legendre transform structure against the statistical entropy and the expectation value*, Proceeding of the meeting on Quantum Theory of Thermo-field and its Applications, Soryushiron Kenkyu (Kyoto) **103**, 104-107 (2001)[in Japanese].
- [2624] G. Kaniadakis, *Maximum entropy principle and power-law tailed distributions*, Eur. Phys. J. B **70**, 3-13 (2009).
- [2625] L. Rebollo-Neira and A. Plastino, *Nonlinear non-extensive approach for identification of structured information*, Physica A **388**, 4703-4712 (2009).
- [2626] L. Rebollo-Neira, J. Bowley, A.G. Constantinides and A. Plastino, *Self-contained encrypted image folding*, Physica A **391**, 5858-5870 (2012).
- [2627] L. Guo and J. Du, *The two parameters (κ, r) in the generalized statistics*, Physica A **389**, 47-51 (2010).
- [2628] F.A.R. Navarro and J.F.V. Flores, *Internal energy in the context of nonextensive statistical mechanics*, preprint (2009), 0909.4254 [cond-mat.stat-mech].
- [2629] M. Campisi, P. Talkner and P. Hanggi, *Finite bath fluctuation theorem*, Phys. Rev. E **80**, 031145 (2009) (9 pages).
- [2630] P. Sanchez-Moreno, J.J. Omiste, J.S. Dehesa, *Entropic functionals of Laguerre polynomials and complexity properties of the half-line Coulomb potential*, Int. J. Quantum Chem. **111**, 2283-2294 (2011).
- [2631] C.N. Isonguyo, K.J. Oyewumi and O.S. Oyin, *Quantum information-theoretic measures for the static screened Coulomb potential*, Internat. J. Quantum Chemistry **118**, e25620 (2018), doi: <http://q-chem.org>
- [2632] C. Martinez-Flores, *The information theory of the helium atom in screened Coulomb potentials*, Internat. J. Quantum Chemistry (2020), doi:10.1002/qua.26529
- [2633] I. Nasser, C. Martinez-Flores, M. Zeama, R. Vargas and J. Garza, *Tsallis entropy: A comparative study for the 1s2-state of helium atom*, Phys. Lett. A **392**, 127136 (2021).
- [2634] H. Al-Jibbouri, *Analysis of information entropies for He-like ions*, Emerging Science Journal **6** (4) (2022).
- [2635] C.R. Estanon, H.E. Montgomery Jr, J.C. Angulo and N. Aquino, *The confined helium atom: An information-theoretic approach*, International Journal of Quantum Chemistry **124**, e27358 (2024).
- [2636] R. Holyst, *Challenges in thermodynamics: Irreversible processes, nonextensive entropies, and systems without equilibrium states*, Pure. Appl. Chem. **81**, 1719-1726 (2009).
- [2637] D. Campos, *Renyi and Tsallis entropies for incomplete or overcomplete systems of events*, Physica A **389**, 981-992 (2010).
- [2638] D. Campos, *Real and spurious contributions for the Shannon, Renyi and Tsallis entropies*, Physica A **389**, 3761-3768 (2010).
- [2639] D. Campos, *A thermodynamic-like approach for the study of probabilistic systems*, Physica A **390**, 214-222 (2011).
- [2640] D. Campos, *Macroscopic characterization of data sets by using the average absolute deviation*, Physica A **393**, 222-234 (2014).
- [2641] D. Campos, *On the discretization of probability density functions and the continuous Renyi entropy*, Pramana **85** (6), 1073-1087 (2015).
- [2642] F.A.R. Navarro, *On the formulas for quantum mean values for a composite $A + B$* , preprint (2009), 0911.1957 [cond-mat.stat-mech].
- [2643] G.L. Gilardoni, *On a Gel'fand-Yaglom-Peres theorem for f -divergences*, preprint (2009), 0911.1934 [cs.IT].
- [2644] H. Hasegawa, *Validity of the factorization approximation and correlation induced by nonextensivity in N -unit independent systems*, preprint (2009), 0912.0521 [cond-mat.stat-mech].
- [2645] O.J.E Maroney, *Thermodynamic constraints on fluctuation phenomena*, Phys. Rev. E **80**, 061141 (2009) (12 pages).
- [2646] H. Hasegawa, *The Tsallis entropy in finite N -unit nonextensive systems: the ordinary average and q -average*, preprint (2010), 1001.0214.
- [2647] H. Hasegawa, *The entropy in finite N -unit nonextensive systems: The normal average and q -average*, J. Math. Phys. **51**, 093301 (2010) (20 pages).
- [2648] X. Feng, *Using harmonic mean to replace Tsallis's q -average*, preprint (2010), 1002.4254 [cond-mat.stat-mech].
- [2649] X. Feng, *The Tsallis entropy and the Boltzmann entropy applicable to the same classic generalized system*, World Chinese Forum on Science of General Systems (WCFSGS) **6** (S1), Total No. 49 (2010) [ISSN 1936-7260].
- [2650] S.A. Frank and D.E. Smith, *Measurement invariance, entropy, and probability*, Entropy **12**, 289-303 (2010).

- [2651] J.P. Boon and J.F. Lutsko, *Is nonextensive statistics applicable to continuous Hamiltonian systems?*, preprint (2010), 1003.3592 [cond-mat.stat-mech].
- [2652] J.P. Boon and J.F. Lutsko, *Nonextensive formalism and continuous Hamiltonian systems*, Phys. Lett. A **375** (3), 329-334 (2011).
- [2653] L. Guo and J. Du, *Thermodynamic potentials and thermodynamic relations in nonextensive thermodynamics*, Physica A **390**, 183-188 (2011).
- [2654] A.M. Scarfone, *Intensive variables in the framework of the non-extensive thermostatistics*, Phys. Lett. A **374**, 2701-2706 (2010).
- [2655] E.K. Lenzi and A.M. Scarfone, *Extensive-like and intensive-like thermodynamical variables in the generalized thermostatistics*, Physica A **391**, 2543-2555 (2012).
- [2656] Hong Qian, *Thermodynamics of Markov processes with non-extensive entropy and free energy*, preprint (2010), 1005.1251 [math-ph].
- [2657] S. Abe, *Essential discreteness in generalized thermostatistics with non-logarithmic entropy*, Eur. Phys. Lett. **90**, 50004 (2010) (4 pages).
- [2658] A. Plastino and M.C. Rocca, *On the putative essential discreteness of q-generalized entropies*, Physica A **488**, 56-59 (2017).
- [2659] B. Andresen, *Comment on "Essential discreteness in generalized thermostatistics with non-logarithmic entropy"*, Europhys. Lett. **92**, 40005 (2010).
- [2660] S. Abe, *Reply to "Comment on Essential discreteness in generalized thermostatistics with non-logarithmic entropy"*, Europhys. Lett. **92**, 40006 (2010).
- [2661] G.B. Bagci, T. Oikonomou and U. Tirnakli, *Comment on 'Essential discreteness in generalized thermostatistics with non-logarithmic entropy' by S. Abe*, preprint (2010), 1006.1284 [cond-mat.stat-mech].
- [2662] T. Oikonomou and G.B. Bagci, *The route from discreteness to the continuum for the non-logarithmic q-entropy*, preprint (2017), 1705.00407 [cond-mat.stat-mech].
- [2663] T. Oikonomou and G.B. Bagci, *Route from discreteness to the continuum for the Tsallis q-entropy*, Phys. Rev. E **97**, 012104 (2018).
- [2664] C. Ou and S. Abe, *Comment on "Route from discreteness to the continuum for the Tsallis q-entropy"*, Phys. Rev. E **97**, 066101 (2018).
- [2665] T. Oikonomou and B. Bagci, *Reply to "Comment on 'Route from discreteness to the continuum for the Tsallis q-entropy' "*, Phys. Rev. E **97**, 066102 (2018).
- [2666] T. Oikonomou, G.B. Bagci and U. Tirnakli, *Canonical equilibrium distribution derived from Helmholtz potential*, Physica A **391**, 6386-6389 (2012).
- [2667] G. Samid, *Shannon revisited - Considering a more tractable expression to measure and manage intractability, uncertainty, risk, ignorance, and entropy*, preprint (2010), 1006.1055 [cs.IT].
- [2668] A.E. Rastegin, *Entropic uncertainty relations for extremal unravelings of super-operators*, J. Phys. A: Math. Theor. **44**, 095303 (2011)(12 pages).
- [2669] A.E. Rastegin, *Entropic formulation of the uncertainty principle for the number and annihilation operators*, Physica Scripta **84**, 057001 (2011) (6 pages).
- [2670] W.S. Chung, *The new type of extended uncertainty principle and some applications in deformed quantum mechanics*, Internat. J. Theoretical Physics (2019) (17 pages), doi: doi.org/10.1007/s10773-019-04146-z
- [2671] W.S. Chung, *Two different interpretations for q-boson algebra and a new q-deformed statistical physics*, Physica Scripta (2019), in press.
- [2672] G.G. Barbieri and G. Lenzi, *Tsallis entropy in MV-algebras*, Mathematics **12**, 3594 (2024).
- [2673] A.E. Rastegin, *Properties and upper continuity bounds of relative q-entropy for $1 < q \leq 2$* , preprint (2010), 1010.1335 [math-ph].
- [2674] A.E. Rastegin, *Upper continuity bounds on the relative q-entropy for $q > 1$* , J. Math. Phys. **52**, 062203 (2011) (8 pages).
- [2675] A.E. Rastegin, *On quantum conditional entropies defined in terms of the f-divergences*, Reports Mathematical Phys. **73** (3), 393-411 (2014).
- [2676] A.E. Rastegin, *Fano type quantum inequalities in terms of q-entropies*, preprint (2010), 1010.1811 [quant-ph].
- [2677] A.E. Rastegin, *On generalized conditional entropies and information-theoretic Bell inequalities under decoherence*, preprint (2014), 1410.7889 [quant-ph].
- [2678] A.E. Rastegin, *Further results on generalized conditional entropies*, RAIRO-Theor. Inf. Appl. **49** (1), 67-92 (2015), doi: http://dx.doi.org/10.1051/ita/2014029
- [2679] A.E. Rastegin, *Uncertainty relations for overcomplete measurements from generalized equiangular tight frames*, preprint (2024), 2405.19900 [quant-ph].

- [2680] P. Tempesta, *Group entropies, correlation laws, and zeta functions*, Phys. Rev. E **84**, 021121 (2011) (10 pages).
- [2681] M.A. Rodriguez, A. Romaniega and P. Tempesta, *A new class of entropic information measures, formal group theory and information geometry*, Proc. R. Soc. A **475**, 20180633 (2019), doi: <http://dx.doi.org/10.1098/rspa.2018.0633>
- [2682] P. Tempesta, *Formal groups and Z-entropies*, Proc. R. Soc. A **472**, 20160143 (2016), doi: [10.1098/rspa.2016.0143](https://doi.org/10.1098/rspa.2016.0143)
- [2683] P. Tempesta and H.J. Jensen, *Universality classes and information-theoretic measures of complexity via group entropies*, Scientific Reports **10**, 5952 (2020).
- [2684] J.A. Carrasco, F. Finkel, A. Gonzalez-Lopez, M.A. Rodriguez and P. Tempesta, *Generalized isotropic Lipkin-Meshkov-Glick models: ground state entanglement and quantum entropies*, J. Stat. Mech. 033114 (2016) (33 pages), doi:[10.1088/1742-5468/2016/03/033114](https://doi.org/10.1088/1742-5468/2016/03/033114)
- [2685] J. Carrasco, G. Marmo and P. Tempesta, *New computable entanglement monotones from formal group theory*, Quantum Information Processing **20**, 325 (2021).
- [2686] D. Stefanopoulos, *Physical examples of quantum entropies: Properties, calculations and programmability*, Doctor Thesis (Aristotle's University of Thessaloniki, 2021).
- [2687] E.M.F. Curado, P. Tempesta and C. Tsallis, *A new entropy based on a group-theoretical structure*, Annals Phys. **366**, 22-31 (2016), doi: <http://dx.doi.org/10.1016/j.aop.2015.12.008>
- [2688] P. Tempesta, *Multivariate group entropies, super-exponentially growing systems, and functional equations*, Chaos **30**, 123119 (2020), doi: [10.1063/5.0009846](https://doi.org/10.1063/5.0009846)
- [2689] H.J. Jensen and P. Tempesta, *Group entropies: from phase space geometry to entropy functionals via group theory*, Entropy **20**, 804 (2018), doi: [10.3390/e20100804](https://doi.org/10.3390/e20100804)
- [2690] P. Tempesta, *Random graphs arising from L-functions and modular forms: Topological properties and phase transitions*, preprint (2013).
- [2691] P. Tempesta, *Beyond the Shannon-Khinchin formulation: The composability axiom and the universal-group entropy*, Annals Physics **365**, 180-197 (2016).
- [2692] P. Tempesta, *A new class of composable entropies from group theory: The Z-entropies*, preprint (2015), [1507.07436 \[math-ph\]](https://arxiv.org/abs/1507.07436).
- [2693] J. Carrasco, G. Marmo and P. Tempesta, *New computable entanglement monotones and witnesses from formal group theory*, preprint (2019), [1904.10691 \[math-ph\]](https://arxiv.org/abs/1904.10691).
- [2694] P. Tempesta, *A theorem on the existence of trace-form generalized entropies*, Proc. R. Soc. A **471**, 20150165 (2015) (13 pages).
- [2695] A. Enciso and P. Tempesta, *Uniqueness and characterization theorems for generalized entropies*, J. Stat. Mech. 123101 (2017) (17 pages).
- [2696] H.J. Jensen, R.H. Pazuki, G. Pruessner and P. Tempesta, *Statistical mechanics of exploding phase spaces: Ontic open systems*, J. Phys. A: Math. Theor. **51**, 375002 (2018), doi: [10.1088/1751-8121/aad57b](https://doi.org/10.1088/1751-8121/aad57b)
- [2697] J.M. Amigo, R. Dale and P. Tempesta, *A generalized permutation entropy for noisy dynamics and random processes*, Chaos **31**, 013115 (2021).
- [2698] K.P. Nelson, M. Barbu and B.J. Scannell, *Probabilistic graphs using coupled random variables*, Machine Intelligence and Bio-inspired Computation: Theory and Applications VIII, Eds. M. Blowers and J. Williams, Proc. of SPIE **9119**, 911903 (2014) (8 pages).
- [2699] P. Tempesta, *Bipartite and directed scale-free complex networks arising from zeta functions*, Commun. Nonlinear Sci. Numer. Simulat. **19**, 2493-2504 (2014).
- [2700] P. Lu, J. Yang and T. Zhang, *Identifying influential nodes in complex networks based on network embedding and local structure entropy*, J. Stat. Mech. 083402 (2023).
- [2701] C. Ou, A. El Kaabouchi, Q.A. Wang and J. Chen, *The uncertainty measure for q-exponential distribution function*, Chinese Science Bulletin 2013 **58** (13), 1524-1528 (2013), doi: [10.1007/s11434-012-5664-3](https://doi.org/10.1007/s11434-012-5664-3)
- [2702] J.A.T. Machado, *Entropy analysis of integer and fractional dynamical systems*, Nonlinear Dyn. **62**, 371-378 (2010).
- [2703] J.A.T. Machado, A.C. Costa and M.F.M. Lima, *Dynamical analysis of compositions*, Nonlinear Dyn. **65**, 399-412 (2011).
- [2704] J.A.T. Machado, A.C. Costa and M.D. Quelhas, *Shannon, Renyi and Tsallis entropy analysis of DNA using phase plane*, Nonlinear Analysis: Real World Applications **12**, 3135-3144 (2011).
- [2705] M.M.F. de Lima, G.H. Nunes, R. Silva, U.L. Fulco, V.D. Mello and D.H.A.L. Anselmo, *Bayesian analysis of plant DNA size distribution via non-additive statistics*, Eur. Phys. J. Plus **137**, 495 (2022).

- [2706] M.M.F. de Lima, D.H.A.L. Anselmo, R. Silva, G.H.S. Nunes, U.L. Fulco, M.S. Vasconcelos and V.D. Mello, *A Bayesian analysis of plant DNA length distribution via κ -statistics*, Entropy **24**, 1225 (2022).
- [2707] J.A. Tenreiro Machado, *Entropy analysis of systems exhibiting negative probabilities*, Commun. Nonlinear Sci. Numer. Simulat. **36**, 58-64 (2016), doi: 10.1016/j.cnsns.2015.11.022
- [2708] A.M. Lopes, J.A.T. Machado and A.M. Galhano, *Multidimensional scaling visualization using parametric entropy*, Int. J. Bifurcation Chaos **25**, 1540017 (2015) (16 pages, doi: 10.1142/S0218127415400179
- [2709] J.A.T. Machado and A.M. Lopes, *Fractional Renyi entropy*, Eur. Phys. J. Plus **134**, 217 (2019), doi: 10.1140/epjp/i2019-12554-9
- [2710] A.M. Lopes and J.A.T. Machado, *A review of fractional order entropies*, Entropy **22**, 1374 (2020), doi: 10.3390/e22121374
- [2711] J.A.T. Machado and A.M. Lopes, *Analysis and visualization of complex phenomena*, CINTI 2015, 16th IEEE International Symposium on Computational Intelligence and Informatics (19-21 November, 2015, Budapest).
- [2712] A.M. Lopes, J.A. Tenreiro Machado and M.E. Mata, *Analysis of global terrorism dynamics by means of entropy and state space portrait*, Nonlinear Dyn. **85** (3), 1547-1560 (2016), doi: 10.1007/s11071-016-2778-1
- [2713] E.B. Starikov, *Many faces of entropy or Bayesian statistical mechanics*, ChemPhysChem (2010), in press.
- [2714] H. Hasegawa, *Classical small systems coupled to finite baths*, Phys. Rev. E **83**, 021104 (2011) (14 pages).
- [2715] A. Jencova and M.B. Ruskai, *A unified treatment of convexity of relative entropy and related trace functions, with conditions for equality*, Rev. Math. Phys. **22** (9), 1099-1121 (2010).
- [2716] J.L. Du, *On the power-law q -distribution function based on the probabilistically independent postulate in nonextensive statistics*, preprint (2010), 1012.2765 [cond-mat.stat-mech].
- [2717] T. Oikonomou, G.B. Bagci and Ugur Tirnakli, *Generalized maximum entropy principle and first law of thermodynamics*, preprint (2011), 1101.2607 [cond-mat.stat-mech].
- [2718] T. Yamano, *When index of escort mean is different from nonextensive entropy index*, preprint (2010).
- [2719] B.B. Markiv, R.M. Tokarchuk, P.P. Kostrobij and M.V. Tokarchuk, *Nonequilibrium statistical operator method in Renyi statistics*, Physica A **390**, 785-791 (2011).
- [2720] J. Ananias Neto, *Fundamental constants, entropic gravity and nonextensive equipartition theorem*, Physica **391** (18), 4320-4324 (2012).
- [2721] N. Ebrahimi, E.S. Soofi and R. Soyer, *Information measures in perspective*, Internat. Statistical Rev. **78** (3), 383-412 (2010).
- [2722] N. Ebrahimi, N.Y. Jalali and E.S. Soofi, *Comparison, utility, and partition of dependence under absolutely continuous and singular distributions*, Multivariate Analysis (2014), in press, doi: <http://dx.doi.org/10.1016/j.jmva.2014.06.014>
- [2723] R. Chandrashekar and S.S. Naina Mohammed, *A class of energy-based ensembles in Tsallis statistics*, J. Stat. Mech. P05018 (2011).
- [2724] S.S. Naina Mohammed, K. Jeevanandham, A.B.M. Ahmed, M.M. Ali and R. Chandrashekar, *Inverse Laplace transform based on Widder's method for Tsallis exponential*, preprint (2022), 2205.03545 [math-ph].
- [2725] A.E. Rastegin, *Continuity estimates on the Tsallis relative entropy*, preprint (2011), 1102.5154
- [2726] H. Babacan, *An alternative approach to calculate the density of states in nonextensive statistical mechanics*, Phys. Lett. A **375**, 360-362 (2011) (34 pages).
- [2727] A.S. Parvan and T.S. Biro, *Equilibrium statistical mechanics for incomplete nonextensive statistics*, Phys. Lett. A **375**, 372-378 (2011).
- [2728] Z.F. Huang, C.J. Ou and J.C. Chen, *Incomplete nonextensive statistics and the zeroth law of thermodynamic*, Chin. Phys. B **22** (4), 040501 (2013) (4 pages).
- [2729] A. Cabo, S. Curilef, A. Gonzalez, N.G. Cabo-Bizet and C.A. Vera, *A statistical physics of stationary and metastable states*, J. Stat. Mech. P02012 (2011) (24 pages).
- [2730] H. Li, Y. Xiong and Y. Li, *The Tsallis statistical distribution in a completely open system*, Physica A **390**, 2769-2775 (2011).
- [2731] S. Abe, *Generalized molecular chaos hypothesis and the H theorem: Problem of constraints and amendment of nonextensive statistical mechanics*, Phys. Rev. E **79**, 041116 (2009) (6 pages).
- [2732] H.F. Cui, J.Q. Sun and Y.M. Ding, *The rates of convergence for generalized entropy of the normalized sums of IID random variables*, preprint (2011), 1106.3381v1 [cs.IT].
- [2733] A.E. Rastegin, *Some general properties of unified entropies*, J. Stat. Phys. **143**, 1120-1135 (2011).
- [2734] A.E. Rastegin, *Notes on entropic uncertainty relations beyond the scope of Riesz's theorem*, Int. J. Theor. Phys. **51**, 1300-1315 (2012).
- [2735] A.E. Rastegin, *Uncertainty relations for general canonically conjugate observables in terms of unified entropies*, Found. Phys. **45**, 923-942 (2015), doi: 10.1007/s10701-015-9909-2

- [2736] A.E. Rastegin, *Entropic uncertainty relations for successive measurements of canonically conjugate observables*, Annalen der Physik **528** (11-12), 835-844 (2016).
- [2737] R.P. Kostecki, *The general form of γ -family of quantum relative entropies*, Open Systems and Information Dynamics **18** (2), 191-221 (2011).
- [2738] V. Kumar and H.C. Taneja, *A generalized entropy-based residual lifetime distributions*, Internat. J. Biomathematics **4** (2), 171-184 (2011).
- [2739] R. Thapliyal, H.C. Taneja and V. Kumar, *Characterization results based on non-additive entropy of order statistics*, Physica A **417**, 297-303 (2015).
- [2740] V. Kumar and H.C. Taneja, *Non-additive entropy measure and record values*, Applied Mathematics Information Sciences **9** (3), 1541-1548 (2015).
- [2741] L. Batra and H.C. Taneja, *Evaluating volatile stock markets using information theoretic measures*, Physica A **537**, 122711 (2020).
- [2742] T. Kopczewski and L. Bil, *Exploring stock markets dynamics: a two-dimensional entropy approach in return/volume space*, Bank i Kredyt **55** (6), 731-758 (2024).
- [2743] D. Papla and R. Siedlecki, *Entropy as a tool for the analysis of stock market efficiency during periods of crisis*, Entropy **26**, 1079 (2024).
- [2744] D. Papla and R. Siedlecki, *Analysis of entropy on the European markets of energy and energy commodities prices*, Plos One **20** (1), e031534 (2025).
- [2745] M. Marcolli and R. Thorngren, *Thermodynamics semirings*, J. Noncommut. Geom. **8**, 337-392 (2014), doi: 10.4171/JNCG/159
- [2746] M. Marcolli and N. Tedeschi, *Entropy algebras and Birkhoff factorization*, preprint (2014), 1412.0247 [math.QA].
- [2747] M. Marcolli, *Information algebras and their applications*, Geometric Science of Information, Lecture Notes in Computer Science **9389**, 271-276 (2015).
- [2748] A.D. Al-Nasser, *An information-theoretic alternative to maximum likelihood estimation method in ultra-structural measurement error model*, Hacettepe Journal of Mathematics and Statistics **40** (3), 469-481 (2011).
- [2749] M. Al-Rawwash and A.D. Al-Nasser, *Repeated measures and longitudinal data analysis using higher-order entropies*, Statistica Neerlandica **67** (1), 100-111 (2013).
- [2750] M. Ponnurugan, *Tsallis statistics generalization of nonequilibrium work relations*, Phys. Rev. E **93**, 032107 (2016) (5 pages).
- [2751] I.J. Ford and R.W. Eyre, *Work relations for a system governed by Tsallis statistics*, Phys. Rev. E **92**, 022143 (2015) (6 pages).
- [2752] H. Miyahara and K. Aihara, *Work relations with measurement and feedback control on nonuniform temperature systems*, Phys. Rev. E **98**, 042138 (2018).
- [2753] E. Korkmazhan, *Fluctuation relations for non-Markovian and heterogeneous temperature systems*, Physica A **537**, 122615 (2020).
- [2754] J. Korbel and D.H. Wolpert, *Stochastic thermodynamics and fluctuation theorems for non-linear systems*, New J. Phys. **23**, 033049 (2021).
- [2755] Y. Shibasaki, M. Saito and K. Judai, *Loewner time conversion for q -generalized stochastic dynamics*, J. Stat. Mech. 083205 (2023).
- [2756] C.J. Ou and J.C. Chen, *Generalized entropies under different probability normalization conditions*, Chinese Science Bulletin **56**(34), 3649-3653 (2011).
- [2757] L. Zheng and W. Li, *Thermoequilibrium statistics for a finite system with energy nonextensivity*, Chinese Science Bulletin **56** (34), 3666-3670 (2011).
- [2758] R. Wang, S. Nganso Djanteng, El Aziz Kaabouchi and Q.A. Wang, *Investigation of an energy nonadditivity for nonextensive systems*, Chinese Science Bulletin **56** (34), 3661-3665 (2011).
- [2759] J. Jiang, R. Wang, Y. Lysogorskii, D. Zvezdov, D. Lysogorskii and Q.A. Wang, *An equilibrium thermostatics of nonextensive finite system: canonical distribution and entropy*, Physica A **391**, 3140-3150 (2012).
- [2760] G.R. Murthy, *Gibbs-Shannon entropy and related measures: Tsallis entropy*, preprint (2012), 1201.1096 [cs.IT].
- [2761] E. Rufeil Fiori and A. Plastino, *A Shannon-Tsallis transformation*, Physica A **392**, 1742-1749 (2013).
- [2762] C.G. Schon, T. MiyazakiI and S.R.A. Salinas, *A generalized thermodynamics formulation of the cluster variation method*, communicated at CALPHAD XXXVI (State College-PA, 2007), CALPHAD, Inc. 138-139 [doi: <http://dx.doi.org/10.1016/j.calphad.2007.11.002>].

- [2763] M.S. Stankovic, S. Marinkovic and P. Rajkovic, *A Deformed exponential function of two variables - Motivation and applications*, Application of Mathematics in Technical and Natural Sciences: 3rd International Conference AMITANS'11, eds. M.D. Todorov and C.I. Christov, AIP Conference Proceedings **1404** (2011).
- [2764] V.M. Ilic and M.S. Stankovic, *On the characterization and connection between q -additive information measures and multiplicative certainty measures*, communicated at the First National Conference on Information Theory and Complex Systems (Belgrade, Serbia, September 25, 2013).
- [2765] E. Mulalic, M. Stankovic and R. Stankovic, *Notes on evolution of axiomatic characterization of the Tsallis entropy*, communicated at the First National Conference on Information Theory and Complex Systems (Belgrade, Serbia, September 25, 2013).
- [2766] V.M. Ilic and M.S. Stankovic, *A unified characterization of generalized information and certainty measures*, Physica A **415**, 229-239 (2014).
- [2767] V.M. Ilic and M.S. Stankovic, *Generalized Shannon-Khinchin axioms and uniqueness theorem for pseudo-additive entropies*, Physica A **411**, 138-145 (2014).
- [2768] M. Stankovic and V. Ilic, *On the generalized thermostatics for generalized entropies*, Peta nacionalna konferencija "Verovatnosne logike i njihove primene" (Beograd, Serbia, 29-30 October 2015).
- [2769] V.M. Ilic and M.S. Stankovic, *Comments on "On q -non-extensive statistics with non-Tsallisian entropy"*, Physica A **466**, 160-165 (2017).
- [2770] P. Jizba and J. Korbel, *Remarks on "Comments on 'On q -non-extensive statistics with non-Tsallisian entropy'"* [*Physica A 466 (2017) 160*], Physica A **468**, 238-243 (2017).
- [2771] J. Naudts and B. Anthonis, *Data set models and exponential families in statistical physics and beyond*, Modern Phys. Lett. B **26** (10), 1250062 (2012) (19 pages).
- [2772] J. Naudts and B. Anthonis, *The exponential family in abstract information theory*, preprint (2013), 1302.5205 [cs.IT].
- [2773] A.M. Kowalski and A. Plastino, *The Tsallis-complexity of a semiclassical time-evolution*, Physica A **391**, 5375-5383 (2012).
- [2774] A.E. Rastegin, *Convexity inequalities for estimating generalized conditional entropies from below*, Kybernetika **48** (2) 242-253 (2012).
- [2775] A.E. Rastegin, *Formulation of the Hellmann-Feynman theorem for the "second choice" version of Tsallis' thermostatics*, Physica A **392**, 103-110 (2013).
- [2776] C.A. Onate, M.C. Onyeaju, A.N. Ikot and O. Ebomwonyi, *Eigen solutions and entropic system for Hellmann potential in the presence of the Schrodinger equation*, Eur. Phys. J. Plus **132**, 462 (2017), doi: 10.1140/epjp/i2017-11729-8
- [2777] M.Z.I. Nasser and A. Abdel-Hady, *The nonadditive entropy for the ground state of helium-like ions using Hellmann potential*, Molecular Physics **118** (3), e1612105 (2020) (8 pages), doi: 10.1080/00268976.2019.1612105
- [2778] I. Nasser, *J-matrix calculation of Tsallis entropy for Hellmann potential*, J. Phys.: Conf. Series **1253**, 012013 (2019), doi: 10.1088/1742-6596/1253/1/012013
- [2779] F. Khalfaoui, S. Dilmi and A. Boumali, *On the calculation of superstatistics ionization rates of neutral Helium*, Physica A (2022), in press, doi: 10.1016/j.physa.2022.127193
- [2780] A.E. Rastegin, *Relations for certain symmetric norms and anti-norms before and after partial trace*, J. Stat. Phys. **148**, 1040-1053 (2012).
- [2781] S. Kim, *The matrix geometric means under partial trace*, J. Chungcheong Mathematical Society **30**, (1), 21-29 (2017).
- [2782] A.E. Rastegin, *Entropic uncertainty relations and quasi-Hermitian operators*, J. Phys. A: Math. Theor. **45**, 444026 (2012) (14 pages).
- [2783] A.E. Rastegin, *Tests for quantum contextuality in terms of q -entropies*, Quantum Information and Computation **14** (11-12), 996-1013 (2014).
- [2784] A.E. Rastegin, *Number-phase uncertainty relations in terms of generalized entropies*, Quantum Information and Computation **12** (9-10), 743-762 (2012).
- [2785] A.E. Rastegin, *Generalized conditional entropies of partitions on quantum logic*, Commun. Theor. Phys. **58** (6), 819-822 (2012).
- [2786] A.E. Rastegin, *Notes on entropic characteristics of quantum channels*, Cent. Eur. J. Phys. **11** (1), 69-77 (2013).
- [2787] J. Fan, Z. Wu and S.M. Fei, *Coherence monotones of quantum channels based on two generalized quantum relative entropies*, Laser Phys. Lett. **20**, 105209 (2023).
- [2788] A.E. Rastegin, *Uncertainty and certainty relations for complementary qubit observables in terms of Tsallis' entropies*, Quantum Inf. Process **12**, 2947-2963 (2013), DOI 10.1007/s11128-013-0568-y

- [2789] A.E. Rastegin, *Unified-entropy uncertainty relations for a single quantum channel*, preprint (2013), 1302.4525 [quant-ph].
- [2790] A.E. Rastegin, *Unified-entropy trade-off relations for a single quantum channel*, J. Phys. A: Math. Theor. **46**, 285301 (2013) (10 pages), doi:10.1088/1751-8113/46/28/285301
- [2791] A.E. Rastegin, *Formulation of Leggett-Garg inequalities in terms of q -entropies*, Commun. Theor. Phys. **62** (3), 320-326 (2014).
- [2792] A.E. Rastegin, *Uncertainty relations for MUBs and SIC-POVMs in terms of generalized entropies*, Eur. Phys. J. D **67**, 269 (2013) (14 pages), doi: 10.1140/epjd/e2013-40453-2
- [2793] A.E. Rastegin, *Complementarity relations for design-structured POVMs in terms of generalized entropies of order $\alpha \in (0, 2)$* , Quantum Information Processing **24**, 181 (2025).
- [2794] A.E. Rastegin, *Notes on general SIC-POVMs*, Phys. Scr. **89**, 085101 (2014) (8 pages).
- [2795] A.E. Rastegin, *Quantum work fluctuations versus the macrorealism in terms of non-extensive entropies*, Physica A **505**, 233-242 (2018).
- [2796] A. Hernando, A. Plastino and A.R. Plastino, *MaxEnt and dynamical information*, Eur. Phys. J. B **85**, 147 (2012) (8 pages).
- [2797] A. Hernando, R. Hernando, A. Plastino and A. R. Plastino, *The workings of the maximum entropy principle in collective human behaviour*, J. R. Soc. Interface **10**, 20120758 (2013) (11 pages).
- [2798] M. Lemanska, *Non-additive entropy: Reason and conclusions*, preprint (2012), 1207.2172 [physics.gen-ph].
- [2799] S. Kumar and A. Choudhary, *Some coding theorems on generalized Havrda-Charvat and Tsallis's entropy*, Tamkang J. Math. **43** (3), 437-444 (2012).
- [2800] S. Kumar and A. Choudhary, *Generalized useful relative information measures of type (α, β)* , Open Systems and Information Dynamics **22** (1), 1550003 (2015) (21 pages), doi: 10.1142/S1230161215500031
- [2801] S. Kumar and G. Ram, *A generalization of the Havrda-Charvat and Tsallis entropy and its axiomatic characterization*, Abstract and Applied Analysis, ID 505184 (2014, Hindawi Publishing) (8 pages), <http://dx.doi.org/10.1155/2014/505184>
- [2802] L. Wondie and S. Kumar, *Bounds of mean code word length with generalized information measure and its application in coding theory*, Int. J. Math. and Appl. **7** (3), 111-117 (2019).
- [2803] M.A.K. Baig and N. Mushtaq, *A Generalized fuzzy inaccuracy measure of order α and type β and coding theorems*, Internat. J. Fuzzy Mathematics and Systems **4** (1), 27-37 (2014).
- [2804] V. Preda, R.C. Sfetcu and S.C. Sfetcu, *Some generalizations concerning inaccuracy measures*, Results in Mathematics **78**, 195 (2023).
- [2805] S. Kumar and A. Choudhary, *Sharma-Mittal entropy and coding theorem*, Tamsui Oxford J. Information and Mathematical Sciences **29** (1), 19-27 (2013).
- [2806] S. Abe, *Conceptual difficulties with the q -averages in non-extensive statistical mechanics*, J. Physics: Conf. Series **394**, 012003 (2012) (7 pages).
- [2807] P. Li and C.H. Zhang, *Entropy estimations using correlated symmetric stable random projections*, preprint (2012).
- [2808] C. Beck, *Non-additivity of Tsallis entropies and fluctuations of temperature*, preprint (2012).
- [2809] R.A.X. Persson, *Algorithms and interaction potentials - Phase density, surface tension and carbon dioxide*, Doctoral Thesis (Gothenburg, Sweden, 2012) (72 pages).
- [2810] S. Bwanakare, M. Cierpial-Wolan and D. Rzeczkowski, *An entropic metric for assessing carbon dioxide emissions in economic production processes*, preprint (2024).
- [2811] M. Visser, *Zipf's law, power laws, and maximum entropy*, New J. Phys. **15**, 043021 (2013) (13 pages).
- [2812] A.M. Scarfone, *Entropic forms and related algebras*, Entropy **15**, 624-649 (2013).
- [2813] J.M. Conroy and H.G. Miller, *The Tsallis parameter*, preprint (2013), 1301.7715 [cond-mat.stat-mech].
- [2814] W.S. Chung, *New exponential, logarithm and q -probability in the non-extensive statistical physics*, preprint (2013), 1302.1865 [math-ph].
- [2815] W.S. Chung, *Some possible q -exponential type probability distribution in the non-extensive statistical physics*, Mod. Phys. Lett. B **30** (22), 1650252 (2016) (15 pages), doi: 10.1142/S0217984916502523
- [2816] W.S. Chung, *On the q -exponential type Boltzmann factors from the super-statistics and the q -deformed Maxwell Boltzmann distribution*, Internat. J. Thermodynamics **19** (3), 163-166 (2016), doi: 10.5541/ijot.5000163767
- [2817] W.S. Chung, *Two parameter deformed non-extensive entropy from the two-parameter quantum number*, Internat. J. Thermodynamics **19** (No. 3), 158-161 (2016), doi: 10.5541/ijot.5000160131
- [2818] N. Gupta and R.K. Bajaj, *On partial monotonic behaviour of some entropy measures*, Statistics and Probability Letters **83**, 1330-1338 (2013).
- [2819] Y. Bin, L.L. He and X. Ying, , Applied Mechanics and Materials **312**, 220-225 (2013).

- [2820] S. Presse, K. Ghosh, J. Lee and K.A. Dill, *Nonextensive entropies are inconsistent with the probability multiplication rule*, preprint (2013).
- [2821] S. Presse, K. Ghosh, J. Lee and K.A. Dill, *Principles of maximum entropy and maximum caliber in statistical physics*, Rev. Mod. Phys. **85**, 1115-1141 (2013).
- [2822] S. Presse, *Nonadditive entropy maximization is inconsistent with Bayesian updating*, Phys. Rev. E **90**, 052149 (2014) (4 pages).
- [2823] S. Presse, K. Ghosh, J. Lee and K.A. Dill, *Nonadditive entropies yield probability distributions with biases not warranted by the data*, Phys. Rev. Lett. **111**, 180604 (2013) (4 pages).
- [2824] M. Tavakoli, J.N. Taylor, C.B. Li, T. Komatsuzaki and S. Presse, *Single molecule data analysis: An introduction*, Advances in Chemical Physics (2018), doi: 10.1002/9781119324560.ch4
- [2825] C. Tsallis, *Comment on “Nonadditive Entropies Yield Probability Distributions with Biases not Warranted by the Data ” by Pressé et al*, preprint (2014), 1404.1257 [cond-mat.stat-mech].
- [2826] S. Presse, K. Ghosh, J. Lee and K.A. Dill, *Reply to C. Tsallis’ Comment on our “Nonadditive Entropies Yield Probability Distributions with Biases not Warranted by the Data”*, preprint (2015), 1504.01822 [cond-mat.stat-mech].
- [2827] C. Tsallis, *Conceptual inadequacy of the Shore and Johnson axioms for wide classes of complex systems*, Entropy **17**, 2853-2861 (2015), doi:10.3390/e17052853
- [2828] S. Presse, K. Ghosh, J. Lee and K.A. Dill, *Reply to C. Tsallis’ “Conceptual inadequacy of the Shore and Johnson axioms for wide classes of complex systems”*, Entropy **17**, 5043-5046 (2015), doi:10.3390/e17075043
- [2829] T. Oikonomou and G.B. Bagci, *Overcoming the artificial biases for the nonadditive q-entropy*, preprint (2018), 1810.06916 [cond-mat.stat-mech].
- [2830] T. Oikonomou and G.B. Bagci, *Renyi entropy yields artificial biases not in the data and incorrect updating due to the finite-size data*, Phys. Rev. E **99**, 032134 (2019).
- [2831] P. Jizba and J. Korbel, *Comment on “Renyi entropy yields artificial biases not in the data and incorrect updating due to the finite-size data”*, Phys. Rev. E **100**, 026101 (2019).
- [2832] T. Oikonomou and G.B. Bagci, *Reply to “Comment on ‘Renyi entropy yields artificial biases not in the data and incorrect updating due to the finite-size data’ ”*, Phys. Rev. E **100**, 026102 (2019)
- [2833] P. Jizba and J. Korbel, *Maximum entropy principle in statistical inference: case for non-Shannonian entropies*, Phys. Rev. Lett. **122**, 120601 (2019).
- [2834] P. Jizba and J. Korbel, *Supplemental material for “Maximum entropy principle in statistical inference: case for non-Shannonian entropies”*, preprint (2018), 1808.01172 [cond-mat.stat-mech].
- [2835] J. Korbel, *Calibration invariance of the MaxEnt distribution in the maximum entropy principle*, Entropy **23**, 96 (2021), doi: 10.3390/e23010096
- [2836] V. Ilic, J. Korbel, S. Gupta and A.M. Scarfone, *An overview of generalized entropic forms*, EPL **133**, 50005 (2021).
- [2837] P. Jizba and J. Korbel, *When Shannon and Khinchin meet Shore and Johnson: equivalence of information theory and statistical inference axiomatics*, Phys. Rev. E **101**, 042126 (2020).
- [2838] M. Kim, *Shore-Johnson derivation does not fix functional form of entropy*, preprint (2019).
- [2839] G.B. Bagci and T. Oikonomou, *Tsallis power laws and finite baths with negative heat capacity*, Phys. Rev. E **88**, 042126 (2013) (5 pages).
- [2840] M. Campisi, *Comment on “Tsallis power laws and finite baths with negative heat capacity”*, preprint (2013), 1310.5556 [cond-mat.stat-mech].
- [2841] G.B. Bagci and T. Oikonomou, *Reply to M. Campisi [arXiv: 1310.5556]*, preprint (2014), 1401.0319 [cond-mat.stat-mech].
- [2842] M. Smieja, *Weighted approach to general entropy function*, IMA Journal of Mathematical Control and Information **32**, 329-341 (2015), doi:10.1093/imamci/dnt044
- [2843] K.S. Uthushagen, *Entropy in dynamical networks*, Master Thesis (Institute of physics, NTNU, N-7491 Trondheim, Norge March 4, 2013).
- [2844] L. R. Franca Filho, *As multidefinicoes do conceito de entropia: Visao termodinamica e termoestatistica*, Master Thesis (2012, Patos, UEPB, 2012).
- [2845] J. Gao, F. Liu, J. Zhang, J. Hu and Y. Cao, *Information entropy as a basic building block of complexity theory*, Entropy **15**, 3396-3418 (2013), doi:10.3390/e15093396
- [2846] P.F. Pessoa Macedo, *Contributos para a teoria de maxima entropia na estimacao de modelos mal-postos [Contributions to the theory of maximum entropy estimation for ill-posed models]*, Doctor Thesis (Universidade de Aveiro, Departamento de Matematica, 2013).

- [2847] G. Gour, M.P. Muller, V. Narasimhachar, R.W. Spekkens and N.Y. Halpern, *The resource theory of informational nonequilibrium in thermodynamics*, Phys. Rep. **583**, 1-58 (2015).
- [2848] P. Quarati and M. Lissia, *The phase space elementary cell in classical and generalized statistics*, Entropy **15**, 4319-4333 (2013), doi:10.3390/e15104319
- [2849] G. Sonnino and G. Steinbrecher, *New class of generalized extensive entropies for studying dynamical systems in highly anisotropic phase space*, preprint (2013), 1311.4790 [cond-mat.stat-mech].
- [2850] G. Sonnino and G. Steinbrecher, *Generalized extensive entropies for studying dynamical systems in highly anisotropic phase spaces*, Phys. Rev. E **89**, 062106 (2014) (8 pages).
- [2851] G. Sonnino, G. Steinbrecher and A. Sonnino, *The Renyi entropy of Levy distribution*, preprint (2014), 1402.5909 [physics.data-an].
- [2852] G. Steinbrecher, A. Sonnino and G. Sonnino, *Category theoretic properties of the A. Renyi and C. Tsallis entropies*, Rev. Mod. Phys. (2015), in press, 1504.05552 [physics.data-an].
- [2853] G. Steinbrecher and G. Sonnino, *Generalized Renyi entropy and structure detection of complex dynamical systems*, preprint (2015), 1512.06108 [physics.data-an].
- [2854] G. Steinbrecher, G. Sonnino and N. Pometescu, *Maximal entropy distribution functions from generalized Renyi entropy*, preprint (2016), 1606.08730 [cond-mat.stat-mech].
- [2855] J. Peterson, P.D. Dixit and K.A. Dill, *A maximum entropy framework for nonexponential distributions*, PNAS **110** (51), 20380-20385 (2013).
- [2856] J.G. Dar, I. Sajjad and S. Tamboli, *A comparative analysis of entropy measures for exponentiated exponential and truncated exponentiated exponential distributions*, European Journal of Pure and Applied Mathematics **18** (2), 5796 (2025).
- [2857] C. Moreira de Souza, *Investigacao e Interpretacao do Conceito de Entropia na Fisica e a Evolucao do Conceito em Outras Areas do Conhecimento*, Undergraduate Thesis (Universidade Estadual da Paraiba, Centro de Ciencias Exatas e Sociais Aplicadas, Campus VII-Governador Antonio Mariz, Patos, 2010).
- [2858] M.S. Tabass and G.R. Mohtashami Borzadaran, *The generalized maximum α - entropy principle*, 9th Seminar on Probability and Stochastic Processes 753-760 (11-12 September 2013, Faculty of Mathematics, University of Sistan and Baluchestan).
- [2859] S.A.F. Mortezaejad, G. Mohtashami Borzadaran and B.S. Gildeh, *Joint dependence distribution of data set using optimizing Tsallis copula entropy*, Physica A **533**, 121897 (2019).
- [2860] M.S. Tabass and G.R. Mohtashami Borzadaran, *The generalised maximum α entropy principle*, Internat. J. Mathematics Operational Research **12** (1), (2018).
- [2861] R. Kazemi, M.R. Miri and G.R. Mohtashami Borzadaran, *Topological unified (r, s)-entropy*, Physica A **541**, 123657 (2020).
- [2862] S. Maadani, G.R.M. Borzadaran and A.H.R. Roknabadi, *A new generalized varentropy and its properties*, Ural Mathematical Journal **6** (1), 114-129 (2020), doi: 10.15826/umj.2020.1.009
- [2863] S. Maadani, G.R.M. Borzadaran and A.H.R. Roknabadi, *Varentropy of order statistics and some stochastic comparisons*, Communications in Statistics - Theory and Methods (2021) (15 pages), doi: 10.1080/03610926.2020.1861299
- [2864] A. Sharma and C. Kundu, *Stochastic properties of varentropy based on residual lifetime*, Statistics (2024).
- [2865] A. Sharma, *Variance of some information measures for truncated random variables with applications*, Doctor Thesis (Rajiv Gandhi Institute of Petroleum Technology, 2024).
- [2866] A. Plastino, E.M.F. Curado and F.D. Nobre, *Deriving partition functions and entropic functionals from thermodynamics*, Physica A **403**, 13-20 (2014), doi: http://dx.doi.org/10.1016/j.physa.2014.02.009
- [2867] E.M.F. Curado and C. Tsallis, *Evolution equations for continuous and discrete probabilities*, Entropy **25**, 1132 (2023).
- [2868] X. Deng and Y. Deng, *On the axiomatic requirement of range to measure uncertainty*, Physica A **406**, 163-168 (2014).
- [2869] Y. Xue and Y. Deng, *Interval-valued belief entropies for Dempster-Shafer structures*, Soft Computing (2021), doi: 10.1007/s00500-021-05901-3
- [2870] F. Buono, Y. Deng and M. Longobardi *The unified extropy and its versions in classical and Dempster-Shafer theories*, J. Applied Probability (2023).
- [2871] O. Obregon and A. Gil-Villegas, *Generalized information entropies depending only on the probability distribution*, Phys. Rev. E **88**, 062146 (2013) (7 pages).
- [2872] C. Tsallis and H.J. Haubold, *Boltzmann-Gibbs entropy is sufficient but not necessary for the likelihood factorization required by Einstein*, EPL **110**, 30005 (2015) (5 pages), doi: www.epljournal.org doi: 10.1209/0295-5075/110/30005

- [2873] G. Sicuro and P. Tempesta, *Groups, information theory and Einstein's likelihood principle*, Phys. Rev. E **93**, 040101(R) (2016) (5 pages).
- [2874] F. Osorio, M. Galea and P. Gimenez, *A robust approach for generalized linear models based on maximum L_q -likelihood procedure*, preprint (2024), 2408.04176 [stat.ME].
- [2875] S.L.E.F. da Silva and G. Kaniadakis, *Robust parameter estimation based on the generalized log-likelihood in the context of Sharma-Taneja-Mittal measure*, Phys. Rev. E **104**, 024107 (2021).
- [2876] M.N. Cankaya and J. Korbel, *Least informative distributions in Maximum q -log-likelihood estimation*, Physica **509**, 140-150 (2018).
- [2877] A. Gayen and M.A. Kumar, *Projection theorems of divergences and likelihood maximization methods*, preprint (2017), 1705.09898 [cs.IT].
- [2878] A. Gayen and M.A. Kumar, *Projection theorems, estimating equations, and power-law distributions*, preprint (2019), 1905.01434 [math.ST].
- [2879] S. Chen, J. Chowdhury and M.G. Genton, *Robust Maximum L_q -Likelihood Covariance Estimation for Replicated Spatial Data*, preprint (2024), 2407.17592 [stat.ME].
- [2880] T.K.A. Ribeiro and S.L.P. Ferrari, *Robust estimation in beta regression via maximum L_q -likelihood*, preprint (2020), 2010.11368 [stat.ME].
- [2881] H.Y. Tang, T.L. Song, J.H. Wang and Y.L. Ma, *A new construction for the statistical theory of the nonextensive systems*, Chin. Sci. Bull. **59** (21), 2528-2533 (2014), doi: 10.1007/s11434-014-0351-1
- [2882] T.S. Biro, G.G. Barnafoldi and P. Van, *New entropy formula with fluctuating reservoir*, Physica A **417**, 215-220 (2015).
- [2883] H.Y. Tang, J.H. Wang and Y.L. Ma, *A new approach for the statistical thermodynamic theory of the nonextensive systems confined in different finite traps*, J. Phys. Soc. Japan **83**, 064004 (2014) (15 pages), <http://dx.doi.org/10.7566/JPSJ.83.064004>
- [2884] T. Yamano, *Thermodynamic meaning of the index of γ -entropy*, Results in Physics **4**, 50-51 (2014).
- [2885] N.C. Petroni, *Entropy and its discontents: A note on definitions*, Entropy **16**, 4044-4059 (2014), doi:10.3390/e16074044
- [2886] I. Nikoufar, *On operator inequalities of some relative operator entropies*, Advances Mathematics **259**, 376-383 (2014).
- [2887] I. Nikoufar and M. Alinejad, *Bounds of generalized relative operator entropies*, Mathematical Inequalities and Applications **20** (4), 1067-1078 (2017).
- [2888] X.S. Xing, *On Tsallis nonequilibrium entropy evolution*, preprint (2014), 1406.2105 [cond-mat.stat-mech].
- [2889] C. Tsallis, E.P. Borges and A.R. Plastino, *Entropy evolution at generic power-law edge of chaos*, Chaos, Solitons and Fractals **174**, 113855 (2023).
- [2890] V. Crupi and K. Tentori, *State of the field: Measuring information and confirmation*, Studies in History and Philosophy of Science Part A, **47**, 81-90.(2014).
- [2891] V. Crupi, *Measures of biological diversity: Overview and unified framework*, in *From Assessing to Conserving Biodiversity, History, Philosophy and Theory of the Life Sciences* **24**, E. Casetta et al, Eds. (2019).
- [2892] A. Misra, A. Biswas, A.K. Pati, A. Sen(De) and U. Sen, *Quantum correlation with sandwiched relative entropies*, Phys. Rev. E **91**, 052125 (2015) (13 pages).
- [2893] E.H. Lieb and J. Yngvason, *Entropy meters and the entropy of non-extensive systems*, Proc. R. Soc. A **470**, 20140192 (2014) (10 pages).
- [2894] H. Fawzi and J. Saunderson, *Lieb's concavity theorem, matrix geometric means, and semidefinite optimization*, Linear Algebra and its Applications **513**, 240-263 (2017).
- [2895] Y. Li, B. Li, H. Sun and L. Jiu, *Matrix geometric means and uncertainty relation*, preprint (2016).
- [2896] R. Guo and J.L. Du, *The adiabatic static linear response function in nonextensive statistical mechanics*, Physica A **414**, 414-420 (2014).
- [2897] K.P. Nelson, *Factoring multivariate coupled exponentials using the coupled-product*, preprint (2014).
- [2898] K.P. Nelson, *A definition of the coupled-product for multivariate coupled-exponentials*, Physica A Physica A **422**, 187-192 (2015).
- [2899] J.M. Conroy and H. G. Miller, *MAXENT and the Tsallis Parameter*, preprint (2014), 1408.1686 [cond-mat.stat-mech].
- [2900] P. Lazov and I. Lazov, *A general methodology for population analysis*, Physica A **415**, 557-594 (2014).
- [2901] I. Lazov, *A methodology for revenue analysis of parking lots*, Networks and Spatial Economics (2018) (22 pages), in press, doi: 10.1007/s11067-018-9418-x

- [2902] A. Subbarayan and G. Kumar, *The size distribution of cities and towns in the states of India (1951-2011) : An evaluation of pareto, lognormal and q-Exponential distributions*, Internat. J. Agricultural and Statistical Sciences **11** (2), 481-486 (2015).
- [2903] F. Hansen, *Golden-Thompson's inequality for deformed exponentials*, preprint (2014), 1409.1110 [math-ph].
- [2904] F. Hansen, J. Liang and G. Shi, *Peierls-Bogolyubov's inequality for deformed exponentials*, Entropy **19**, 271 (2017), doi: 10.3390/e19060271
- [2905] T.O. Kvalseth, *Entropy evaluation based on value validity*, Entropy **16**, 4855-4873 (2014), doi:10.3390/e16094855
- [2906] T.O. Kvalseth, *On the measurement of randomness (uncertainty): A more informative entropy*, Entropy **18**, 159 (2016) (15 pages), doi:10.3390/e18050159
- [2907] T.O. Kvalseth, *Entropies and their concavity and Schur-concavity conditions*, IEEE Access **10** (2022).
- [2908] K.P. Nelson, *Reduced perplexity: Uncertainty measures without entropy*, communication in Info-metrics Meeting (Washington, 2014), arxiv 1603:08830
- [2909] M. Chen, J.M. Dunn, A. Golan and A. Ullah, *Advances in Info-Metrics: Information and Information Processing across Disciplines*, Oxford Scholarship Online (2020), doi: 10.1093/oso/9780190636685.001.0001
- [2910] F. Pennini, A. Plastino and M.C. Rocca, *The thermal statistics of quasi-probabilities in phase space*, preprint (2014), 1409.4465 [cond-mat.stat-mech].
- [2911] S.V. Terekhov, *Universality of synergetics laws. IV. Tsallis entropy and unextensive thermodynamics*, [In Russian] **24** (1) (2014) (24 pages).
- [2912] H.C. Videira, *The synergic entropy - An efficient frontier output derived from merged input units boosted by synergy and constrained by critical input*, preprint (2022).
- [2913] H.C. Videira, *The synergic entropy : a parametric volatility boosted by synergy among companies*, preprint (2023).
- [2914] A.R.F. Carvalho, J.M.R.S. Tavares and J.C. Principe, *A novel nonparametric distance estimator for densities with error bounds*, Entropy **15**, 1609-1623 (2013), doi:10.3390/e15051609
- [2915] B. Tamir and E. Cohen, *Logical entropy for quantum states*, preprint (2014), 1412.0616 [quant-ph].
- [2916] B. Tamir and E. Cohen, *A Holevo-type bound for a Hilbert Schmidt distance measure*, J. Quantum Information Science, **5**, 127-133 (2015).
- [2917] A.M. Kowalski, M.T. Martin and A. Plastino, *Generalized relative entropies in the classical limit*, Physica A **422**, 167-174 (2015), doi: http://dx.doi.org/10.1016/j.physa.2014.12.017
- [2918] P.D. Dixit, *Fluctuating intensive parameters at equilibrium*, preprint (2014), preprint.
- [2919] P.D. Dixit, *Detecting temperature fluctuations at equilibrium*, Phys. Chem. Chem. Phys. **17**, 13000-13005 (2015), doi: 10.1039/C5CP01423A
- [2920] I. Rasa, *Renyi entropy and Tsallis entropy associated with positive linear operators*, preprint (2014), 1412.4971 [math.CA].
- [2921] I. Rasa, *Concavity of some entropies*, preprint (2015), 1512.02364 [math.CA].
- [2922] M. Divari and D. Vivona, *A form of information entropy*, Natural Science **6**, 1282-1285 (2014), doi: http://dx.doi.org/10.4236/ns.2014.617118
- [2923] M.S. Harre, *The interactional foundations of MaxEnt: Open questions*, AIP Conference Proceedings **1636** (1), 17-23 (2014), doi: 10.1063/1.4903704.
- [2924] I. Gialampoukidis and I. Antoniou, *Entropy, age and time operator*, Entropy **17**, 407-424 (2015), doi:10.3390/e17010407
- [2925] E.P. Bento, G.M. Viswanathan, M.G.E. da Luz and R. Silva, *Third law of thermodynamics as a key test of generalized entropies*, Phys. Rev. E **91**, 022105 (2015) (7 pages).
- [2926] V. Dossetti, G.M. Viswanathan and V.M. Kenkre, *Numerical studies for an ab initio investigation into the Boltzmann prescription in statistical mechanics of large systems*, preprint (2022), 2201.02271 [cond-mat.stat-mech].
- [2927] G.B. Bagci and T. Oikonomou, *Comment on "Third law of thermodynamics as a key test of generalized entropies"*, Phys. Rev. E **92**, 016103 (2015) (2 pages).
- [2928] G.B. Bagci and T. Oikonomou, *Validity of the third law of thermodynamics for the Tsallis entropy*, Phys. Rev. E **93**, 022112 (2016) (4 pages).
- [2929] B. Canturk, T. Oikonomou and G.B. Bagci, *Group theory, entropy and the third law of thermodynamics*, Annals Physics **377**, 62-70 (2017).
- [2930] G.B. Bagci, *The third law of thermodynamics and the fractional entropies*, Phys. Lett. A **380**, 2615-2618 (2016), doi: http://dx.doi.org/10.1016/j.physleta.2016.06.010

- [2931] E.P. Bento, G.M. Viswanathan, M.G.E. da Luz and R. Silva, *Reply to “Comment on ‘Third law of thermodynamics as a key test of generalized entropies’ ”*, Phys. Rev. E **92**, 016104 (2015) (2 pages).
- [2932] G.B. Bagci, *The validity of the third law of thermodynamics for the Renyi and homogeneous entropies*, Physica A **437**, 405-407 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2015.05.115>
- [2933] I. Rasa, *Entropies and the derivatives of some Heun functions*, Applied Mathematics and Computation **268**, 422-431 (2015).
- [2934] I. Rasa, *Entropies and Heun functions associated with positive linear operators*, Applied Mathematics and Computation **268**, 422-431 (2015).
- [2935] I. Rasa, *Complete monotonicity of some entropies*, Period. Math. Hung. **75** (2), 159-166 (2017), doi: 10.1007/s10998-016-0177-5
- [2936] A.M. Acu, G. Bascanbaz-Tunca and I. Rasa, *Information potential for some probability density functions*, Applied Mathematics and Computation **389**, 125578 (2021).
- [2937] E. Hillion and O. Johnson, *A proof of the Shepp-Olkin entropy concavity conjecture*, Bernoulli **23** (4B), 3638-3649 (2017).
- [2938] E. Hillion and O. Johnson, *A proof of the Shepp-Olkin entropy monotonicity conjecture*, preprint (2018), 1810.09791 [math.PR].
- [2939] J. Ruseckas, *Canonical ensemble in non-extensive statistical mechanics*, Physica A **447**, 85-99 (2016).
- [2940] J. Ruseckas, *Canonical ensemble in non-extensive statistical mechanics, $q \neq 1$* , Physica A **458**, 210-218 (2016).
- [2941] M. Tomamichel, *Quantum Information Processing with Finite Resources - Mathematical Foundations*, preprint (2015), 1504.00233 [quant-ph].
- [2942] M. Kelbert and P. Mozgunov, *Asymptotic behaviour of weighted differential entropies in a Bayesian problem*, preprint (2015), 1504.01612 [cs.IT].
- [2943] A.L. Fradkov and D.S. Shalymov, *Speed gradient and MaxEnt principles for Shannon and Tsallis entropies*, Entropy **17**, 1090-1102 (2015), doi:10.3390/e17031090
- [2944] D.S. Shalymov and A.L. Fradkov, *Dynamics of non-stationary processes that follow the maximum of the Renyi entropy principle*, Proc. R. Soc. A **472**, 20150324 (2016) (18 pages), doi: <http://dx.doi.org/10.1098/rspa.2015.0324>
- [2945] A.L. Fradkov, D.S. Shalymov and A.V. Proskurnikov, *Speed-gradient entropy maximization in networks*, IEEE Conference on Norbert Wiener in the 21st Century (21CW), 62-66 (July 13-16, 2016, University of Melbourne, Australia).
- [2946] D.S. Shalymov and A.L. Fradkov, *Dynamics of the f -divergence minimization processes based on the speed-gradient principle*, IEEE Conference on Norbert Wiener in the 21st Century (21CW), 7-11 (July 13-16, 2016, University of Melbourne, Australia).
- [2947] D.S. Shalymov and A.L. Fradkov, *Dynamics of an escort probability-based systems which tend to maximize its Tsallis*, IFAC PapersOnLine **51-33**, 180-185 (2018).
- [2948] T.A. Khantuleva and D.S. Shalymov, *Evolution of complex nonequilibrium systems based on nonextensive statistical mechanics*, IFAC PapersOnLine **51-33**, 175-179 (2018).
- [2949] R.M. Angelo and A.D. Ribeiro, *Wave-particle duality: An information-based approach*, Found. Phys. **45**, 1407-1420 (2015), doi: 10.1007/s10701-015-9913-6
- [2950] C. Caferov, B. Kaya, R. O'Donnell and A.C. Cem Say, *Optimal bounds for estimating entropy with PMF queries*, preprint (2015).
- [2951] G.M. Bosyk, S. Zozor, F. Holik, M. Portesi and P.W. Lamberti, *A family of generalized quantum entropies: definition and properties*, preprint (2015), 1506.02090 [quant-ph].
- [2952] F. Holik, A. Plastino and M. Saenz, *Natural information measures in Cox' approach for contextual probabilistic theories*, Quantum Information and Computation **16** (1-2), 115-133 (2016).
- [2953] D. Garg and S. Kumar, *'Exponential' quantum Tsallis-Havrda-Charvat entropy of 'type α '*, preprint (2015), 1506.05557 [cs.IT].
- [2954] D. Garg and S. Kumar, *Parametric R -norm directed-divergence convex function*, Infinite Dimensional Analysis, Quantum Probability and Related Topics **19** (2), 1650014 (2016) (12 pages), doi: 10.1142/S0219025716500144
- [2955] M. Niezgoda, *Shannon like inequalities for f -connections of positive linear maps and positive operators*, Linear Algebra and its Applications **481**, 186-201 (2015).
- [2956] P. Kluza and M. Niezgoda, *Generalizations of Crooks and Lin's results on Jeffreys-Csiszar's and Jensen-Csiszar's f -divergences*, Physica A **463**, 383-393 (2016), doi: <http://dx.doi.org/10.1016/j.physa.2016.07.062>
- [2957] P.A. Kluza and M. Niezgoda, *On Csiszar and Tsallis type f -divergences induced by superquadratic and convex functions*, Mathematical Inequalities and Applications **21** (2), 455-467 (2018).

- [2958] M. Niezgodna, *Further results on positively homogeneous subadditive functions by using Csiszar f -divergence*, Aequat. Math. (2024).
- [2959] K. Zografos, *On reconsidering entropies and divergences and their cumulative counterparts: Csiszar's, DPD's and Fisher's type cumulative and survival measures*, Probability in the Engineering and Informational Sciences (2022) (28 pages), doi: 10.1017/S0269964822000031
- [2960] P.A. Kluza, *On Jensen-Renyi and Jeffreys-Renyi type f -divergences induced by convex functions*, Physica A **548**, 122527 (2020).
- [2961] H. Isa, M. Ito, E. Kamei, H. Tohyama and M. Watanabe, *Expanded relative operator entropies and operator valued α -divergence*, J. Mathematics and System Science **5**, 215-224 (2015) D doi: 10.17265/2159-5291/2015.06.001
- [2962] M.M. Sati and N. Gupta, *Some characterization results on dynamic cumulative residual Tsallis entropy*, J. Probability and Statistics, Article 694203 (2015) (8 pages), doi: <http://dx.doi.org/10.1155/2015/694203>
- [2963] M.M. Sati and H. Singh, *Bivariate dynamic cumulative residual Tsallis entropy*, J. Appl. Math. and Informatics **35** (1-2), 45-58 (2017), doi: 10.14317/jami.2017.045
- [2964] J.M. Amigo, K. Keller and V.A. Unakafova, *On entropy, entropy-like quantities, and applications*, Discrete and Continuous Dynamical Systems Series B **20** (10), 3301-3343 (2015), doi:10.3934/dcdsb.2015.20.3301
- [2965] S.A. Sepulveda-Fontaine and J.M. Amigo, *Applications of entropy in data analysis and machine learning: A review*, Entropy **26**, 1126 (2024).
- [2966] S. Yang and P. Plebani, *A quantitative privacy evaluation method based on Tsallis entropy for trustworthy data sharing*, Lecture Notes in Computer Science **15547**, 131-145 (Springer, 2025).
- [2967] J.M. Amigo, S.G. Balogh and S. Hernandez, *A brief review of generalized entropies*, Entropy **20**, 813 (2018), doi: 10.3390/e20110813
- [2968] S. Jackle and K. Keller, *Tsallis entropy and generalized Shannon additivity*, Axioms **6**, 14 (2017) (9 pages), doi:10.3390/axioms6020014
- [2969] O. Johnson, *Entropy and thinning of discrete random variables*, preprint (2015), 1510.05390 [math.PR].
- [2970] G. Livadiotis, *Non-Euclidean-normed statistical mechanics*, Physica A **445**, 240-255 (2016), doi: <http://dx.doi.org/10.1016/j.physa.2015.11.002>
- [2971] G. Livadiotis, *Derivation of the entropic formula for the statistical mechanics of space plasmas*, Nonlin. Processes Geophys. (2017), in press.
- [2972] A. Singh, A.K. Singh and P. Kumar, *Generalized Kappa distribution function for mixed fermion-boson quantum plasmas*, preprint (2025), Arxiv 2505.10934
- [2973] G. Livadiotis and D.J. McComas, *Universality of kappa distributions*, EPL **146**, 41003 (2024).
- [2974] G. Livadiotis and D.J. McComas, *What defines stationarity in space plasmas*, preprint (2025), arxiv 2502.13168
- [2975] D.J. McComas, G. Livadiotis and N.V. Sarlis, *Correlations and Kappa distributions: Numerical experiment and physical understanding*, Entropy **27**, 375 (2025).
- [2976] E. Gravanis, E. Akylas and G. Livadiotis, *Physical meaning of temperature in superstatistics*, EPL **130**, 30005 (2020).
- [2977] A.N. Hatzinikitas, *Self-similar solutions of Renyi's entropy and the concavity of its entropy power*, Entropy **17**, 6056-6071 (2015), doi:10.3390/e17096056
- [2978] S. Tahmasebi and A.A. Jafari, *Information measures for weighted distributions of exp-G family*, (2015), doi: <http://www.researchgate.net/publication/281373628>
- [2979] C. Subramanian and A.A. Rather, *Weighted exponentiated Mukherjee-Islam distribution*, Internat. J. Management, Technology and Engineering **8**, Issue XI,1328-1339 (2018).
- [2980] A.A. Rather and C. Subramanian, *Length biased Sushila distribution*, Universal Review **7** (XII), 1010-1023 (2018).
- [2981] A.A. Rather and C. Subramanian, *On weighted Sushila distribution with properties and its applications*, Internat. J. of Scientific Research in Mathematical and Statistical Sciences **6** (1),105-117 (2019), doi: 10.26438/ijrms/v6i1.105117
- [2982] A.A. Rather and C. Subramanian, *Exponentiated Ishita distribution: Properties and applications*, Internat. J. Management, Technology and Engineering **9** (5), (2019).
- [2983] A.A. Rather and C. Subramanian, *The length-biased Erlang-truncated exponential distribution with life time data*, preprint (2019).
- [2984] Y.Y. Abdelall, *Statistical properties of a generalization Erlang truncated exponential distribution with applications and its bivariate extension*, Computational Journal of Mathematical and Statistical Sciences **3** (2), 258-279 (2024).

- [2985] C. Subramanian and A.A. Rather, *Exponentiated power distribution: Properties and estimation*, Science, Technology and Development **8** (9), 213-223 (2019).
- [2986] A.A. Rather and G. Ozel, *The weighted power Lindley distribution with applications on the life time data*, Pak. j. stat. oper. res. **16** (2), 225-237 (2020), doi: 10.18187/pjsor.v16i2.2931
- [2987] A.A. Rather, M. Azeem, M. Alam, C. Subramanian, G. Ozel and I. Ali, *Weighted Erlang-Truncated exponential distribution: System reliability optimization, structural properties, and simulation*, Lobachevskii Journal of Mathematics **45** (9), 4311-4337 (2024).
- [2988] P.J. Coles, M. Berta, M. Tomamichel and S. Wehner, *Entropic uncertainty relations and their applications*, Rev. Mod. Phys. **89** (2017).
- [2989] F. Balibrea, *On the origin and development of some notions of entropy*, Topol. Algebra Appl. **3**, 57-74 (2015), doi: 10.1515/taa-2015-0006
- [2990] N.P. Shah, *Entropy maximisation and queues with or without balking*, Doctor Thesis (School of Electrical Engineering and Computer Science Faculty of Engineering and Informatics, University of Bradford, 2014).
- [2991] R.W. Ibrahim, H.A. Jalab and A. Gani, *Cloud entropy management system involving a fractional power*, Entropy **18**, 14 (2016) (11 pages), doi:10.3390/e18010014
- [2992] R.W. Ibrahim, H.A. Jalab and A. Gani, *Entropy solution of fractional dynamic cloud computing system associated with finite boundary condition*, Boundary Value Problems **2016**, 94 (2016) (12 pages), doi: 10.1186/s13661-016-0602-y
- [2993] R.W. Ibrahim, *On a class of analytic functions generated by fractional integral operator*, Concr. Oper. **4**, 1-6 (2017), doi: 10.1515/conop-2017-0001
- [2994] R.W. Ibrahim, *On new classes of analytic functions imposed via the fractional entropy integral operator*, Facta Universitatis (Nis), Ser. Math. Inform. **32** (3), 293-302 (2017), doi: 10.22190/FUMI1703293I
- [2995] H.K. Nashine and R.W. Ibrahim, *Solvability of a fractional Cauchy problem based on modified fixed point results of non-compactness measures*, AIMS Mathematics **4** (3), 847-859 (2019), doi: 10.3934/math.2019.3.847
- [2996] H. Li, *Nonsymmetric dependence measures: the discrete case*, preprint (2015), arxiv 1512.07945.
- [2997] G. Sicuro, D. Bagchi and C. Tsallis, *On the connection between linear combination of entropies and linear combination of extremizing distributions*, Phys. Lett. A **380**, 2025-2030 (2016), doi: http://dx.doi.org/10.1016/j.physleta.2016.03.033
- [2998] Y. Sakai and K. Iwata, *Extremal relations between Shannon entropy and l_α -norm*, Proc. 2016 International Symposium on Information Theory and its Applications (ISITA 2016), 428-432 (2016).
- [2999] Y. Sakai and K. Iwata, *Relations between conditional Shannon entropy and expectation of l_α -norm*, IEEE International Symposium on Information Theory, 1641-1645 (2016).
- [3000] Y. Sakai, *Generalized Fano-type inequality for countably infinite systems with list-decoding*, preprint (2018), 1801.02876 [cs.IT].
- [3001] A. Plastino, M.C. Rocca and F. Pennini, *Troublesome aspects of the Renyi-MaxEnt treatment*, Phys. Rev. E **94** (1), 012145 (2016), 1602.02696 [cond-mat.stat-mech].
- [3002] T. Oikonomou and G.B. Bagci, *Comment on "Troublesome aspects of the Renyi-MaxEnt treatment"*, Phys. Rev. E **96**, 056101 (2017).
- [3003] A. Plastino, M.C. Rocca and F. Pennini, *Reply to "Comment on 'Troublesome aspects of the Renyi-MaxEnt treatment'"*, Phys. Rev. E **96**, 056102 (2017).
- [3004] G. Sonnino and G. Steinbrecher, *Numerical stability of generalized entropies*, preprint (2016), 1603.06240 [physics.data-an].
- [3005] H. Li, *A true measure of dependence*, MPRA-Munich Personal RePEc Archive, Paper No. 69735 (2016).
- [3006] J. Zhou, *Information theory and statistical mechanics revisited*, preprint (2016), 1604.08739 [math-ph].
- [3007] Y. Sakai and K. Iwata, *Sharp bounds between two Renyi entropies of distinct positive orders*, preprint (2016), 1605.00019 [cs.IT].
- [3008] M.S. Tabass, G.R.M. Borzadaran and M. Amini, *Renyi entropy in continuous case is not the limit of discrete case*, Mathematical Sciences and Applications e-Notes **4** (1), 113-117 (2016).
- [3009] M. Gerlach, F. Font-Clos and E.G. Altmann, *Similarity of symbol frequency distributions with heavy tails*, Phys. Rev. X **6**, 021009 (2016) (13 pages).
- [3010] E.G. Altmann, *Generalized entropies and the similarity of texts*, preprint (2016), 1611.03596 [physics.soc-ph].
- [3011] E.G. Altmann, L. Dias and M. Gerlach, *Generalized entropies and the similarity of texts*, J. Stat. Mech. **014002** (2017) (13 pages).
- [3012] S. Dey, S.S. Maiti and M. Ahmad, *Comparison of different entropy measures*, Pakistan J. Statistics **32** (2), 97-108 (2016).

- [3013] Y. Li, J. Fang and Q. Liu, *Relationship between entropy and hybrid ratios for unified hybrid network with variable speed growth*, Journal of Shanghai Normal University (Natural Sciences) **45** (3), 298-304 (2016), doi: 10.3969/J.1SSN.100-5137.2016.03.004
- [3014] Y. Li, J. Fang and Q. Liu, *An entropy approach to complexity of networks generated with the unified hybrid network model: Complexity of complex systems*, [in Chinese], Science and Technology Review **35** (14), 56-62 (2017).
- [3015] T. Wen and W. Jiang, *Measuring the complexity of complex network by Tsallis entropy*, Physica A **526**, 121054 (2019).
- [3016] A. Ramirez-Arellano, L.M. Hernandez-Simon and J. Bory-Reyes, *A box-covering Tsallis information dimension and non-extensive property of complex networks*, Chaos, Solitons and Fractals **132**, 109590 (2020).
- [3017] S.B. Carvalho, *Alternative Fractal Indices to the Box-Counting Dimension : Information and Gap Dimension*, Thesis (Program in Biosystems Modeling and Simulation, State University of Bahia, Alagoinhas, Brazil, 2024).
- [3018] X. Chen, J. Zhou, Z. Liao, S. Liu and Y. Zhang, *A novel method to rank influential nodes in complex networks based on Tsallis entropy*, Entropy **22**, 848 (2020), doi: 10.3390/e22080848
- [3019] O.K. Kazemi and S.M. Taheri, *Entropy of spatial network with applications to non-extensive statistical mechanics*, preprint (2025), 2502.13225 [cond-mat.stat-mech].
- [3020] D.H.G. Duarte, P.D.S. de Lima and J.M. de Araujo, *Outlier-resistant physics-informed neural network*, Phys. Rev. E - Letter **111**, L023302 (2025).
- [3021] R.G. James and J.P. Crutchfield, *Multivariate dependence beyond Shannon information*, Entropy **19**, 531 (2017) (15 pages), doi: 10.3390/e19100531
- [3022] W.S. Chung, *On the $\mu(\beta)$ -deformed statistical physics*, preprint (2016).
- [3023] G. Toscani, *Diffusion equations and entropy inequalities*, preprint (2016).
- [3024] F. Fidaleo and S. Viaggiu, *A proposal for the thermodynamics of certain open systems*, Physica A **468**, 677-690 (2017).
- [3025] R. Rychtarikova, J. Korbelt, P. Machacek, P. Casar, J. Urban and D. Stys, *Point information gain and multidimensional data analysis*, Entropy **18**, 372 (2016) (16 pages), doi:10.3390/e18100372
- [3026] G. Rajesh and S.M. Sunoj, *Some properties of cumulative Tsallis entropy of order α* , Stat. Papers (2016), doi: 10.1007/s00362-016-0855-7
- [3027] I.V. Toranzo, S. Zozor and J.M. Brossier, *Generalization of the de Bruijn's identity to general Φ -entropies and Φ -Fisher informations*, preprint (2016), 1611.09400 [cs.IT].
- [3028] F. Pavese, *On the definition of the measurement unit for extreme quantity values: Some considerations on the case of temperature and the Kelvin scale*, arxiv 1612.07161.
- [3029] J.I. Fujii and Y. Seo, *Tsallis relative operator entropy with negative parameters*, Adv. Oper. Theory **1** (2), 219-235 (2016).
- [3030] Y. Seo, *On the quantum Tsallis relative entropies : Based on developmental thinking* [In Japanese], (2023).
- [3031] A. Ramirez Arellano, J. Bory Reyes and L.M. Hernandez Simon, *Shannon's entropy, the saga continues*, So Congreso Internacional de Ingenieria, CIIES (2016).
- [3032] D.P.K. Ghikas and F.D. Oikonomou, *Towards an information geometric characterization/classification of complex systems. I. Use of generalized entropies*, Physica A **496**, 384-398 (2018).
- [3033] D.P.K. Ghikas and F.D. Oikonomou, *Towards an information geometric characterization/classification of complex systems. II. Critical parameter values from the (c,d) -manifold*, Physica A **510**, 365-374 (2018).
- [3034] D.P.K. Ghikas, *From complexity to information geometry and beyond*, Nonlinear Phenomena in Complex Systems **23** (2), 212-220 (2020).
- [3035] J. Yang, G.I. Choudhary, S. Rahardja and P. Franti, *Classification of interbeat interval time-series using attention entropy*, IEEE Transactions on Affective Computing (2020).
- [3036] A. Squicciarini, E.V. Toranzo and A. Zarzo, *A time-series feature-extraction methodology based on multiscale overlapping windows, adaptive KDE, and continuous entropic and information functionals*, Mathematics **12**, 2396 (2024).
- [3037] A. Squicciarini, T. Trigano and D. Luengo, *Jensen-Tsallis divergence for supervised classification under data imbalance*, Machine Learning **114**, 162 (2025).
- [3038] A. Plastino and M.C. Rocca, *On the nature of the correlations induced by entropic non additivity*, preprint (2017), 1701.03525 [cond-mat.stat-mech].
- [3039] A. Plastino and M.C. Rocca, *Hidden correlations entailed by q-non additivity render the q-monoatomic gas highly non trivial*, **490**, 50-58 (2018).

- [3040] S. Davis and G. Gutierrez, *Emergence of Tsallis statistics as a consequence of invariance*, Physica A **533**, 122031 (2019).
- [3041] G.L. Ferri, A. Plastino, M.C. Rocca and D.J. Zamora, *A first order Tsallis theory*, Eur. Phys. J. B **90**, 46 (2017) (7 pages), doi: 10.1140/epjb/e2017-70699-1
- [3042] D.J. Zamora, M.C. Rocca, A. Plastino and G.L. Ferri, *q-Statistical mechanics of phase-space curves*, preprint (2017), 1704.03570 [cond-mat.stat-mech].
- [3043] D.J. Zamora, M.C. Rocca, A. Plastino and G.L. Ferri, *Verlinde's emergent gravity in an n-dimensional, non-additive Tsallis' scenario*, Physica A **506**, 1050-1059 (2018), doi: 10.1016/j.physa.2018.05.031
- [3044] D.J. Zamora, *No extensividad en Fisica: ecuaciones cuanticas no lineales y mecanica estadistica de la gravitacion*, Doctor Thesis (Departamento de Fisica, Facultad de Ciencias Exactas, Universidad Nacional de La Plata, 2020).
- [3045] L. Calderon, M.T. Martin, A. Plastino, M.C. Rocca and V. Vampa, *Relativistic treatment of Verlinde's emergent force in Tsallis' statistics*, Mod. Phys. Lett. A **34** (10), 1950075 (2019).
- [3046] A. Plastino and M.C. Rocca, *On the entropic derivation of the r^{-2} Newtonian gravity force*, Physica A **505**, 190-195 (2018).
- [3047] A. Plastino and M.C. Rocca, *Quantum treatment of Verlinde's conjecture in a Tsallis framework*, Physica A **517**, 341-348 (2019).
- [3048] K. Abbasi and S. Gharaati, *A Tsallisian universe*, preprint (2020), 2006.01763 [gr-qc].
- [3049] G.B. Bagci and T. Oikonomou, *Looking at the Tsallis entropy in the eye*, Communication at the 14th Joint European Thermodynamics Conference (Budapest, May 21-25, 2017).
- [3050] D. Ellerman, *What can (partition) logic contribute to information theory?*, preprint (2017).
- [3051] D. Ellerman, *New Foundations for Information Theory - Logical Entropy and Shannon Entropy*, SpringerBriefs in Philosophy (2021).
- [3052] L. Truffet, *Shannon entropy reinterpreted*, Reports on Mathematical Physics **81** (3), 303-319 (2018).
- [3053] B. Allen, B.C. Stacey and Y. Bar-Yam, *Multiscale information theory and the marginal utility of information*, Entropy **19**, 273 (2017) (38 pages), doi: 10.3390/e19060273
- [3054] H. Li, H. Shen and B. Yang, *A mechanism producing power law etc. distributions*, AIP Conference Proceedings **1863**, 100004 (2017) (4 pages), doi: 10.1063/1.4992280
- [3055] N. Flores-Gallegos, *Generalized Shannon's entropies in position and momentum spaces*, J. Theor. Comput. Chemistry **16** (6), 1750051 (2017) (17 pages), doi: 10.1142/S0219633617500511
- [3056] N. Flores-Gallegos, *A possible generalization Shannon's entropy using q-calculus*, J. Mathematical Chemistry (2022), doi: 10.1007/s10910-022-01394-z
- [3057] I.B. Israfil, *Analysis simulation of interaction information in chaotic systems of fractional order*, Internat. J. Engineering and Applied Sciences (IJEAS) **4** (6) (June 2017).
- [3058] J. Li and H. Cao, *A new generalization of von Neumann relative entropy*, Int. J. Theor. Phys. (2017) (20 pages), doi: 10.1007/s10773-017-3503-7
- [3059] G. Chliamovitch, *Information theory and maximum entropy principles in non-equilibrium statistical physics*, Doctor Thesis (Universite de Geneve, 2017), doi: 10.13097/archive-ouverte/unige:96244
- [3060] L. Hatton and G. Warr, *Information Theory and the Length Distribution of all Discrete Systems*, preprint (2017).
- [3061] J. Chen, T. Liu, Z. Huang and G. Su, *Probability distribution function of complex systems*, Internat. J. Mod. Phys. B **31**, 1850022 (2017) (8 pages), doi: 10.1142/S0217979218500224
- [3062] V. Patrascu, *Shannon entropy for imprecise and under-defined or over-defined information*, 25th Conference on Applied and Industrial Mathematics, CAIM 2017 (Iasi, Romania, September 14-17, 2017), 1709.04729 [cs.IT].
- [3063] S.M. Panjehkeh, G.R.M. Borzadaran and M. Amini, *Results related to exponential entropy*, Internat. J. Information and Coding Theory **4** (4) (2017).
- [3064] L. Wondie and S. Kumar, *A joint representation of Renyi's and Tsallis' entropy with application in coding theory*, Internat. J. Mathematics and Mathematical Sciences, 2683293 (2017) (5 pages), doi: doi.org/10.1155/2017/2683293
- [3065] L. Wondie and S. Kumar, *Some inequalities in information theory using Tsallis entropy*, Internat. J. Mathematics and Mathematical Sciences, 2861612 (2018).
- [3066] P. Appel, M. Huber and C. Klockl, *Monogamy of correlations and entropy inequalities in the Bloch picture*, J. Phys. Commun. **4**, 025009 (2020).
- [3067] A.H. Khammar and S.M.A. Jahanshahi, *Quantile based Tsallis entropy in residual lifetime*, Physica A **492**, 994-1006 (2018).

- [3068] E. Sciubba and F. Zullo, *A novel derivation of the time evolution of the entropy for macroscopic systems in thermal non-equilibrium*, Entropy **19**, 594 (2017) (18 pages), doi:10.3390/e19110594
- [3069] A. Di Vita, *Exponential or power law? How to select a stable distribution of probability in a physical system*, preprint (2017), 1711.07811 [physics.class-ph].
- [3070] R.A.P. Perdigao, *Polyadic entropy, synergy and redundancy among statistically independent processes in nonlinear statistical physics with microphysical codependence*, preprint (2017), 1712.02265 [cs.IT].
- [3071] D.G. Moore, G. Valentini, S.I. Walker and M. Levin, *Inform: A toolkit for information-theoretic analysis of complex systems*, preprint (2017).
- [3072] M. Weilenmann and R. Colbeck, *Analysing causal structures with entropy*, Proc. R. Soc. A **473**, 20170483 (2017), doi: <http://dx.doi.org/10.1098/rspa.2017.0483>
- [3073] S.G. Tzafestas, *Energy II: Thermodynamics*, in *Energy, Information, Feedback, Adaptation, and Self-organization*, Intelligent Systems, Control and Automation: Science and Engineering **90** (2018, Springer, Cham).
- [3074] M. Lu, Z. Huang, Z. Tian, Y. Zhao, X. Fei and D. Li, *Meta-Tsallis-entropy minimization: A new self-training approach for domain adaptation on text classification*, preprint (2023), 2308.02746v1 [cs.CL].
- [3075] H. Liu, J. Wang and M. Long, *Cycle self-training for domain adaptation*, preprint (2021), 2103.03571 [cs.LG].
- [3076] J.E. Gray and S.R. Addison, *Generalized extensivity, generalized superposition and the principle of parsimony*, Washington Academy of Sciences (2017) (18 pages).
- [3077] A. Plastino and M.C. Rocca, *Information management in MaxEnt variational treatments*, preprint (2018).
- [3078] A. Barar, G.R. Mocanu and I. Rasa, *Bounds for some entropies and special functions*, Carpathian J. Mathematics **34** (1), 9-15 (2018).
- [3079] L.S. Lima, *Expression of some special functions through q-exponentials of the nonadditive statistical mechanics*, J. Mod. Phys. **11**, 81-90 (2020).
- [3080] N. Mukherjee and A.K. Roy, *Information-entropic measures in free and confined hydrogen atom*, Internat. J. Quantum Chem. **118** (14) (2018), doi: 10.1002/qua.25596
- [3081] S. Majumdar, N. Mukherjee and A.K. Roy, *Information entropy and complexity measure in generalized Kratzer potential*, Chem. Phys. Lett. **716**, 257-264 (2019), doi: 10.1016/j.cplett.2018.12.032
- [3082] R. Lahkar, S. Mukherjee and S. Roy, *Generalized perturbed best response dynamics with a continuum of strategies*, J. Economic Theory (2021), in press, doi: 10.1016/j.jet.2021.105398
- [3083] M. Jauregui, L. Zunino, E.K. Lenzi, R.S. Mendes and H.V. Ribeiro, *Characterization of time series via Renyi complexity-entropy curves*, Physica A **498**, 74-85 (2018).
- [3084] T.N. Sequeira, P.M. Gil and O. Afonso, *Endogenous growth and entropy*, J. Economic Behavior and Organization **154**, 100-120 (2018).
- [3085] A. Plastino, A.R. Plastino and M.C. Rocca, *Reciprocity relations and generalized entropic quantifiers that lack trace-form*, preprint (2018).
- [3086] J.S. Kim, *Hamming weight and tight constraints of multi-qubit entanglement in terms of unified entropy*, Scientific Reports (2018) **8**, 12245 (2018), doi: 10.1038/s41598-018-30766-2
- [3087] Y.Y. Ren, Z.X. Wang and S.M. Fei, *Tighter constraints on multiqubit entanglement in terms of unified entropy*, Laser Physics Letters **18**, 115204 (2021).
- [3088] H.M. Reji, H.S. Hegde and R. Prabhu, *Conditions for separability in multiqubit systems with an accelerating qubit using a conditional entropy*, Phys. Rev. A **110**, 032403 (2024).
- [3089] J. He, B. Wang and S. Fu, *Characterization of stabilizer states and magic states in terms of Tsallis and Renyi entropies for qubit systems*, Phys. Scr. **100**, 015115 (2025).
- [3090] T. De Wet and F. Sterreicher, *A note on extended Arimoto's entropies*, South African Statistical J. **51** (2), 285-294 (2017).nuclei
- [3091] S. Yu and T.Z. Huang, *The unifying frameworks of information measures*, Mathematical Problems in Engineering 1791954 (2018) (16 pages), doi: 10.1155/2018/1791954
- [3092] M. Portesi, F. Holik, P.W. Lamberti, G.M. Bosyk, G. Bellomo and S. Zozor, *Generalized entropies in quantum and classical statistical theories*, Eur. Phys. J. Special Topics **227**, 335-344 (2018).
- [3093] S. Koltcov, *Application of Renyi and Tsallis entropies to topic modeling optimization*, Physica A **512**, 1192-1204 (2018).
- [3094] S. Koltcov, *Application of duality properties of Renyi entropy for parameter tuning in an unsupervised machine learning task*, International Conference on Applied Informatics ICAI 2022: Applied Informatics, 189-203 (2022).
- [3095] Y. Wu, P. Shang and Y. Li, *Modified generalized multiscale sample entropy and surrogate data analysis for financial time series*, Nonlinear Dyn. **92** (3), 1335-1350 (2018), doi: 10.1007/s11071-018-4129-x

- [3096] M.C. Pardo, Q. Zhao, H. Jin and Y. Lu, *Evaluation of surrogate endpoints using information-theoretic measure of association based on Havrda and Charvat entropy*, Mathematics **10**, 465 (2022).
- [3097] P. Zhao, J. Pan, Q. Yue and J. Zhang, *Pricing of financial derivatives based on the Tsallis statistical theory*, Chaos, Solitons and Fractals **142**, 110463 (2021).
- [3098] C. Tsallis and E.P. Borges, *Comment on “Pricing of financial derivatives based on the Tsallis statistical theory” by Zhao, Pan, Yue and Zhang*, Chaos, Solitons and Fractals **148**, 111026 (2021).
- [3099] S. Chen, P. Shang and Y. Wu, *Generalized entropy plane based on large deviations theory for financial time series*, Applied Mathematics and Computation **365**, 124719 (2020).
- [3100] B. Shang and P. Shang, *Binary indices of time series complexity measures and entropy plane*, Physica A **558**, 125003 (2020), doi: 10.1016/j.physa.2020.125003
- [3101] B. Shang and P. Shang, *Multivariate synchronization curve: A measure of synchronization in different multivariate signals*, Chaos **31**, 123121 (2021), doi: 10.1063/5.0064807
- [3102] E.M.F. Curado and F.D. Nobre, *Equilibrium states in two-temperature systems*, Entropy **20**, 183 (2018), doi:10.3390/e20030183
- [3103] D.V. Anghel and A.S. Parvan, *The statistics of mesoscopic systems and the physical interpretation of extensive and non-extensive entropies*, J. Phys. A: Math. Theor. **51**, 445002 (2018) (17 pages).
- [3104] K. Okamura, *On nested diversities and novel correlation-based entropies*, preprint (2018), 1804.02454 [q-bio.QM].
- [3105] K. Okamura, *Affinity-based extension of non-extensive entropy and statistical mechanics*, Physica A **557**, 124849 (2020), doi: 10.1016/j.physa.2020.124849
- [3106] S.M.A.T. Bafghi, M. Kamalvand, A. Morsali and M.R. Bozorgmehr, *Radial distribution function within the framework of the Tsallis statistical mechanics*, Physica A **506**, 857-867 (2018), doi: 10.1016/j.physa.2018.04.107
- [3107] J.S. Canovas, G. Garcia-Clemente and M. Munoz-Guillermo, *Comparing permutation entropy functions to detect structural changes in time series*, Physica A **507**, 153-174 (2018).
- [3108] M. Asano, I. Basieva, E.M. Pothos and A. Khrennikov, *State entropy and differentiation phenomenon*, Entropy **20**, 394 (2018), doi: 10.3390/e20060394
- [3109] X. Fang and Y. Lao, *Preservers for the Tsallis entropy of convex combinations of density operators*, Advances in Mathematical Physics, ID 5296085 (2018) (10 pages), doi: 10.1155/2018/5296085
- [3110] M. Asadian and A. Ebrahimzadeh, *On local Tsallis entropy of relative dynamical systems*, Reports Mathematical Physics **81** (3) (2018) (21 pages).
- [3111] F.T. Varela, *Propiedades del estimador de la entropia de permutacion y su aplicacion en problemas de ingenieria*, Tesis de Doctorado en Ingenieria (2018, Instituto Tecnologico de Buenos Aires).
- [3112] R. Joshi and S. Kumar, *A new weighted (α, β) -norm information measure with application in coding theory*, Physica A **510**, 538-551 (2018).
- [3113] R. Joshi and S. Kumar, *Jensen-Tsallis’ intuitionistic fuzzy divergence measure and Its applications in medical analysis and pattern recognition*, Internat. J. Uncertainty, Fuzziness and Knowledge-Based Systems **27** (1), 145-169 (2019), doi: 10.1142/S0218488519500077
- [3114] R. Joshi, *A new multi-criteria decision-making method based on intuitionistic fuzzy information and its application to fault detection in a machine*, Journal of Ambient Intelligence and Humanized Computing (2019) (15 pages), doi: doi.org/10.1007/s12652-019-01322-1
- [3115] R. Joshi, *A new picture fuzzy information measure based on Tsallis-Havrda-Charvat concept with applications in presaging poll outcome*, Computational and Applied Mathematics **39**, 71 (2020), doi: doi.org/10.1007/s40314-020-1106-z
- [3116] R. Kadian and S. Kumar, *A new picture fuzzy divergence measure based on Jensen-Tsallis information measure and its application to multicriteria decision making*, Granular Computing (2021).
- [3117] Y. Wang and K. Hutter, *Phenomenological thermodynamics of irreversible processes*, Entropy **20**, 479 (2018), doi: doi:10.3390/e20060479
- [3118] G. Livadiotis, *Thermodynamic origin of kappa distributions*, EPL/Perspective **122**, 50001 (2018), doi: 10.1209/0295-5075/122/50001
- [3119] G. Livadiotis and D.J. McComas, *Physical correlations lead to kappa distributions*, Astrophysical J. **940**, 83 (2022).
- [3120] G. Livadiotis and D.J. McComas, *Transport equation of kappa distributions in the heliosphere*, Astrophys. J. **954**, 72 (2023).
- [3121] E. Gravanis, E. Akylas and G. Livadiotis, *Stochastic dynamics and superstatistics of the many-particle kappa distribution*, J. Stat. Mech. 053201 (2021).

- [3122] S. Zenitani and S. Nakano, *Loading a relativistic Kappa distribution in particle simulations*, Phys. Plasmas **29**, 113904 (2022).
- [3123] D. Summers and R. Tang, *Influence of Kappa distributions on the Whistler mode instability*, J. Geophysical Research: Space Physics **126** (1), e2020JA028276 (2021).
- [3124] G. Livadiotis, *Kappa distributions: Statistical physics and thermodynamics of space and astrophysical plasmas*, Universe **4**, 144 (2018) (19 pages, doi:10.3390/universe4120144)
- [3125] G. Livadiotis, *Rankine-Hugoniot shock conditions for space and astrophysical plasmas described by kappa distributions*, Astrophys. J. **886**, 3 (2019).
- [3126] A.R. Plastino, A. Plastino and M. C. Rocca, *Features of constrained entropic functional variational problems*, Modern Phys. Lett. B **32** (23), 1850267 (2018), doi: 10.1142/S0217984918502676
- [3127] Y. Khmou, *A statistical study of binary sequence*, Advanced Science Technology Lett. **151**, 36-42 (2018).
- [3128] J.D. Ramshaw, *Supercanonical probability distributions*, Phys. Rev. E **98**, 020103(R) (2018).
- [3129] J.D. Ramshaw, *Maximum entropy and constraints in composite systems*, Phys. Rev. E **105**, 024138 (2022).
- [3130] D. Markechova and B. Riecan, *Tsallis entropy of product MV-algebra dynamical systems*, Entropy **20**, 589 (2018), doi: 10.3390/e20080589
- [3131] S. Gadetska, V. Dubnitskiy and A.Kobulin, *Parametric elasticity of entropy of Shannon, Tsallis and Renyi*, 61-66 (2018), doi: 10.26906/SUNZ.2018.3.061
- [3132] A. Plastino, A.R. Plastino and M.C. Rocca, *Reciprocity relations and generalized, classic entropic quantifiers that lack trace-form*, Physica A **515**, 346-354 (2019).
- [3133] W. Xia, *Partial monotonicity of entropy revisited*, Statistics and Probability Letters **145**, 248-253 (2019).
- [3134] E.M.F. Curado, F.D. Nobre and A. Plastino, *Associating an entropy with power-law frequency of events*, Entropy **20**, 940 (2018), doi: 10.3390/e20120940
- [3135] K.H. Hoffmann, K. Kulmus, C. Essex and J. Prehl, *Between waves and diffusion: Paradoxical entropy production in an exceptional regime*, Entropy **20**, 881 (2018), doi: 10.3390/e20110881
- [3136] O. Olendski, *Renyi and Tsallis entropies: three analytic examples*, European J. Phys. **40** (2), 025402 (2019).
- [3137] O. Olendski, *Quantum information measures of the Aharonov-Bohm ring in uniform magnetic fields*, Phys. Lett. A (2019), in press, doi: 10.1016/j.physleta.2018.12.040
- [3138] O. Olendski, *Renyi and Tsallis entropies of the Aharonov-Bohm ring in uniform magnetic fields*, Entropy **21**, 1060 (2019).
- [3139] O. Olendski, *One-dimensional pseudoharmonic oscillator: classical remarks and quantum-information theory*, preprint (2023), 2304.06428 [quant-ph].
- [3140] P. Ghosh and D. Nath, *Localization effect on Renyi complexity of Kratzer potential in the presence of Aharonov-Bohm field*, Internat. J. Quantum Chemistry (2020) (19 pages), doi: 10.1002/qua.26461
- [3141] Y.F. Chang, *Self-organization, critical phenomena, entropy decrease in isolated systems and its tests*, preprint (2018).
- [3142] R.V. Ramos, *Disentropy, disentanglement measure and the Lambert-Tsallis W_q function*, preprint (2018).
- [3143] R.V. Ramos, *Solving the Fermat and Fibonacci equations with the Lambert-Tsallis W_q function*, preprint (2023).
- [3144] S.T. de Oliveira, J.S. de Andrade, G.L. de Oliveira and R.V. Ramos, *Applications of disentropy in the analysis of randomness generated by quantum random number generators*, Quantum Information Processing **24**, 73 (2025).
- [3145] J.L.E. da Silva, *Geometric relations in Classical and Quantum Information Theory using the Lambert-Tsallis $W_q(x)$ function*, Journal of Computational and Applied Mathematics (2023), in press.
- [3146] J.L.E. da Silva, *Applications of the Lambert-Tsallis W_q function in graph theory and quantum networks*, preprint (2024).
- [3147] V.F. Guedes, K.Z. Nobrega and R.V. Ramos, *Analytical results for space charge limited current using Lambert-Tsallis W_q function*, GIQ Letters (2022).
- [3148] V.F. Guedes, K.Z. Nobrega and R.V. Ramos, *Analytical solution of the space charge limited current using Lambert-Tsallis W_q function*, IEEE Transactions on Electron Devices (2022).
- [3149] J.S. de Andrade, K.Z. Nobrega, J.B.R. Silva and R.V. Ramos, *Eavesdropping detection without using error rate: The disentropy-based quantum key distribution*, preprint (2023).
- [3150] G.S. Castro and R.V. Ramos, *Detecting eavesdropping activities in BB84 quantum key distribution protocol using the disentropy of the autocorrelation*, preprint (2020).
- [3151] G.S. Castro and R.V. Ramos, *Enhancing eavesdropping detection in quantum key distribution using disentropy measure of randomness*, Quantum Information Processing **21**, 79 (2022), doi: 10.1007/s11128-022-03422-y

- [3152] T. Kobayashi, *q*-VAE for disentangled representation learning and latent dynamical systems, preprint (2020), 2003.01852 [cs.LG].
- [3153] R.V. Ramos, *Quantum and classical information theory with disentropy*, preprint (2019).
- [3154] R.V. Ramos, *Transcendental numbers and the Lambert-Tsallis function*, preprint (2020).
- [3155] F.V. Mendes, C. Lima and R.V. Ramos, *Applications of the Lambert-Tsallis W_q function in quantum photonic Gaussian boson sampling*, preprint (2022).
- [3156] J.L.E. da Silva and R.V. Ramos, *Calculation of the disentropy of the Wigner function using the Lambert-Tsallis W_q function with non-integer q values*, J. Optical Society of America B **37** (7), 2035 (2020)., doi: doi.org/10.1364/JOSAB.390323
- [3157] J.L.E. da Silva, D.C. Souza and R.V. Ramos, *Bounds for disentropy of the Wigner function*, Quantum Information Processing **24**, 45 (2025).
- [3158] P. Jimenez, R. Cardoso, M.G. de Queiroz, M. Abdalla, C. Marchand, X. Letartre and F. Pavanello, *Complexity assessment of analog security primitives using the disentropy of autocorrelation*, preprint (2024), 2402.17488 [cs.CR].
- [3159] J.L.E. da Silva, *Teoria e Aplicacoes das Funcoes W_κ de Lambert-Kaniadakis, W_q de Lambert-Tsallis e as disentropias associadas*, Doctor Thesis (Departamento de Engenharia de Teleinformatica, Universidade Federal do Ceara, 2022).
- [3160] G.B. da Silva, *A funcao W_q de Lambert-Tsallis e suas aplicacoes*, Doctor Thesis (Universidade Federal do Ceara, Departamento de Engenharia de Teleinformatica, 2021).
- [3161] P.S. Adami, S.M. Mendonca, O.H. Menin, A.H. de Martini and A.S. Martinez, *Funcao exponencial generalizada complexa para argumento real*, Revista Brasileira de Ensino de Fisica **45**, e20230095 (2023).
- [3162] P.S. Adami, O.H. Menin and A.S. Martinez, *Deformed exponential function for complex argument: writing roots of polynomial equations with complex coefficients*, Revista Brasileira de Ensino de Fisica **46**, e20240069 (2024).
- [3163] R.V. Ramos, *The Lambert-Tsallis operator: $A \exp_q(A) = B$* , preprint (2019).
- [3164] V.F. Guedes, F.A. Mendonca and R.V. Ramos, *Simulacao de circuitos quanticos opticos*, Communication at VII Workshop Escola de Computacao, Comunicacao e Informacao Quanticas (21-23 August 2024, Rio de Janeiro).
- [3165] J.S. de Andrade and R.V. Ramos, *Simulacao do impacto do espalhamento Raman espontaneo na taxa de transmissao em sistemas de QKD em redes opticas passivas*, Communication at VII Workshop Escola de Computacao, Comunicacao e Informacao Quanticas (21-23 August 2024, Rio de Janeiro).
- [3166] S.T. de Oliveira, G.L. de Oliveira e R.V. Ramos, *Analise do desempenho de geradores quanticos de numeros aleatorios usando a disentropia*, Communication at VII Workshop Escola de Computacao, Comunicacao e Informacao Quanticas (21-23 August 2024, Rio de Janeiro).
- [3167] R.V. Ramos, *Using the Lambert-Tsallis function in the solution of basic relativistic problems*, preprint (2020).
- [3168] R.V. Ramos, *Disentropy, entropy and the degree of randomness*, preprint (2019).
- [3169] R.V. Ramos, *Disentropy of the Wigner function*, J. Optical Society of America B **36**, 2244 (2019).
- [3170] R.V. Ramos, *Lambert, Lambert-Tsallis and many others*, preprint (2019).
- [3171] R.V. Ramos, *Non-extensive statistical mechanics and black hole disentropy*, preprint (2019).
- [3172] R.V. Ramos, *The $R_{q,Q}$ function and the q -diode*, Physica A **556**, 124851 (2020).
- [3173] J.L.E. da Silva, F.V. Mendes and R.V. Ramos, *The $R_{\kappa\kappa}$ function and its applications: disentropy, image processing and the κ -diode*, Eur. Phys. J. Plus **137**, 320 (2022).
- [3174] R.V. Ramos, *Function and cubic equation*, preprint (2020).
- [3175] R.V. Ramos, *A Simple iterative scheme to solve $x \exp_{q_1}(k_1 x) \exp_{q_2}(k_2 x) = y$* , preprint (2020).
- [3176] R.V. Ramos, *Estimation of the randomness of continuous and discrete signals using the disentropy of the autocorrelation*, preprint (2020).
- [3177] R.V. Ramos, *New relations between prime counting and logarithmic integral functions using the generalized Lambert-Tsallis function*, preprint (2020).
- [3178] J.L.E. da Silva and R.V. Ramos, *The $R_{\kappa,\kappa}$ function and the κ -diode*, preprint (2021).
- [3179] J L.E. da Silva, F.V. Mendes and R.V. Ramos, *The $R_{\kappa\kappa}$ function and its applications: Disentropy and the κ -diode*, preprint (2012).
- [3180] F.J.L. de Almeida and R.V. Ramos, *On the randomness of the Planck CMB maps*, preprint (2022).
- [3181] R.V. Ramos, *The Lambert-Tsallis W_q function and the Last Fermat's Theorem*, preprint (2023).
- [3182] Z. Nikooravesh, *Estimation of the probability function under special moments conditions using the maximum Shannon and Tsallis entropies*, Chilean Journal of Statistics **9** (2), 55-64 (2018).

- [3183] R. Hanel and S. Thurner, *Equivalence of information production and generalized entropies in complex processes*, preprint (2022), 2208.06201 [cond-mat.stat-mech].
- [3184] Z. Nikooravesh, *On the Tsallis entropy rate of hidden Markov chains*, preprint (2021).
- [3185] G. Shi and F. Hansen, *Variational representations related to Tsallis relative entropy*, Letters Mathematical Physics (2020), doi: doi.org/10.1007/s11005-020-01289-7
- [3186] M. Rahimi, *Entropy as an integral operator*, Mathematica Slovaca **69** (1), (2019), doi: 10.1515/ms
- [3187] M. Rahimi, *Entropy as an integral operator: Erratum and modification*, Mathematica Slovaca **70** (5), (2020).
- [3188] A. Sarkar and S. Kumar, *Bures-Hall ensemble: Spectral densities and average entropies*, J. Phys. A: Math. Theor. **52**, 295203 (2019).
- [3189] T. Nishiyama, *L_p -norm inequality using Q -moment and its applications I*, preprint (2019), 1902.01021 [math.ST.]
- [3190] Y. Seo, *Matrix trace inequalities on Tsallis relative entropy of negative order*, J. Math. Anal. Appl. **472**, 1499-1508 (2019).
- [3191] B.A. Diadie and L.G. Samb, *Entropies and their asymptotic theory in the discrete case*, preprint (2019), 1903.08645 [math.ST].
- [3192] J.I. Fujii and Y. Seo, *The unique solution of the Karcher equation and the self-adjointness of the Karcher mean*, Linear and Multilinear Algebra **67** (5), 976-986 (2019), doi: 10.1080/03081087.2018.1440520
- [3193] A. Bidollina, T. Oikonomou and G.B. Bagci, *Opening Pandora's box: Maximizing the q -entropy with escort averages*, preprint (2019), 1904.00581 [cond-mat.stat-mech].
- [3194] S. Gottwald and D.A. Braun, *Bounded rational decision-making from elementary computations that reduce uncertainty*, Entropy **21**, 375 (2019), doi: 10.3390/e21040375
- [3195] P. Hack, D.A. Braun and S. Gottwald, *Representing preorders with injective monotones*, Theory and Decision (2022), doi: 10.1007/s11238-021-09861-w
- [3196] Y. Zheng, H. Yu and J. Du, *The dual formalisms of nonextensive thermodynamics for open systems with maximum entropy principle*, Continuum Mech. Thermodyn. **31**, 1503-1516 (2019), doi: 10.1007/s00161-019-00769-z
- [3197] N. Cabo Bizet, J. Fuentes and O. Obregon, *Generalised asymptotic equivalence for extensive and non-extensive entropies*, preprint (2019), 1904.07858 [cond-mat.stat-mech].
- [3198] N.C. Bizet, O. Obregon, C.D. Ascencio and R. Santos-Silva, *Quantum implications of non-extensive statistics*, preprint (2019), 1907.03172 [cond-mat.stat-mech].
- [3199] H.A. Tanaka, M. Nakagawa and Y. Oohama, *A direct link between Renyi-Tsallis entropy and Holder's inequality – Yet another proof of Renyi-Tsallis entropy maximization*, Entropy **21**, 549 (2019), doi: 10.3390/e21060549
- [3200] S.N. Saadatmand, T. Gould, E.G. Cavalcanti and J.A. Vaccaro, *Thermodynamics from first principles: correlations and nonextensivity*, preprint (2019), 1907.01855 [cond-mat.stat-mech].
- [3201] B. Lopez-Carrera and C. Yanez-Marquez, *A simple model for the entropy of a system with interacting particles*, IEEE Access **7**, 108969 (2019), doc: 10.1109/ACCESS.2019.2933172
- [3202] P. Baudot, *The Poincare-Shannon machine: Statistical physics and machine learning aspects of information cohomology*, Entropy **21**, 881 (2019), doi: 10.3390/e21090881
- [3203] C. Rouyer and Y. Seldin, *Tsallis-INF for decoupled exploration and exploitation in multi-armed bandits*, Proceedings of Machine Learning Research **125**, 1-23 (2020) [33rd Annual Conference on Learning Theory].
- [3204] S. Masoudian and Y. Seldin, *Improved analysis of robustness of the Tsallis-INF algorithm to adversarial corruptions in stochastic multiarmed bandits*, preprint (2021), 2103.12487 [cs.LG].
- [3205] S. Masoudian and Y. Seldin, *Improved analysis of the Tsallis-INF algorithm in stochastically constrained adversarial bandits and stochastic bandits with adversarial corruptions*, Proceedings of Machine Learning Research **134**, 1-21, 34th Annual Conference on Learning Theory (2021).
- [3206] D.J. Galas, *The group theoretic roots of information I: permutations, symmetry, and entropy*, preprint (2019), arxiv 1908.09642.
- [3207] G.M. Correia, V. Niculae and A.F.T. Martins, *Adaptively sparse transformers*, Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing, 2174-2184 (2019), Hong Kong, China.
- [3208] C. Lou, Z. Jia, Z. Zheng and K. Tu, *Sparsen is faster and less is more: Efficient sparse attention for long-range transformers*, preprint (2024), 2406.16747 [cs.CL].
- [3209] J. Zhang, R. Liu, J. Zhang and B. Kang, *Extension of Yager's negation of a probability distribution based on Tsallis entropy*, Int. J. Intell. Syst. 1-13 (2019), doi: 10.1002/int.22198
- [3210] D. Bennequin and J.P. Vigneaux, *A functional equation related to generalized entropies and the modular group*, preprint (2019), 1910.06927 [math.CA].

- [3211] I. Sason, *On data-processing and majorization inequalities for f -divergences with applications*, Entropy **21**, 1022 (2019), doi: 10.3390/e21101022
- [3212] X. Gao and Y. Deng, *The pseudo-pascal triangle of maximum Deng entropy*, International Journal of Computers, Communications and Control **15** (1), 1006 (2020).
- [3213] X. Gao and Y. Deng, *The Pascal triangle of maximum Deng entropy*, preprint (2019).
- [3214] T. Zhao, Z. Li and Y. Deng, *Linearity in Deng entropy*, Chaos, Solitons and Fractals **178**, 114388 (2024).
- [3215] P. Ortiz-Vilchis, M. Lei and A. Ramirez-Arellano, *Reformulation of Deng information dimension of complex networks based on a sigmoid asymptote*, Chaos, Solitons and Fractals **180**, 114569 (2024).
- [3216] J. Dezert and A. Tchamova, *On the effectiveness of measures of uncertainty of basic belief assignments*, Information and Security **52**, 9-36 (2022), doi: 10.11610/isij.5201
- [3217] S. Depeweg, *Modeling epistemic and aleatoric uncertainty with Bayesian neural networks and latent variables*, Doctor Thesis (2019, Fakultät für Informatik Technische Universität München).
- [3218] R.P. Di Sisto, S. Martinez, R.B. Orellana, A.R. Plastino and A. Plastino, *General thermostistical formalisms, invariance under uniform spectrum translations, and Tsallis q -additivity*, Physica A **265**, 590-613 (1999).
- [3219] A. Rebei, *Entropic decision making*, preprint (2020), 2001.00122 [q-bio.NC].
- [3220] W.S. Chung and H. Hassanabadi, *Possible non-additive entropy based on the α -deformed addition*, Eur. Phys. J. Plus **135**, 19 (2020), doi: doi.org/10.1140/epjp/s13360-019-00047-6
- [3221] I. Klein and M. Doll, *(Generalized) Maximum cumulative direct, residual, and paired Φ entropy approach*, Entropy **22**, 91 (2020), doi: 10.3390/e22010091
- [3222] J. Korbelt, R. Hanel and Stefan Thurner, *Information geometry of scaling expansions of non-exponentially growing configuration spaces*, Eur. Phys. J. Special Topics **229**, 787-807 (2020).
- [3223] N. Rasheed, *Topp-Leone Dagum distribution: Properties and its applications*, Research Journal of Mathematical and Statistical Sciences **8** (1), 16-30 (2020).
- [3224] N.C. Bizet, J. Fuentes and O. Obregon, *Generalised asymptotic classes for additive and non-additive entropies*, EPL **128**, 60004 (2019).
- [3225] H. Kwon, A.J. Paige and M.S. Kim, *Condition on the Renyi entanglement entropy under stochastic local manipulation*, preprint (2020), 2002.11779 [quant-ph].
- [3226] M. Shin, S. Lee, J. Lee, M. Lee, D. Ji, H. Yeo and K. Jeong, *Disentangling quantum neural networks for unified estimation of quantum entropies and distance measures*, Phys. Rev. A **110**, 062418 (2024).
- [3227] A. Balcerzak, S. Barroso-Bellido, M.P. Dabrowski and S. Robles-Perez, *Entanglement entropy at critical points of classical evolution in oscillatory and exotic singularity multiverse models*, Phys. Rev. D **103**, 043507 (2021).
- [3228] C. Beck, G. Benedek, G. Livadiotis, A. Rapisarda, U. Tirnakli and C. Tsallis, *Nonextensive statistical mechanics, superstatistics and beyond: theory and applications in astrophysical and other complex systems*, Eur. Phys. J. Special Topics **229**, 707-709 (2020).
- [3229] M.A. Aldahlan, F. Jamal, C. Chesneau, M. Elgarhy and I. Elbatal, *The truncated Cauchy power family of distributions with inference and applications*, Entropy **22**, 346 (2020), doi: 10.3390/e22030346
- [3230] S. Al-Marzouki, F. Jamal, C. Chesneau and M. Elgarhy, *Half logistic inverse Lomax distribution with applications*, Symmetry **13**, 309 (2021), doi: 10.3390/sym13020309
- [3231] A.S. Hassan, A.W. Shawki and H.Z. Muhammed, *Analysis of household income, expenditure and consumption survey research data for North Sinai governorate in Egypt using length biased truncated Lomax distribution*, Statistics, Optimization and Information Computing (2023), in press.
- [3232] N. Alsadat, M. Elgarhy, A.H. Tolba, A.S. Elwehidy, H. Ahmad and E.M. Almetwally, *Classical and Bayesian estimation for the extended odd Weibull power Lomax model with applications*, AIP Advances **13**, 095316 (2023).
- [3233] A.A. Ogunde, I.O. Oseghale and O.B. Nwanyibuife, *The Type II Topp-Leone inverse power Lomax distribution with simulation and applications*, J. Modern Applied Statistical Methods **23** (1), 10 (2023).
- [3234] S.A. Alyami, I. Elbatal, A.S. Hassan and E.M. Almetwally, *Engineering applications with stress-strength for a new flexible extension of inverse Lomax model: Bayesian and non-Bayesian inference*, Axioms **12**, 1097 (2023).
- [3235] A.A. Al-Babtain, I. Elbatal, C. Chesneau and M. Elgarhy, *Estimation of different types of entropies for the Kumaraswamy distribution*, Plos One **16** (3), e0249027 (2021), doi: 10.1371/journal.pone.0249027
- [3236] N. Alotaibi, I. Elbatal, M. Shrahili, A.S. Al-Moisheer, M. Elgarhy and E.M. Almetwally, *Statistical inference for the Kavya-Manoharan Kumaraswamy model under ranked set sampling with applications*, Symmetry **15**, 587 (2023).

- [3237] M. Shrahili and M. Kayid, *Uncertainty quantification based on residual Tsallis entropy of order statistics*, preprint (2023).
- [3238] M. Shrahili and M. Kayid, *Some new results involving past Tsallis entropy of order statistics*, Entropy **25**, 1581 (2023).
- [3239] M. Shrahili and M. Kayid, *Residual Tsallis entropy and record values: Some new insights*, Symmetry **15**, 2040 (2023).
- [3240] N. Alotaibi, A.S. Al-Moisheer, I. Elbatal, M. Shrahili, M. Elgarhy and E.M. Almetwally, *Half logistic inverted Nadarajah-Haghighi distribution under ranked set sampling with applications*, Mathematics **11**, 1693 (2023).
- [3241] A.A. Al-Babtain, I. Elbatal, C. Chesneau and M. Elgarhy, *On a new modeling strategy: The logarithmically-exponential class of distributions*, AIMS Mathematics **6** (7), 7845-7871 (2021).
- [3242] A. Plastino, M.C. Rocca and F. Pennini, *Useful dual functional of entropic information measures*, preprint (2020).
- [3243] V. Penchev, *Reality in a few thermodynamic reference frames: Statistical thermodynamics from Boltzmann via Gibbs to Einstein*, preprint (2020).
- [3244] M.S. Marques and W.S. Santana, *O que e entropia? - reflexoes para o ensino de ciencias*, Research, Society and Development **9** (7), e502974344 (2020), doi: 10.33448/rsd-v9i7.4344
- [3245] J. Klamut, R. Kutner and Z.R. Struzik, *Towards a universal measure of complexity*, Entropy **22**, 866 (2020), doi: 10.3390/e22080866
- [3246] L. Bertram, E. Schulz, M. Hofer and J.D. Nelson, *Emotion, entropy evaluations and subjective uncertainty*, preprint (2020).
- [3247] S.G. Balogh, G. Palla, P. Pollner and D. Czege, *Generalized entropies, density of states, and non-extensivity*, Scientific Reports **10** (1), 15516.(2020).
- [3248] W.S. Chung and A. Algin, *Imprecise probability through f -probability and its statistical physical implications*, Chaos, Solitons and Fractals **139**, 110020 (2020).
- [3249] R.A. Treumann and W. Baumjohann, *Lorentzian entropies and Olbert's kappa-distribution*, Frontiers in Physics **8**, 221 (2020).
- [3250] J.M. Angulo, F.J. Esquivel, A.E. Madrid and F.J. Alonso, *Information and complexity analysis of spatial data*, Spatial Statistics 100462 (2020), in press, doi: 10.1016/j.spasta.2020.100462.
- [3251] R. Borja-Tamayo, C. Cartagena-Marin, G. Loaiza-Ossa, G. Molina-Velez and M. Puerta-Yepes, *Sobre el parametro de no extensividad para algunos sistemas super-aditivos*, Ingenieria y Ciencia **6** (11), 143 (2010).
- [3252] K. Ahmad, M.A. Khan, S. Khan, A. Ali and Y.M. Chu, *New estimates for generalized Shannon and Zipf-Mandelbrot entropies via convexity results*, Results in Physics (2020), in press.
- [3253] R. Kadian and S. Kumar, *A novel intuitionistic Renyi's-Tsallis discriminant information measure and its applications in decision-making*, Granular Computing (2020).
- [3254] M. Rashad, Z. Iqbal and M. Hanif, *Characterizations and entropy measures of the Libby-Novick generalized Beta distribution*, Advances and Applications in Statistics **63** (2), 235-259 (2020).
- [3255] M.Z. Arshad, O.S. Balogun, M.Z. Iqbal and P.E. Oguntunde, *On some properties of a new truncated model with applications to lifetime data*, Int. J. Anal. Appl. **20**, 23 (2022).
- [3256] A. Basit and Z. Iqbal, *Recent advances in entropy: A new class of generalized entropy*, Journal of Multidisciplinary Engineering Science and Technology **7** (11) (2020).
- [3257] Q.A. Wang, *Principle of least effort vs. maximum efficiency: deriving Zipf-Pareto's laws*, Invited talk at the 6th SPMCS conference (15-19 January 2020, Huaqiao University, Xiamen, China).
- [3258] Q.A. Wang, *Principle of least effort vs. maximum efficiency: deriving Zipf-Pareto's laws*, Chaos, Solitons and Fractals **153**, 111489 (2021).
- [3259] Y. Zhang, P. Shang, J. He and H. Xiong, *A measure of complexity based on the order patterns*, Nonlinear Dyn. (2020), doi: 10.1007/s11071-020-06038-y
- [3260] T. de Wet, F. Osterreicher and M. Thaler, *Tsallis' entropies – axiomatics, associated f -divergences and Fisher's information*, South African Statistical Journal **54** (2), 163-175 (2020), doi: 10.37920/sasj.2020.54.2.3
- [3261] R. Kadian and S. Kumar, *A generalization of J -divergence measure based on Renyi's-Tsallis entropy with application in fault detection*, Advances and Applications in Mathematical Sciences **19** (8), 683-708 (2020).
- [3262] H.S. Lima and C. Tsallis, *Exploring the neighborhood of q -exponentials*, Entropy **22**, 1402 (2020), doi: 10.3390/e22121402
- [3263] H.S. Lima and C. Tsallis, *Ising ferromagnet and nonadditive entropies - Equilibrium and nonequilibrium properties*, Eur. Phys. J. B Special Topics **98**, 131(2025).
- [3264] S.H. Abid, *General class of mixture of some densities*, preprint (2021).

- [3265] Q. Tong and K. Kobayashi, *Entropy-regularized optimal transport on multivariate normal and q -normal distributions*, Entropy **23**, 302 (2021), doi: 10.3390/e23030302
- [3266] R.A. Jelodar, H. Mehri-Dehnavi and H. Agahi, *Some properties of Tsallis and Tsallis-Lin quantum relative entropies*, Physica A (2021), in press, doi: 10.1016/j.physa.2020.125719
- [3267] F. Hassanzad, H. Mehri-Dehnavi and H. Agahi, *Some applications of the Hermite-Hadamard inequality for log-convex functions in quantum divergences*, Mathematical Methods in the Applied Sciences (2022).
- [3268] Y. Sayyari and H. Barsam, *New inequalities related to entropy and relative entropy with respect to Hermite-Hadamard inequality*, Filomat **38** (4), 1265-1277 (2024).
- [3269] V.E. Tarasov, *Entropy interpretation of Hadamard-type fractional operators: Fractional cumulative entropy*, Entropy **24**, 1852 (2022).
- [3270] M.S. Mohamed, *On cumulative Tsallis entropy and its dynamic past version*, Indian J. Pure Appl. Math. **51** (4), 1903-1917(2020), doi: 10.1007/s13226-020-0503-8
- [3271] S. Bansal and N. Gupta, *On various weighted past and residual entropy measures*, J. Indian Statistical Association **56**, 127-153 (2018).
- [3272] R.C. Sfetcu and V. Preda, *Order properties concerning Tsallis residual entropy*, Mathematics **12**, 417 (2023).
- [3273] T.N. Bakiev, D.V. Nakashidze and A.M. Savchenko, *Certain relations in statistical physics based on Renyi entropy*, Moscow University Physics Bulletin **75** (6), 559-569 (2020).
- [3274] T.N. Bakiev, D.V. Nakashidze, A.M. Savchenko and K.M. Semenov, *Generalized Maxwell distribution in the Tsallis entropy formalism*, Moscow University Physics Bulletin **77** (5), 728-740 (2022).
- [3275] T.N. Bakiev, D.V. Nakashidze, A.M. Savchenko and K.M. Semenov, *Some properties of the Sharma-Mittal statistical distribution*, Moscow University Physics Bulletin **78** (4), 434-444 (2023).
- [3276] A. Pruthi, *On the study of association of utility function with different (h, Φ) entropies*, Advances in Mathematics: Scientific Journal **10** (3), 1419-1423 (2021), doi: 10.37418/amsj.10.3.31
- [3277] P. Maneejuk, *On regularization of generalized maximum entropy for linear models*, Soft Computing (2021), in press, doi: 10.1007/s00500-021-05805-2
- [3278] M. Ishihara, *Thermodynamic relations and fluctuations with physical quantities in the Tsallis statistics*, preprint (2021), 2104.11427 [cond-mat.stat-mech].
- [3279] A. Toomaj and H.A. Atabay *Some new findings on the cumulative residual Tsallis entropy*, J. Computational and Applied Mathematics (2021), in press, doi: 10.1016/j.cam.2021.113669
- [3280] T. Oikonomou and G.B. Bagci, *Tsallis divergence and superadditivity*, preprint (2021), 2105.10850 [cond-mat.stat-mech].
- [3281] A. Americo and P. Malacaria, *Concavity, core-concavity, quasiconcavity: A generalizing framework for entropy measures*, preprint (2021).
- [3282] N. Sebastian, A.M. Mathai and H.J. Haubold, *Entropy optimization, Maxwell-Boltzmann, and Rayleigh distributions*, Entropy **23**, 754 (2021).
- [3283] V.M. Ilic and I.B. Djordjevic, *On the $\alpha - q$ -mutual information and the $\alpha - q$ -capacities*, Entropy **23**, 702 (2021).
- [3284] L. Moreels, *Discrete schaalinvariantie en haar generatieve mechanismen*, Master Thesis (2021, Gent Univer-siteit, Belgium).
- [3285] Y. Orenes, A. Rabasa, J.J. Rodriguez-Sala and J. Sanchez-Soriano, *Benchmarking analysis of the accuracy of classification methods related to entropy*, Entropy **23**, 850 (2021).
- [3286] J. Bonilla, D. Velez, J. Montero and J. Tinguaro Rodriguez, *Fuzzy clustering methods with Renyi relative entropy and cluster size*, Mathematics **9**, 1423 (2021), doi: 10.3390/math9121423
- [3287] T.K.L. Wong and J. Zhang, *Tsallis and Renyi deformations linked via a new λ -duality*, preprint (2021), 2107.11925 [math.PR].
- [3288] H. Moradpour, A.H. Ziaie and C. Corda, *Tsallis uncertainty*, EPL **134**, 20003 (2021).
- [3289] S. Jalalzadeh, H. Moradpour and P.V. Moniz, *Modified cosmology from quantum deformed entropy*, preprint (2023), 2308.12089 [gr-qc].
- [3290] P.F. da Silva Junior, E.W. O. Costa and S. Jalalzadeh, *Emergence of fractal cosmic space from fractional quantum gravity*, preprint (2023), 2309.12478 [gr-qc].
- [3291] N. Shahhoseini, M. Malekjani and A. Khodam-Mohammadi, *Thermodynamics-gravity conjecture in the context of cosmography: observational constraints and potential deviations*, Eur. Phys. J. C **85**, 699 (2025).
- [3292] A.S. Parvan, *Proof of invariance of the Tsallis-1 statistics under the overall energy shift*, preprint (2021), 2108.05702 [cond-mat.stat-mech].
- [3293] A.S. Parvan, *Study of invariance of nonextensive statistics under the uniform energy spectrum translation*, Physica A **588**, 126556 (2022).

- [3294] J. Zhou, *On some mathematics related to the interpolating statistics*, preprint (2021), 2108.10514 [math-ph].
- [3295] Y. Shibasaki and M. Saito, *Non-equilibrium entropy and irreversibility in generalized stochastic Loewner evolution from an information-theoretic perspective*, Entropy **23**, 1098 (2021), doi: 10.3390/e23091098
- [3296] J. Fuentes, *On non-extensive entropies: With applications in stochastic dynamics and information theory*, Doctor Thesis (Department of Physics, University of Guanajuato, 2021).
- [3297] J. Bailey, M.E. Houle and X. Ma, *Relationships between local intrinsic dimensionality and tail entropy*, International Conference on Similarity Search and Applications SISAP, 186-200 (2021).
- [3298] J. Bailey, M.E. Houle and X. Ma, *Local intrinsic dimensionality, entropy and statistical divergences*, Entropy **24**, 1220 (2022).
- [3299] J. Bailey, M.E. Houle and X. Ma, *Relationships between tail entropies and local intrinsic dimensionality and their use for estimation and feature representation*, Information Systems (2023).
- [3300] H. Lanteri, *Logarithmes déformés. Divergences entropiques associées. Applications aux problèmes inverses linéaires. Algorithmes d'inversion*, preprint (2021).
- [3301] H. Lanteri, *-Deformed logarithms. -Associated entropic divergences. -Applications to linear inverse problems. -Inversion algorithms.*, preprint (2021), 2109.12895 [cs.IT].
- [3302] J. Melbourne and C. Roberto, *Transport-majorization to analytic and geometric inequalities*, preprint (2021), 2110.03641 [math.FA].
- [3303] J. Zhang and T.K.L. Wong, *Chapter 10 - λ -deformed probability families with subtractive and divisive normalizations*, Handbook of Statistics **45**, 187-215 (2021).
- [3304] R. Kazemi, M.R. Miri and G.R.M. Borzadaran, *Topological unified (r, s) -entropy of continuous maps on quasi-metric spaces*, Vladikavkaz Mathematical Journal **23** (4), 56-67 (2021).
- [3305] A. Americo, M.H.R. Khouzani and P. Malacaria, *Channel-supermodular entropies: Order theory and an application to query anonymization*, Entropy **24**, 39 (2022), doi: 10.3390/e24010039
- [3306] P. Sriling, R. Nakarachinda and P. Wongjun, *Thermodynamics of Black String from Renyi entropy in de Rham-Gabadadze-Tolley Massive Gravity Theory*, preprint (2021), 2112.13120 [gr-qc].
- [3307] K. Korzekwa and M. Lostaglio, *Optimizing thermalizations*, preprint (2022), :2202.12616 [quant-ph].
- [3308] L. Yu and V.Y.F. Tan, *Common information, noise stability, and their extensions*, Foundations and Trends in Communications and Information Theory **19** (2), 107-389 (2022).
- [3309] L. Cui, X. Li and N. Balakrishnan, *On uncertainty of dynamic systems via state aggregation coarse-graining and state decomposition fine-graining ways*, preprint (2022), arxiv 2205.08336
- [3310] A. El Kaabouchi, F.X. Machu, J. Cocks, R. Wang, Y.Y. Zhu and Q.A. Wang, *Study of a measure of efficiency as a tool for applying the principle of least effort to the derivation of the Zipf and the Pareto laws*, preprint (2022).
- [3311] Z. Nikooravesh, *Generalized entropy for random walks in regular networks and graphs as a superdiffusion*, Bulletin of the Transilvania University of Brasov, Series III: Mathematics and Computer Science, **2** (64), 197-208 (2022).
- [3312] P. Guha, *The κ -deformed entropic Lagrangians, Hamiltonian dynamics and their applications*, Eur. Phys. J. Plus **137**, 932 (2022).
- [3313] I.A. Mageed and Q. Zhang, *An introductory survey of entropy applications to information theory, queuing theory, engineering, computer science, and statistical mechanics*, Proceedings of the 27th International Conference on Automation & Computing, University of the West of England, Bristol, UK (1-3 September 2022).
- [3314] I.A. Mageed and K.Q. Zhang, *The Renyian-Tsallisian formalisms of the stable M/G/1 queue with heavy tails entropic threshold theorems for the squared coefficient of variation with potential applications to computer science, engineering and technology*, Electronic Journal of Computer Science and Information Technology **9** (1), (2023).
- [3315] I.A. Mageed and K.Q. Zhang, *The linearity theorem of Renyian and Tsallisian maximum entropy solutions of the heavy-tailed stable queueing system entailed with potential queueing - Theoretic applications to cloud computing and IoT*, Electronic Journal of Computer Science and Information Technology **9** (1), (2023).
- [3316] I.A. Mageed, *Where the mighty trio meet : Information theory (IT), Pathway model theory (PMT) and Queueing theory (QT)*, 39th Annual UK Performance Engineering Workshop University of Birmingham (2023).
- [3317] I.A. Mageed, *Rényi's maximum entropy formalism of heavy-tailed queues with Hurst exponent heuristic mean queue length combined with potential applications of Hurst exponent to engineering*, 39th Annual UK Performance Engineering Workshop University of Birmingham (2023).

- [3318] F. Suter, I. Cernat and M. Dragan, *Some information measures properties of the GOS-concomitants from the FGM family*, Entropy **24**, 1361 (2022).
- [3319] T. Yamano, *Index of various entropies*, in *Frontiers in Entropy Across the Disciplines*, Chapter 19 (World Scientific, 2022), doi: 10.1142/9789811259401
- [3320] V. Girardin and P. Regnault, *Linear (h, ϕ) -entropies for quasi-power sequences with a focus on the logarithm of Taneja entropy*, Phys. Sci. Forum **5**, 9 (2022).
- [3321] A.N. Tawfik, A. Aboanbar and A. Ghoneim, *On exp and log distributions in extensive and nonextensive statistical mechanics*, preprint (2022), doi: 10.21203/rs.3.rs-2229064/v1
- [3322] A.N. Tawfik, A. Aboanbar and A. Ghoneim, *Extensive and nonextensive statistical mechanics: Exp and log distribution functions*, Modern Physics Letters B, 2450042 (2024) (16 pages).
- [3323] J.M. Amigo, R. Dale and P. Tempesta, *Permutation group entropy: a new route to complexity for real-valued processes*, Chaos (2022), in press.
- [3324] J.M. Amigo and P. Tempesta, *Information geometry, complexity measures and data analysis*, Entropy **24**, 1797 (2022).
- [3325] E. Lopez-Sandoval, *Estadística no extensiva de Tsallis, su origen en su relación con los exponentes críticos*, preprint (2022).
- [3326] X. Zhou, *Relations between observational entropy and other measures based on Tsallis-q entropy*, Internat. J. Theor. Phys. **62**, 12 (2023).
- [3327] A. Somazzi and D. Garlaschelli, *Learn your entropy from informative data: an axiom ensuring the consistent identification of generalized entropies*, preprint (2023), 2301.05660 [physics.data-an].
- [3328] A. Somazzi, *Challenges in data science for complex systems*, Thesis (2024).
- [3329] S. Izadkhah, E. Amini-Seresht and A. Moradian, *Sufficient conditions for the majorization ordering and their applications in some quantum information comparisons*, Physica A (2023), in press.
- [3330] C. Chen and J. Stojanow, *Generalized fractional entropy functions with an application in hierarchical clustering*, Math. Meth. Appl. Sc., 1-21 (2023).
- [3331] I. Nikoufar and M. Fazlolahi, *Some bounds for the generalized Tsallis relative operator entropy*, Mediterr. J. Math. **20**, 115 (2023).
- [3332] I. Nikoufar and M.K. Arpatapeh, *Refined estimations for some types of entropies and divergences*, Complex Analysis and Operator Theory **17**, 98 (2023).
- [3333] A.A.P. Rezende, *Generalized conditional entropies and applications to channel ordering and design*, Doctor Thesis (School of Electronic Engineering and Computer Science, Queen Mary University of London, 2023).
- [3334] O. Afsar and U. Tirnakli, *Necessary condition of self-organisation in nonextensive open systems*, Entropy **25**, 517 (2023).
- [3335] G. Wilk and Z. Włodarczyk, *Some non-obvious consequences of non-extensiveness of entropy*, Entropy **25**, 474 (2023).
- [3336] O. Kharazmi, F. Shirazinia, F. Buono and M. Longobardi, *Jensen-inaccuracy information measure*, Entropy **25**, 483 (2023).
- [3337] G. Alomani and M. Kayid, *Further properties of Tsallis entropy and its application*, Entropy **25**, 199 (2023).
- [3338] M. Kayid and M.A. Alshehri, *Tsallis entropy of a used reliability system at the system level*, Entropy **25**, 550 (2023).
- [3339] P.P. Dwivedi and D.K. Sharma, *Categorical interpretation of generalized 'useful' Tsallis information measure*, AIP Conference Proceedings **2591**, 050036 (2023).
- [3340] A.R. Plastino and Angelo Plastino, *Brief review on the connection between the micro-canonical ensemble and the S_q -canonical probability distribution*, Entropy **25**, 591 (2023).
- [3341] H. Lanteri, *Generalisation des divergences par application du Logarithme déformé - Applications aux problèmes inverses linéaires - Algorithmes d'inversion*, hal-04055699 (2023) [Generalization of divergences by application of the deformed logarithm - Applications to linear inverse problems - Inversion algorithms, arXiv 2304.01941 [math.GM]]
- [3342] C. Tsallis, *Senses along which S_q is unique*, Entropy **25**, 743.(2023).
- [3343] A. Rodriguez, A. Pluchino, U. Tirnakli, A. Rapisarda and C. Tsallis, *Nonextensive footprints in dissipative and conservative dynamical systems*, Symmetry **15**, 444 (2023).
- [3344] T. Suguro and T. Yachimura, *Convergence rate of Tsallis entropic regularized optimal transport*, preprint (2023), 2304.06616 [math.OC].
- [3345] O.J.M. Sanchez, *Fractales y caos en ingeniería y aplicaciones*, (Universidad Nacional de Colombia, 2023).
- [3346] M. Ishihara, *Relation between the escort average in microcanonical ensemble and the escort average in canonical ensemble in the Tsallis statistics*, preprint (2023), 2305.12921 [cond-mat.stat-mech].

- [3347] H. Nakashima and P. Graczyk, *Stieltjes transforms and R-transforms associated with two-parameter Lambert-Tsallis functions*, Entropy **25**, 858 (2023).
- [3348] M.B. Graczyk, *Correlacao, dependencia e matrizes aleatorias. Aprimorando a caraterizacao de sistemas complexos*, Doctor Thesis (Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro, 2023).
- [3349] J.W. Kang, K.M. Shen and B.W. Zhang, *A Note on the connection between non-additive entropy and h-derivative*, Entropy **25**, 918 (2023).
- [3350] V. Girardin and P. Regnault, *Extensive entropy functionals and non-ergodic random walks*, Geometric Science of Information, 117-124 (2023).
- [3351] Z. Zhang, *Several basic elements of entropic statistics*, Entropy **25**, 1060 (2023).
- [3352] T.S. Biro and A. Deppman, *Non-additive entropy formulas: Motivation and derivations*, Entropy **25**, 1203 (2023).
- [3353] V. Zhdankin, *Dimensional measures of generalized entropy*, J. Phys. A: Math. Theor. (023), in press.
- [3354] Y. Gao and J.W. Liu, *Adaptively sparse transformers Hawkes process*, International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems **31** (4), 669-689 (2023).
- [3355] C. Tsallis, *When may a system be referred to as complex? - An entropic perspective*, Frontiers in Complex Systems **1**, 1284458 (2023), doi: 10.3389/fcpxs.2023.1284458
- [3356] R. Muthuganesan, *Unifying nonclassical correlation via Tsallis α -entropy and its application in bilocal scenario*, Physica A **630**, 129250 (2023).
- [3357] R. Hanel and S. Thurner, *Equivalence of information production and generalised entropies in complex processes*, PLoS One **18** (9), e0290695 (2023).
- [3358] A. Malyarenko, Y. Mishura, K. Ralchenko and Y.A. Rudyk, *Properties of various entropies of Gaussian distribution and comparison of entropies of fractional processes*, Axioms **12**, 1026 (2023).
- [3359] C.G. Gal and A. Poiatti, *Unified framework for the separation property in binary phase-segregation processes with singular entropy densities*, preprint (2023).
- [3360] S. Nojiri, S.D. Odintsov and T. Paul, *Microscopic interpretation of generalized entropy*, Phys. Lett. B **847**, 138321 (2023).
- [3361] S. Nojiri, S.D. Odintsov and T. Paul, *Different aspects of entropic cosmology*, Universe **10**, 352 (2024).
- [3362] Y. Fan, N. Li and S. Luo, *Average coherence and entropy*, Phys. Rev. A **108**, 052406 (2023).
- [3363] U. Hohm and C. Schiller, *Testing the minimum system entropy and the quantum of entropy*, Entropy **25**, 1511 (2023).
- [3364] S.M. Panjehkeh, M.S. Tabass, G.R.M. Borzadaran and M. Amini, *A view on weighted exponential entropy and examining some of its features*, Journal of Mahani Mathematical Research 391-402 (2023).
- [3365] T. Simon and G. Dulac, *On cumulative Tsallis entropies*, Acta Applicandae Mathematicae **188**, 9 (2023).
- [3366] R. Okour and M. Al-Taliby, *More on the generalized fuzzy entropy of order α and β* , Electronic Journal of Applied Statistical Analysis , 257-271 (2023).
- [3367] A. Dwivedi and R.N. Saraswat, *Novel generalized entropy measure's characteristics associated with code-word length*, Contemporary Mathematics (2024).
- [3368] K. Saraswat, D.S. Rawat, A. Pandey, V. Singh and H.C. Chandola, *Phenomenological study of the charged particles production in pPb collisions at $\sqrt{s_{NN}} = 5.02 TeV$* , preprint (2024), 2407.14182 [hep-ph].
- [3369] A. Malyarenko, Y. Mishura, K. Ralchenko and Y.A. Rudyk, *Entropy, Gaussian distribution and fractional processes*, communicated at the 2nd International Conference on Innovative Solutions in Software Engineering Ivano-Frankivsk, Ukraine, November 29-30 (2023).
- [3370] N. Kumar, A. Dixit and V. Vijay, *Estimation of Tsallis entropy for exponentially distributed several populations*, preprint (2024), 2401.09009 [math.ST].
- [3371] Y. Hashizume, K. Oishi and K. Kashima, *Tsallis entropy regularization for linearly solvable MDP and linear quadratic regulator*, preprint (2024), 2403.01805 [math.OC].
- [3372] E.K. Nakao and A.L.M. Levada, *Information theory divergences in principal component analysis*, Pattern Analysis and Applications **27**, 19 (2024).
- [3373] L. Liu, X. Ge and S. Cheng, *The subadditivity of quantum entropy in Gaussian quantum systems*, Results in Physics (2024), in press.
- [3374] H.J. Jensen and P. Tempesta, *Group structure as a foundation for entropies*, Entropy **26**, 266 (2024).
- [3375] M.T. Baghdadabad, *Expected idiosyncratic entropy*, China Accounting and Finance Review (2024).
- [3376] Y. Aoyama and E.A. Theodorou, *Generalized maximum entropy differential dynamic programming*, preprint (2024), 2403.18130 [math.OC].
- [3377] M. Schlather, *An algebraic generalization of the entropy and its application to statistics*, preprint (2024), 2404.05854 [math.SP].

- [3378] M.K. Hassan and M. Aslam, *Birnbaum Saunders distribution for imprecise data: statistical properties, estimation methods, and real life applications*, Scientific Reports **14**, 6955 (2024).
- [3379] J.A. Pachter, Y.J. Yang and K.A. Dill, *Entropy, irreversibility and inference at the foundations of statistical physics*, Nature Reviews Physics (2024).
- [3380] Q. Zhang, *A note on distance variance for categorical variables*, preprint (2024), 2405.06813 [stat.ME].
- [3381] C.A. Pinzon, *Isotropic distributions in the p -norm: Uniform directionality in multi-dimensional p -normed spaces*, preprint (2024).
- [3382] V. Fachina, *Entropy metric: Framework for analyzing changes in systems*, preprint (2024).
- [3383] A. Budiyo, J.F. Sumbowo, M.K. Agusta and B.E.B. Nurhandoko, *Quantum coherence from Kirkwood-Dirac nonclassicality, some bounds, and operational interpretation*, J. Phys. A **255301** (2024).
- [3384] J. Karbowski, *Bounds on the rates of statistical divergences and mutual information via stochastic thermodynamics*, Phys. Rev. E **109**, 054126 (2024).
- [3385] Y. Seo, *Matrix trace inequalities related to the Tsallis relative entropies of real order, II*, Journal of Mathematical Analysis and Applications (2024), in press.
- [3386] L. Marris, *Multiagent training in N -player general-sum games*, Doctor Thesis (Centre for Mathematics and Physical Sciences in the Life Sciences and Experimental Biology, University College London, 2024).
- [3387] M.F. Balcan and D. Sharma, *Learning accurate and interpretable decision trees*, preprint (2024), 2405.15911 [cs.LG].
- [3388] M.F.I. Kieler, *Eigenstate entanglement in chaotic bipartite systems*, Doctor Thesis (Technische Universität Dresden, 2024).
- [3389] L.O. Barauna, R.A. Sautter, R.R. Rosa, E.L. Rempel and A.C. Frery, *Characterizing complex spatiotemporal patterns from entropy measures*, Entropy **26**, 508 (2024).
- [3390] E. Alsharbeh, F.M. Alghamdi, M.A. Meraou, H.M. Aljohani, M. Abdelraouf, F.H. Riad, S.M.A. Alsheikh and M.M. Alsolmi, *A novel three-parameter Nadarajah Haghghi model: Entropy measures, inference, and applications*, Symmetry **16**, 751 (2024).
- [3391] G. Livadiotis, D.J. McComas and B.L. Shrestha, *Thermodynamics of pickup ions in the heliosphere*, Astrophysical Journal **968**, 66 (2024).
- [3392] P. Marechal, Y. Navarrete and S. Davis, *On the foundations of the maximum entropy principle using Fenchel duality for Shannon and Tsallis entropies*, Phys. Scr. **99**, 075265 (2024).
- [3393] M.S. Madukaife and H.D. Phuc, *Estimation of Shannon differential entropy: An extensive comparative review*, preprint (2024), 2406.19432 [stat.ME].
- [3394] A. Al-Najafi, U. Tirnakli and K.P. Nelson, *Independent Approximates provide a maximum likelihood estimate for heavy-tailed distributions*, preprint (2024), 2407.06522 [stat.ME].
- [3395] L. Flores-Gomez and N. Flores-Gallegos, *Q -Renyi's divergence as a possible chemical similarity criterion*, Journal of Mathematical Chemistry (2024).
- [3396] S. Saha and S. Kayal, *General weighted information and relative information generating functions with properties*, preprint (2024), 2305.18746v2 [math.ST].
- [3397] I. Gallo Mendez, *On the non-thermal parameters in space plasmas: A Langevin and Boltzmann approach for turbulence*, Doctor Thesis (Universidad de Chile, 2024).
- [3398] K. Ghanem and E. Koch, *Generalized maximum entropy methods as limits of the average spectrum method*, Phys. Rev. B **108**, L201107 (2023).
- [3399] K. Okamura, *The q -generalised multinomial/KL-divergence correspondence*, preprint (2024), 2408.12712 [cond-mat.stat-mech].
- [3400] M. Khodak, *The learning of algorithms and architectures*, Doctor Thesis (Computer Science Department, School of Computer Science, Carnegie Mellon University, USA, 2024).
- [3401] B. Corominas-Murtra, R. Hanel and P. Jizba, *Typicality, entropy and the generalization of statistical mechanics*, Eur. Phys. J. B **97**, 129 (2024).
- [3402] R. Maya, M.R. Irshad, C. Chesneau, F. Buono and M. Longobardi, *Non-parametric estimation of Tsallis entropy and residual Tsallis entropy under p -mixing dependent data*, in *Flexible Nonparametric Curve Estimation* (2024).
- [3403] K.J.A. Down and P.A.M. Mediano, *A logarithmic decomposition and a signed measure space for entropy*, entropy (2024), 2409.03732 [cs.IT].
- [3404] K.J.A. Down and P.A.M. Mediano, *Algebraic representations of entropy and fixed-parity information quantities*, preprint (2024), 2409.04845 [cs.IT].
- [3405] T.N. Sindhu, A. Shafiq, M.B. Riaz and T.A. Abushal, *A Statistical framework for a new two-parameter unit Bilal distribution with application to model asymmetric data*, Heliyon (2024), in press.

- [3406] S. Gottwald and D.A. Braun, *On the structure of information*, preprint (2024), 2409.20331 [cs.IT].
- [3407] Y. Liu and Q. Wang, *On estimating the trace of quantum state powers*, preprint (2024), 2410.13559 [quant-ph].
- [3408] Z. Zhang, *Levels of confidence and utility for binary classifiers*, *Stats* **7**, 1209-1225 (2024).
- [3409] D.V. Nakashidze, A.M. Savchenko and T.N. Bakiev, *Using Gamma distribution to obtain Maxwell-Renyi statistics and other generalized distributions*, *Moscow University Physics Bulletin* **79** (4), 439-449 (2024).
- [3410] Y. Ladghami, B. Asfour, A. Bouali, T. Ouali and G. Mustafa, *Holographic thermodynamics of BTZ black holes and Tsallis entropy*, *Physics of the Dark Universe* **46**, 101724 (2024).
- [3411] Y. Aditya, D. Tejeswararao, U.Y.D. Prasanthi and D.R. Babu, *Reconstruction of Kaniadakis holographic dark energy model in self creation theory of gravity*, *East European Journal of Physics* **1**, 9-19 (2025).
- [3412] L. Herrera, *Modified Landauer principle according to Tsallis entropy*, *Entropy* **26**, 931 (2024).
- [3413] I. Low and Z. Yin, *Entanglement entropy is elastic cross section*, preprint (2024), 2410.22414 [hep-th].
- [3414] M. Yasir, X. Tiecheng, S. Chaudhary and A.B. Jumah, *Quantum-gravitational effects on Joule-Thomson expansion and black hole shadows in $\hbar(P)$ gravity with Barrow entropy corrections*, *Journal of High Energy Astrophysics* **44**, 356-370 (2024).
- [3415] N. Sadeghnezhad, *H_0 tension in Tsallis and Renyi statistics*, preprint (2025), 2501.02457 [gr-qc].
- [3416] C.O. Barkan, *On the convergence of phase space distributions to microcanonical equilibrium: dynamical isometry and generalized coarse-graining*, *J. Phys. A: Math. Theor.* **57**, 475001 (2024).
- [3417] C.O. Barkan, *Applying methods from dynamical systems to topics at the intersection of statistical mechanics and biology*, Doctor Thesis (University of California, Los Angeles, 2025).
- [3418] D. Finkelshtein, A. Malyarenko, Y. Mishura and K. Ralchenko, *Entropies of the Poisson distribution as functions of intensity: “normal” and “anomalous” behavior*, *Methodology and Computing in Applied Probability* **27**, 45 (2025).
- [3419] P. Krisut and S. Yoo-Kong, *Deriving Tsallis entropy from non-extensive Hamiltonian within a statistical mechanics framework*, preprint (2024), 2411.16757 [cond-mat.stat-mech].
- [3420] S.N. Gashti, *Topology of holographic thermodynamics within non-extensive entropy*, preprint (2024), 2412.00889 [hep-th].
- [3421] R. Zamini, M. Ajami and S. Parvizi, *Kernel estimation of Tsallis entropy and its generalization for length-biased data*, *JIRSS* **23** (01), 131-152 (2024).
- [3422] M.L. Guo, S.Y. Huang, Bo Li and S.M. Fei, *Quantifying the imaginarity via different distance measures*, *Adv. Quantum Technol.* 2400562 (2025).
- [3423] N.J. Newton, *A two-parameter family of non-parametric, deformed exponential manifolds*, *Information Geometry* **7** (Suppl 1), S171-S186 (2024).
- [3424] J. Naudts and J. Zhang, *Legendre duality: from thermodynamics to information geometry*, *Information Geometry* **7**, S623-S649 (2024).
- [3425] J.S. Kamnge and M. Chacko, *Half logistic exponentiated inverse Rayleigh distribution: Properties and application to life time data*, *Plos One* **20** (1), e0310681 (2025).
- [3426] S.I. Kruglov, *New entropy, thermodynamics of apparent horizon and cosmology*, preprint (2025), 2502.12165 [physics.gen-ph].
- [3427] N. Kumar, A. Dixit and V. Vijay, *Entropy measures and their applications: A comprehensive review*, preprint (2025), 2503.15660 [math.PR].
- [3428] A. Jreissaty and J. Carrasquilla, *Statistical mechanics and machine learning of the α -Renyi ensemble*, *Physical Review Research* **7**, 013070 (2025).
- [3429] S. Kharvi, M.R. Irshad, A.I. Al-Omari and R. Alsultan, *Power length-biased new XLindley distribution: Properties and modeling of real data*, *Mathematics* **13**, 1394 (2025).
- [3430] Y.J. Ma, F. Wang, X.Y. Wu and K.Y. Cai, *An explicit description of extreme points of the set of couplings with given marginals: with application to minimum-entropy coupling problems*, preprint (2025), 2505.12227 [math.PR].
- [3431] Y.J. Ma, F. Wang, X.Y. Wu and K.Y. Cai, *Efficient approximate minimum-Renyi entropy couplings*, *Discrete and Continuous Dynamical Systems - Series S* (2025), doi: 10.3934/dcdss.2025098
- [3432] F.M. Camilo, P.J. Santos and A.J. Pires, *Entropy-based uncertainty in onshore and offshore wind power: Implications for economic reliability*, *Energies* **18**, 2445 (2025).
- [3433] M.S. Cadirci, *Non-parametric goodness-of-fit tests using Tsallis entropy measures*, preprint (2025), 2506.14242 [stat.ME].
- [3434] A.M. Mariz, *On the irreversible nature of the Tsallis and Renyi entropies*, *Phys. Lett. A* **165**, 409 (1992).
- [3435] J.D. Ramshaw, *H-theorems for the Tsallis and Renyi entropies*, *Phys. Lett. A* **175**, 169 (1993).
- [3436] J.D. Ramshaw, *Irreversibility and generalized entropies*, *Phys. Lett. A* **175**, 171 (1993).

- [3437] M. Shiino, *H-Theorem with generalized relative entropies and the Tsallis statistics*, J. Phys. Soc. Japan **67**, 3658 (1998).
- [3438] M. Shiino, *H-theorems and free energies based on generalized entropies*, The 5th International Workshop on Similarity in Diversity (1999), p. 63.
- [3439] M. Shiino, *Free energies based on generalized entropies and H-theorems for nonlinear Fokker-Planck equations*, J. Math. Phys. **42**, 2540 (2001).
- [3440] T.D. Frank, *On nonlinear and nonextensive diffusion and the second law of thermodynamics*, Phys. Lett. A **267**, 298 (2000).
- [3441] J.A.S. Lima, R. Silva and A.R. Plastino, *Nonextensive thermostatics and the H-theorem*, Phys. Rev. Lett. **86**, 2938-2941 (2001).
- [3442] R. Silva and J.A.S. Lima, *Relativity, nonextensivity, and extended power law distributions*, Phys. Rev. E **75**, 7101-7106 (2005).
- [3443] R. Silva Jr., *Teoria cinetica nao extensiva: Efeitos fisicos em gases e plasmas*, Doctor Thesis (Universidade Federal do Rio Grande do Norte, Natal, Brazil, 2000).
- [3444] R. Silva, J.A.S. Lima and J.S. Alcaniz, *Constraining nonextensive statistics with plasma oscillation data*, Physica A **356**, 509-516 (2005).
- [3445] S. Shaikh, A. Khan and P.K. Bhatia, *Jeans' gravitational instability of a thermally conducting, unbounded, partially ionized plasma*, Zeitschrift fur Naturforschung A **61**, 275-280 (2006).
- [3446] S. Shaikh, A. Khan and P.K. Bhatia, *Thermally conducting partially ionized plasma in a variable magnetic field*, Contributions to Plasma Physics **47**, 147-156 (2007).
- [3447] F. Pervaiz, S. Ali, M. Ali and S.T. Lai, *Spacecraft charging due to energetic electrons and ions at geosynchronous altitudes*, Journal of Geophysical Research: Space Physics (2022), doi: 10.1029/2022JA030642
- [3448] Y. Wang and J. Du, *The viscosity of charged particles in the weakly ionized plasma with power-law distributions*, Phys. Plasmas **25**, 062309 (2018).
- [3449] Y. Wang and J. Du, *Effect of magnetic field on transports of charged particles in the weakly ionized plasma with power-law q-distributions in nonextensive statistics*, Physica A **541**, 123281 (2020).
- [3450] Y. Wang and J. Du, *The current density and transport coefficients in the fully ionized plasma with q-distributions in nonextensive statistics*, Physica A **523**, 757-764 (2019).
- [3451] Y. Wang and J. Du, *The effect of magnetic field on the viscosity in the weakly ionized and magnetized plasma with power-law q-distributions in nonextensive statistics*, Physica A **527**, 121120 (2019).
- [3452] Y. Wang and J. Du, *The collision frequencies in the plasmas with the power-law q-distributions in nonextensive statistics*, Physica A (2021), in press, doi: 10.1016/j.physa.2020.125623
- [3453] A. Takacs and D. Molnar, *Suppression of elliptic flow without viscosity*, preprint (2019), 1906.12311 [nucl-th].
- [3454] R. Etemadpour, N. Sepehri Javan and D. Dorrnian, *Nonlinear dynamics of circularly polarized laser pulse propagating in a magnetized plasma with q- nonextensive velocity distributions*, Contributions to Plasma Physics **56** (10), 938-950 (Wiley, 2016), doi: 10.1002/ctpp.201600010
- [3455] S. Shaikh, A. Khan and P.K. Bhatia, *Jeans' gravitational instability of a thermally conducting plasma*, Phys. Lett. A **372**, 1451-1457 (2008).
- [3456] H.B. Qiu, H.Y. Song and S.B. Liu, *Nonlinear Raman forward scattering driven by a short laser pulse in a collisional transversely magnetized plasma with nonextensive distribution*, Phys. Plasmas **22**, 092128 (2015) (10 pages), doi: 10.1063/1.4931747
- [3457] H.B. Qiu, H.Y. Song and S.B. Liu, *Brillouin backward scattering in the nonlinear interaction of a short-pulse laser with an underdense transversely magnetized plasma with nonextensive distribution*, Phys. Plasmas **24**, 034505 (2017) (5 pages).
- [3458] N. Gupta, S. Choudhry and S.B. Bhardwaj, *Stimulated Brillouin scattering of elliptical q-Gaussian laser beams in plasmas with axial density ramp: Effect of self-focusing*, Zurnal Prikladnoj Spektroskopii (2022).
- [3459] N. Gupta, S. Kumar and S.B. Bhardwaj, *Effect of self focusing on stimulated Raman scattering of elliptical q-Gaussian laser beam in underdense plasma with axial density ramp*, Nonlinear Optics, Quantum Optics **58**, 99-126 (2023).
- [3460] N. Gupta, R. Johari, S.B. Bhardwaj, D. Bhardwaj, A.K. Alex, S. Shishodia and N. Kohli, *Self-focusing, self-trapping and self-phase modulation of elliptical q-Gaussian laser beams in collisionless plasma*, J. Opt. (2023).
- [3461] N. Gupta, S.B. Bhardwaj, R. Johari, A.K. Alex, S. Choudhry and D. Singh, *Self-focusing of rippled q-Gaussian laser beams in plasmas: effect of relativistic nonlinearity*, J. Opt. (2023), doi: 10.1007/s12596-023-01307-6

- [3462] N. Gupta, R. Johari, A.K. Alex, S. Choudhry, S. Kumar and S.B. Bhardwaj, *Spatial frequency chirping of q-Gaussian laser beams in graded index plasma channel with ponderomotive nonlinearity*, J. Opt. (2023), doi: 10.1007/s12596-023-01537-8
- [3463] N. Gupta, R. Johari, A.K. Alex, S. Choudhry, S. Kumar and S.B. Bhardwaj, *Electron acceleration by elliptical q-Gaussian laser pulse in collisionless plasma with exponential density ramp: combined effect of self-focusing and self-compression*, J. Opt. (2024).
- [3464] N. Gupta, R. Johari and A.K. Alex, *Propagation dynamics of q-Gaussian laser beams in preformed collisionless plasma channel: self-focusing, self-channeling, and self-phase modulation*, J. Opt. (2024), in press.
- [3465] N. Gupta, A.K. Alex, R. Johari, S. Choudhry and D. Singh, *Relativistic self-action of q-Gaussian laser pulses: impact of preformed parabolic plasma channels*, J. Opt. India (2024).
- [3466] A.S. Ahmed, H.A. Salih and K.I. Hassoon, *q-Gaussian laser beam for second-harmonic generation from unmagnetized plasma*, J. Opt. (2023), doi: 10.1007/s12596-023-01288-6
- [3467] N. Gupta and S. Kumar, *Terahertz generation by beating of two q-Gaussian laser beams in plasma: Effect of cross focusing*, Journal of Applied Spectroscopy **90** (1) (2023) (Russian Original **90** (1) (2023)).
- [3468] N. Gupta, *Interplay between self-focusing and self-compression of elliptical q-Gaussian laser pulse interacting with axially inhomogeneous plasma*, J. Applied Spectroscopy **90** (3) (2023).
- [3469] N. Gupta and A. Limby, *Spatial frequency chirp of copropagating q-Gaussian laser beams in Kerr media: effect of electromagnetically induced transparency*, J. Opt (2024).
- [3470] C.M.C. Carvalho, *Desenvolvimento e avaliacao de estrategias para a determinacao acurada de propriedades espectroscopicas rovibracionais: Um estudo via Monte Carlo quantico e coupled cluster*, Doctor Thesis (University of Brasilia, Chemistry Institute, 2022)
- [3471] N. Gupta, *Elliptical q-Gaussian laser beams with intensity ripples in axially inhomogeneous plasmas: self-focusing*, J. Opt. (2024), doi: 10.1007/s12596-024-01660-0
- [3472] N. Gupta and S. Kumar, *Dynamics of self modulation of axial phase of q-Gaussian laser beams in relativistic plasma channels*, J. Opt. (2025).
- [3473] E. Sanchez, M. Gonzalez-Navarrete and C. Caamano-Carrillo, *Bivariate superstatistics: an application to statistical plasma physics*, Eur. Phys. J. B **94**, 55 (2021), doi: 10.1140/ep_jb/s10051-021-00066-2
- [3474] A.V. Kolesnichenko and M.Ya. Marov, *Modification of the Jeans instability criterion for fractal-structure astrophysical objects in the framework of nonextensive statistics*, Solar System Research **48** (5), 354-365 (2014) [in Russian: *Astronomicheskii Vestnik* **48** (5), 383-395 (2014)].
- [3475] A.V. Kolesnichenko and M.Ya. Marov, *Scenario of accelerated universe expansion under exposure to entropic forces related to with the entropies of Barrow and Tsallis-Cirto*, Mathematica Montisnigri L, **80** (2021).
- [3476] A.V. Kolesnichenko and M.Ya. Marov, *Friedmann cosmological equations in the Sharma-Mittal entropy formalism*, Astronomy Reports **66** (9), 786-799 (2022).
- [3477] A.V. Kolesnichenko and M.Ya. Marov, *Prigozhin's gravitational theory*, (2023), doi: 10.20948/prepr-2023-4
- [3478] A.V. Kolesnichenko, *Thermodynamics of the Bose Gas and Blackbody Radiation in Non-Extensive Tsallis Statistics*, Solar System Research **54** (5), 420-431 (2020) [In Russian: *Astronomicheskii Vestnik* **54** (5), 446-457 (2020)].
- [3479] A.V. Kolesnichenko, *Conclusion in the framework of the non-extensive kinetics of Jeans' gravitational instability criterion for a preplanetary rotating cloud with account of radiations and magnetic field*, Mathematica Montisnigri **XLVII**, 176-200 (2020).
- [3480] J.W. da Silva Souza, *Um estudo acerca do futuro rotacional de estrelas tipo-solar em aglomerados estelares*, Master Thesis (Departamento de Fisica, Universidade Federal do Ceara, Brasil, 2022).
- [3481] A.V. Kolesnichenko, *Modification in the framework of nonadditive Tsallis statistics of the gravitational instability criterions of astrophysical disks*, Math-Net.Ru **28** (3), 96-118 (2016) (23 pages) [In Russian].
- [3482] A. V. Kolesnichenko, *Chandrasekhar's integral equilibrium theorems modified in the context of non-Gaussian kappa statistics for a spherically symmetric protostar cloud*, Solar System Research **56** (1), 43-53 (2022).
- [3483] A.V. Kolesnichenko and M. Ya. Marov, *Modification of the Jeans and Toomre instability criteria for astrophysical fractal objects within nonextensive statistics*, Solar System Research **50** (4), 251-261 (2016) [in Russian, *Astronomicheskii Vestnik* **50** (4), 268-279 (2016)].
- [3484] A.V. Kolesnichenko, *Two-parameter functional of entropy Sharma-Mittal*, preprint (2018).
- [3485] A.V. Kolesnichenko, *Towards the development of thermodynamics of nonextensive systems based on kappa-entropy Kaniadakis*, preprint (2020).
- [3486] E.M.C. Abreu, J. Ananias Neto, E.M. Barboza Jr. and R.C. Nunes, *Jeans instability criterion from the viewpoint of non-gaussian statistics*, preprint (2016), 1603.00296 [astro-ph.CO.]

- [3487] E.M.C. Abreu, J. Ananias Neto, E.M. Barboza Jr. and R.C. Nunes, *Jeans instability criterion from the viewpoint of Kaniadakis' statistics*, EPL **114**, 55001 (2016) (6 pages), doi: 10.1209/0295-5075/114/55001
- [3488] S. Shaikh, A. Khan and P.K. Bhatia, *Stability of thermally conducting plasma in a variable magnetic field*, Astrophys. Space Sci. **312**, 35-40 (2007).
- [3489] J.M. Ortiz de Zarate, M. Khayet and M. Lopez de Haro, *Tsallis entropy in hyperbolic heat conduction*, preprint (2004).
- [3490] S.N. Li and B.Y. Cao, *A superstatistical model for anomalous heat conduction and diffusion*, Applied Mathematical Modelling (2019), in press, doi: doi.org/10.1016/j.apm.2019.10.042
- [3491] E.H. Vasconcelos Segundo, A.L. Amoroso, V.C. Mariani, L. Santos Coelho, *Economic optimization design for shell-and-tube heat exchangers by a Tsallis differential evolution*, Applied Thermal Engineering (2016), doi: http://dx.doi.org/10.1016/j.applthermaleng.2016.09.032
- [3492] E.H. Vasconcelos Segundo, A.L. Amoroso, V.C. Mariani and L. Santos Coelho, *Thermodynamic optimization design for plate-fin heat exchangers by Tsallis JADE*, Internat. J. Thermal Sciences **113**, 136-144 (2017).
- [3493] F.M. Ramos, R.R. Rosa and L.A.W. Bambace, *Nonextensive thermostatics and the H-theorem revisited*, Physica A **344**, 626 (2004).
- [3494] T. Yamano, *H-theorems based upon a generalized, power law-like divergence*, Phys. Lett. A **374**, 3116-3118 (2010).
- [3495] T. Yamano, *General nonlinear Fokker-Planck equations with multiple potentials: H-Theorem and constraints*, Eur. Phys. J. Plus **133**, 439 (2018), doi: 10.1140/epjp/i2018-12330-5
- [3496] C. Vignat and P. Lambertini, *H-theorems for the Brownian motion on the hyperbolic plane*, Physica A **391**, 544-551 (2012).
- [3497] A. Muriel, *Reversibility and irreversibility from an initial value formulation*, Phys. Lett. A **377**, 1161-1165 (2013).
- [3498] A. Muriel, *Quantum Theory of Turbulence - A Book of Reprints*, (Data Transport Systems, New York, 2013).
- [3499] G.A. Casas, F.D. Nobre and E.M.F. Curado, *H-Theorem for generalized entropic forms within a master-equation framework*, Phys. Rev. E **93**, 032145 (2016) (11 pages).
- [3500] G.A. Casas and F.D. Nobre, *Nonlinear Fokker-Planck equations in super-diffusive and sub-diffusive regimes*, J. Math. Phys. **60**, 053301 (2019), doi: doi.org/10.1063/1.5001189
- [3501] A.K. Rajagopal, *An approach to nonextensive, nonequilibrium systems: Old realizations and a new dream?*, in *Novel Materials - Design and Properties*, eds. B.K. Rao and S.N. Behara (Nova Science Publishers, Commack, New York, 1998), page 427.
- [3502] A.K. Rajagopal, *Equations of motion in nonequilibrium statistical mechanics for nonextensive systems.*, Physica A **253**, 271 (1998).
- [3503] A.R. Plastino and A. Plastino, *Dynamical aspects of Tsallis' entropy*, Physica A **202**, 438 (1994).
- [3504] S.B. Leble and M. Czachor, *Darboux-integrable nonlinear Liouville-von Neumann equation*, Phys. Rev. E **58**, 7091 (1998).
- [3505] J.P.M. Braga and R.N. Costa Filho, *Nonadditive quantum mechanics as a Sturm-Liouville problem*, Internat. J. Modern Phys. C **27** (4), 1650047 (2016) (8 pages), doi: 10.1142/S0129183116500479
- [3506] C. Giordano, A.R. Plastino, M. Casas and A. Plastino, *Nonlinear diffusion under a time dependent external force: q-maximum entropy solutions*, Eur. Phys. J. B **22**, 361 (2001).
- [3507] A.R. Plastino, C. Giordano, A. Plastino and M. Casas, *Liouville equation and the q-statistical formalism*, Physica A **336**, 376 (2004).
- [3508] F. Buyukkilic and D. Demirhan, *A fractal approach to entropy and distribution functions*, Phys. Lett. A **181**, 24 (1993).
- [3509] F. Buyukkilic, D. Demirhan and A. Gulec, *A statistical mechanical approach to generalized statistics of quantum and classical gases*, Phys. Lett. A **197**, 209 (1995).
- [3510] F.C. dos Anjos, M.L. Lyra, I. Gleria, C. Argolo and A.J.F. de Souza, *Emerging extreme value and Fermi-Dirac distributions in the Levy branching and annihilating process*, Phys. Rev. E **101**, 052136 (2020).
- [3511] A. Rovenchak, *Nonadditive generalization of the Gentile statistics*, Low Temperature Physics, Fiz. Nizk. Temp. **49**, 1080-1086 (2023).
- [3512] A.S. Parvan and T. Bhattacharyya, *Remarks on the phenomenological Tsallis distributions and their link with the Tsallis statistics*, J. Phys. A: Math. Theor. **54**, 325004 (2021).
- [3513] A. Hussein and T. Bhattacharyya, *Analytical calculations of the quantum Tsallis thermodynamic variables*, Physics **4** (3), 800-811 (2022).
- [3514] S. Curilef, *Generalized statistical mechanics for the N-body quantum problem - Ideal gases*, Z. Physik B **100**, 433 (1996).

- [3515] S. Curilef, *On the generalized Bose-Einstein condensation*, Phys. Lett. A **218**, 11 (1996).
- [3516] G. Kaniadakis and P. Quarati, *Polynomial expansion of diffusion and drift coefficients for classical and quantum statistics*, Physica A **237**, 229 (1997).
- [3517] F. Pennini, A. Plastino and A.R. Plastino, *Tsallis entropy and quantal distribution functions*, Phys. Lett. A **208**, 309 (1995).
- [3518] F. Pennini, A. Plastino and A.R. Plastino, *Tsallis nonextensive thermostatics, Pauli principle and the structure of the Fermi surface*, Physica A **234**, 471 (1996).
- [3519] F. Pennini, A.R. Plastino and A. Plastino, *Dynamical evolution and Tsallis generalized quantum thermostatics*, Physica A **235**, 388 (1997).
- [3520] Q.A. Wang and A. Le Mehaute, *On the generalized distribution functions of quantum gases*, Phys. Lett. A **235**, 222 (1997).
- [3521] U. Tirnakli, F. Buyukkilic and D. Demirhan, *Some bounds upon nonextensivity parameter using the approximate generalized distribution functions*, Phys. Lett. A **245**, 62 (1998).
- [3522] F.H. Gaioli, E.T. Garcia Alvarez and D.G. Arbo, *Quantum Brownian motion. II*, Int. J. Theor. Phys. **38**, 183 (1999). [quant-ph/9807049].
- [3523] U. Tirnakli, F. Buyukkilic and D. Demirhan, *Nonekstensif Tsallis istatistiginde boson ve fermionlar icin dagilim fonksiyonlari ve uygulamalari*, communicated at the 17th National Physics Congress of the Turkish Physical Society (27-31 October 1998, Antalya).
- [3524] D.F. Torres and U. Tirnakli, *Generalized quantal distribution functions within factorization approach: Some general results for bosons and fermions*, Physica A **261**, 499 (1998).
- [3525] M. Maleki, H. Mohammadzadeh and Z. Ebadi, *Nonextensive Gross Pitaevskii equation*, International Journal of Geometric Methods in Modern Physics 2350216 (2023), doi : 10.1142/S021988782350216X
- [3526] M. Seifi, Z. Ebadi, H. Agahi, H. Mehri-Dehnavi and H. Mohammadzadeh, *Intrinsic attractive and repulsive interactions: From classical to quantum Statistics in the generalized Maxwell-Boltzmann distribution*, Phys. Rev. E **111**, 054114 (2025).
- [3527] M. Czachor and J. Naudts, *Microscopic foundation of nonextensive statistics*, Phys. Rev. E **59**, R2497 (1999).
- [3528] U. Tirnakli, *Nonekstensif fiziksel sistemler icin yeni bir formalizm: Genellestirilmis istatistiksel termodinamik ve uygulamalari*, PhD Thesis (Ege University, Izmir-Turkey, 1998).
- [3529] A.K. Rajagopal and C. Tsallis, *Generalization of the Lie-Trotter product formula for q-exponential operators*, Phys. Lett. A **257**, 283 (1999).
- [3530] D. Popa, *Failure of the Lie-Trotter type formula for q-exponential operators*, Phys. Lett. A **526**, 129975 (2024).
- [3531] M.R. Ubriaco, *Thermodynamics of boson and fermion systems with fractal distribution functions*, preprint (1999) [cond-mat/9904079].
- [3532] U. Tirnakli and D.F. Torres, *Exact and approximate results of non-extensive quantum statistics*, Eur. Phys. J. B **14**, 691 (2000).
- [3533] F. Markus, *On the nonextensivity of entropy of the weakly interacting Bose systems*, Physica A **274**, 563 (1999).
- [3534] M. Czachor and J. Naudts, *Quantization of nonextensive systems*, preprint (1998).
- [3535] L. Salasnich, *BEC in nonextensive statistical mechanics*, Int. J. Mod. Phys. B **14**, 405 (2000).
- [3536] L. Salasnich, *BEC in nonextensive statistical mechanics: Some additional results*, preprint (2001) [cond-mat/0101350].
- [3537] A.I. Nicolin and R. Carretero-Gonzalez, *Nonlinear dynamics of Bose-Condensed gases by means of a q-Gaussian variational approach*, Physica A **387**, 6032-6044 (2008).
- [3538] R. Rossignoli and N. Canosa, *Non-additive entropies and quantum statistics*, Phys. Lett. A **264**, 148 (1999).
- [3539] N. Canosa and R. Rossignoli, *Generalized nonadditive entropies and quantum entanglement*, Phys. Rev. Lett. **88**, 170401 (2002).
- [3540] R. Rossignoli and N. Canosa, *Violation of majorization relations in entangled states and its detection by means of generalized entropic forms*, Phys. Rev. A **67**, 042302 (2003).
- [3541] L. Liu and Y. Li, *Some applications of majorization to quantum entropies*, Reports Math. Phys. **74** (1) (2014) (12 pages).
- [3542] L.G.A. Alves, H.V. Ribeiro, M.A.F. Santos, R.S. Mendes and E.K. Lenzi, *Solutions for a q-generalized Schroedinger equation of entangled interacting particles*, Physica A **429**, 35-44 (2015).
- [3543] R. Rossignoli and N. Canosa, *Generalized entropic criterion for separability*, Phys. Rev. A **66**, 042306 (2002).
- [3544] N. Canosa and R. Rossignoli, *Generalized entropies and quantum entanglement*, Physica A **329**, 371 (2003).

- [3545] R. Rossignoli and N. Canosa, *Limit temperature for entanglement in generalized statistics*, Phys. Lett. A **323**, 22 (2004).
- [3546] R. Rossignoli and N. Canosa, *Generalized disorder measure and the detection of quantum entanglement*, Physica A **344**, 637 (2004).
- [3547] N. Canosa and R. Rossignoli, *General non-additive entropic forms and the inference of quantum density operators*, Physica A **348**, 121 (2005).
- [3548] N. Canosa, R. Rossignoli and M. Portesi, *Majorization properties of generalized thermal states*, communicated at IX Latin American Workshop on Nonlinear Phenomena (23-28 October 2005, Bariloche).
- [3549] N. Canosa, R. Rossignoli and M. Portesi, *Majorization properties of generalized thermal distributions*, Physica A **368**, 435-441 (2006).
- [3550] Y. Han, *Phase-space networks of geometrically frustrated systems*, Phys. Rev. E **80**, 051102 (2009) (5 pages).
- [3551] N. Canosa, R. Rossignoli and M. Portesi, *Majorization relations and disorder in generalized statistics*, Physica A **371**, 126-129 (2006).
- [3552] R. Rossignoli, N. Canosa and L. Ciliberti, *Generalized entropic measures of quantum correlations*, Phys. Rev. A **82**, 052342 (2010) (9 pages).
- [3553] R. Rossignoli, N. Canosa and L. Ciliberti, *Quantum correlations and least disturbing local measurements*, Phys. Rev. A **84**, 052329 (2011) (9 pages).
- [3554] N. Canosa, L. Ciliberti and R. Rossignoli, *Quantum discord and related measures of quantum correlations in finite XY chains*, Internat. J. Mod. Phys B **27** (1-3), 1245033 (2013) (19 pages).
- [3555] L. Ciliberti, N. Canosa and R. Rossignoli, *Discord and information deficit in the XX chain*, Phys. Rev. A **88**, 012119 (2013) (11 pages).
- [3556] N. Canosa, L. Ciliberti and R. Rossignoli, *Quantum discord and information deficit in spin chains*, Entropy **17**, 1634-1659 (2015), doi:10.3390/e17041634
- [3557] M.L. Hu, X. Hu, J. Wang, Y. Peng, Y.R. Zhang and H. Fan, *Quantum coherence and geometric quantum discord*, Phys. Rep. (2018), in press, doi: 10.1016/j.physrep.2018.07.004
- [3558] A. Budiyo, J.F. Sumbowo, M.K. Agusta and B.E.B. Nurhandoko, *Characterizing quantum coherence based on the negativity and nonreality of the Kirkwood-Dirac quasiprobability*, preprint (2023), 2309.09162 [quant-ph].
- [3559] W. Li, *Geometric measures of discordlike quantum correlations based on Tsallis relative entropy*, preprint (2018), 1811.11453 [quant-ph].
- [3560] R. Rossignoli and N. Canosa, *Generalized entropic criterion for separability*, preprint (2015), 1505.03608 [quant-ph].
- [3561] N. Canosa and R. Rossignoli, *Generalized non-additive entropies and quantum entanglement*, preprint (2015), 1505.03613 [quant-ph].
- [3562] N. Gigena and R. Rossignoli, *Generalized conditional entropy in bipartite quantum systems*, J. Phys. A: Math. Theor. **47**, 015302 (2014) (18 pages).
- [3563] N. Gigena and R. Rossignoli, *Generalized conditional entropy optimization for qudit-qubit states*, Phys. Rev. A **90**, 042318 (2014) (10 pages).
- [3564] M. Bilkis, N. Canosa, R. Rossignoli and N. Gigena, *Conditional states and entropy in qudit-qubit systems*, Phys. Rev. A **99**, 062119 (2019).
- [3565] N. Gigena and R. Rossignoli, *One-body information loss in fermion systems*, Phys. Rev. A **94**, 042315 (2016) (10 pages).
- [3566] D.P. Chi, J.S. Kim and K. Lee, *Generalized entropy and global quantum discord in multiparty quantum systems*, Phys. Rev. A **87**, 062339 (2013) (9 pages).
- [3567] N. Canosa, M. Cerezo, N. Gigena and R. Rossignoli, *Quantum discord and entropic measures of quantum correlations: Optimization and behavior in finite XY spin chains*, Physical Realizations and Experimental Progress - Science Online (2022).
- [3568] A.C. Sprotte Costa, *Correlacoes quanticas em sistemas de dois Qbits: Medidas alternativas e dinamica sob acoplamento com banho termico*, Master Thesis (Federal University of Parana, Curitiba, 2012).
- [3569] F.A. Wudarski, *Non-Markovian dynamics in the open quantum systems*, Doctor Thesis (Nicolaus Copernicus University, Faculty of Physics, Astronomy and Informatics, 2015).
- [3570] H. Naseri-Karimvand, B. Lari, H. Hassanabadi, *Non-Markovianity and efficiency of a q-deformed quantum heat engine*, Physica A (2022), in press.
- [3571] O. Giraud, *Distribution of bipartite entanglement for random pure states*, J. Phys. A **40**, 2793-2801 (2007).
- [3572] O. Guhne and M. Lewenstein, *Entropic uncertainty relations and entanglement*, Phys. Rev. A **70**, 022316 (2004).

- [3573] O. Guhne, M. Reimpell and R.F. Werner, *Lower bounds on entanglement measures from incomplete information*, Phys. Rev. A **77**, 052317 (2008) (8 pages).
- [3574] A.C.S. Costa, R. Uola and O. Guhne, *Steering criteria from general entropic uncertainty relations for bipartite and tripartite systems*, preprint (2018), 1808.01198 [quant-ph].
- [3575] A.C.S. Costa, R. Uola and O. Guhne, *Entropic steering criteria: Applications to bipartite and tripartite systems*, Entropy **20**, 763 (2018), doi: 10.3390/e20100763
- [3576] A. Ketterer and O. Guhne, *Entropic uncertainty relations from quantum designs*, preprint (2019), 1911.07533 [quant-ph].
- [3577] X. Ge, Y. Wang, Y. Xiang, G. Zhang, L. Liu, L. Li and S. Cheng, *Faithful geometric measures for genuine tripartite entanglement*, Phys. Rev. A **110**, L010402 (2024).
- [3578] A. Lakshminarayan, S.C.L. Srivastava, R. Ketzmerick, A. Backer and S. Tomsovic, *Entanglement and localization transitions in eigenstates of interacting chaotic systems*, Phys. Rev. E **94** (1), 010205 (2016).
- [3579] S. Tomsovic, A. Lakshminarayan, S.C.L. Srivastava and A. Backer, *Eigenstate entanglement between quantum chaotic subsystems: universal transitions and power laws in the entanglement spectrum*, Phys. Rev. E **98**, 032209 (2018).
- [3580] M.A.S. Trindade and J.D.M. Vianna, *Non-extensive statistical entropy, quantum groups and quantum entanglement*, Physica A **391**, 3413-3416 (2012).
- [3581] A.H. Darooneh, G. Naeimi, A. Mehri and P. Sadeghi, *Tsallis entropy, escort probability and the incomplete information theory*, Entropy **12**, 2497-2503 (2010).
- [3582] P. Sadeghi, S. Khademi and A.H. Darooneh, *Tsallis entropy in phase-space quantum mechanics*, Phys. Rev. A **86**, 012119 (2012) (8 pages).
- [3583] O.K. Kazemi, A. Pourdarvish and J. Sadeghi, *Phase transition in a stochastic geometry model with applications to statistical mechanics*, Mathematical Methods in the Applied Sciences (2022), doi: 10.1002/mma.8385
- [3584] O.K. Kazemi, A. Pourdarvish and J. Sadeghi, *The thermodynamics of a stochastic geometry model with applications to non-extensive statistics*, Journal of Stochastic Analysis **3** (2), 5 (2022).
- [3585] U. Lucia, *Irreversibility, entropy and incomplete information*, Physica A **388**, 4025-4033 (2009).
- [3586] U. Lucia, *Maximum entropy generation and κ -exponential model*, Physica A **389**, 4558-4563 (2010).
- [3587] U. Lucia, *Thermodynamic paths and stochastic order in open systems*, Physica A **392**, 3912-3919 (2013).
- [3588] U. Lucia, *Entropy production and generation: clarity from nanosystems considerations*, Chem. Phys. Lett. **629**, 87-90 (2015), doi: <http://dx.doi.org/10.1016/j.cplett.2015.03.062>
- [3589] T. Yamano, *Bounds for α -divergence and a generalized divergence of Tsallis*, communicated at the Research Institute of Mathematical Science Workshop on Mathematical Aspects of Generalized Entropies and their Applications (7-9 July 2009, Kyoto).
- [3590] F. Buyukkilic and D. Demirhan, *A unified grand canonical description of the nonextensive thermostatics of the quantum gases: Fractal and fractional approach*, Eur. Phys. J. B **14**, 705 2000.
- [3591] M.R. Ubriaco, *Correlation functions in the factorization approach of nonextensive quantum statistics*, Phys. Rev. E **62**, 382 (2000).
- [3592] M.R. Ubriaco, *Quantum group invariant, nonextensive quantum statistical mechanics*, Phys. Lett. A **283**, 157 (2001).
- [3593] M.R. Ubriaco, *The role of quantum group invariance in nonextensive quantum statistical mechanics*, Physica A **305**, 305 (2002).
- [3594] M.R. Ubriaco, *Entropies based on fractional calculus*, Phys. Lett. A **373**, 2516-2519 (2009).
- [3595] M.R. Ubriaco, *Scalar curvature of systems with fractal distribution functions*, Phys. Lett. A **376**, 2899-2902 (2012).
- [3596] M.R. Ubriaco, *The role of curvature in quantum statistical mechanics*, J. Phys. Conference Series **766**, 012007 (2016) (pages), doi:10.1088/1742-6596/766/1/012007
- [3597] M.R. Ubriaco, *Density matrix for a consistent non-extensive thermodynamics*, Physica A **503**, 1212-1217 (2018).
- [3598] M.R. Ubriaco, *Fractal entropies from the second inverse maximum entropy principle*, preprint (2023), arxiv 2303.14163
- [3599] N.V. Ustinov, S.B. Leble, M. Czachor and M. Kuna, *Darboux-integration of $i\dot{\rho} = [H, f(\rho)]$* , preprint (2000) [quant-ph/0005030].
- [3600] Q.A. Wang, *Quantum gas distributions prescribed by factorization hypothesis of probability*, Chaos, Solitons and Fractals **14**, 765 (2002).
- [3601] J. Chen, Z. Zhang, G. Su, L. Chen and Y. Shu, *q-generalized Bose-Einstein condensation based on Tsallis entropy*, Phys. Lett. A **300**, 65 (2002).

- [3602] H.H. Aragao-Rego, D.J. Soares, L.S. Lucena, L.R. da Liva, E.K. Lenzi and K.S. Fa, *Bose-Einstein and Fermi-Dirac distributions in nonextensive Tsallis statistics: An exact study*, Physica A **317**, 199 (2002).
- [3603] S. Martinez, F. Pennini, A. Plastino and M. Portesi, *q-thermostatistics and the analytical treatment of the ideal Fermi gas*, Physica A **332**, 230 (2004).
- [3604] A. Rovenchak and B. Sobko, *Fugacity versus chemical potential in nonadditive generalizations of the ideal Fermi-gas*, Physica A **534**, 122098 (2019).
- [3605] B. Sobko and A. Rovenchak, *Superadditive model of the ideal Fermi-gas near absolute zero*, Lviv University Series Physics **56**, 65-75 (2019).
- [3606] B.Yu. Sobko, *Relationship between the parameters of the second virial coefficient of non-Abelian anyons and the two-parametric fractional statistics*, Ukrainian J. Physics 2071-0194 (2021), doi: 10.15407/ujpe66.7.595
- [3607] C. Ou and J. Chen, *Thermostatistic properties of a q-generalized Bose system trapped in an n-dimensional harmonic oscillator potential*, Phys. Rev. E **68**, 026123 (2003).
- [3608] C. Ou and J. Chen, *A unified description of the thermostatistic properties of a class of Bose systems*, Phys. Lett. A **342**, 107 (2005).
- [3609] R.K. Niven, *Exact Maxwell-Boltzmann, Bose Einstein and Fermi-Dirac statistics*, Phys. Lett. A **342**, 286-293 (2005).
- [3610] G.B. Bagci, A. Arda and R. Sever, *On the problem of constraints in nonextensive formalism: A quantum mechanical treatment*, Int. J. Mod. Phys. B **14**, 2085-2092 (2006).
- [3611] Y. Kaupp, S. Liraki, D. Tayurskii, A. Useinob, A. El Kaabouchi, L. Nivanen, B. Minisini, F. Tsobnang, A. Le Mehaute and Q. A. Wang, *Understanding heavy fermion from generalized statistics*, J. Low Temp. Phys. **150**, 660-666 (2008).
- [3612] A. Lawani, J. Le Meur, D. Tayurskii, A. El Kaabouchi, L. Nivanen, B. Minisini, F. Tsobnang, M. Pezeril, A. Le Mehaute and Q. A. Wang, *A nonextensive approach to Bose-Einstein condensation of trapped interacting boson gas*, J. Low Temp. Phys. **150**, 605-611 (2008).
- [3613] A. Algin and E. Arslan, *Bose-Einstein condensation in a gas of the bosonic Newton oscillators*, J. Phys. A **41**, 365006 (2008).
- [3614] Y. Wang and X.M. Kong, *Bose-Einstein condensation of a q-deformed Bose gas in a random box*, Mod. Phys. Lett. B **24**, 135-141 (2010).
- [3615] V.S. Kirchanov, *Using the Renyi entropy to describe quantum dissipative systems in statistical mechanics*, Theor. Math. Phys. **156**, 1347-1355 (2008).
- [3616] Z.F. Huang, C.J. Ou and J.C. Chen, *Nonextensive and extensive thermostatistic properties of Fermi systems trapped in different external potentials*, Chinese Phys. B **18**, 1380-1388 (2009).
- [3617] G. Jumarie, *On some similarities and differences between fractional probability density signed measure of probability and quantum probability*, Mod. Phys. Lett. B **23**, 791-805 (2009).
- [3618] G. Jumarie, *Derivation of an amplitude of information in the setting of a new family of fractional entropies*, Information Sciences **216**, 113-137 (2012).
- [3619] G. Jumarie, *Informational entropy of non-random non-differentiable functions. An approach via fractional calculus*, Applied Mathematical Sciences **9**, (44), 2153-2185 (2015), doc: <http://dx.doi.org/10.12988/ams.2015.52139>
- [3620] H. Hasegawa, *Bose-Einstein and Fermi-Dirac distributions in nonextensive quantum statistics: Exact and interpolation approaches*, Phys. Rev. E **80**, 011126 (2009) (19 pages).
- [3621] R. Silva, D.H.A.L. Anselmo and J.S. Alcaniz, *Nonextensive quantum H-theorem*, Europhys. Lett. **89**, 10004 (2010) (5 pages).
- [3622] A.P. Santos, R. Silva, J.S. Alcaniz and D.H.A.L. Anselmo, *Generalized quantum entropies*, Phys. Lett. A **375**, 3119-3123 (2011).
- [3623] A.P. Santos, R. Silva, J.S. Alcaniz and D.H.A.L. Anselmo, *Non-Gaussian effects on quantum entropies*, Physica A **391** (6), 2182-2192 (2012).
- [3624] R. Carroll, *Some topics in thermodynamics and quantum mechanics*, preprint (2012), 1211.1898 [physics.gen-ph].
- [3625] M.A. Man'ko and V.I. Man'ko, *Deformed subadditivity condition for qudit states and hybrid positive maps*, J. Russian Laser Research **35** (5), 509-517 (2014), doi: 10.1007/s10946-014-9454-z
- [3626] J.A. Lopez-Saldivar, A. Figueroa, O. Castanos, R. Lopez-Pena, M.A. Manko and V.I. Manko, *Discretization of the density matrix as a nonlinear positive map and entanglement*, preprint (2016), 1607.00982 [quant-ph].
- [3627] V.I. Man'ko and R.S. Puzko, *Inequalities of nonlinearly transformed X-states*, communication (2015).
- [3628] M.A. Man'ko, *Hidden correlations in quantum optics and quantum information*, J. Phys.: Conf. Series **1071**, 012015 (2018), doi:10.1088/1742-6596/1071/1/012015

- [3629] A.S. Avanesov and V.I. Man'ko, *Dissipative evolution of the qubit state in the tomographic-probability representation*, J. Russian Laser Research **38** (4), 311-323 (2017), doi: 10.1007/s10946-017-9647-3
- [3630] T.S. Biro, K.M. Shen and B.W. Zhang, *Non-extensive quantum statistics with particle-hole symmetry*, Physica A **428**, 410-415 (2015).
- [3631] F. Pennini, G.L. Ferri and A. Plastino, *q-generalization of quantum phase-space representations*, Physica A **423**, 97-107 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2014.12.033>
- [3632] C. Tsallis, A.R. Plastino and R.F. Alvarez-Estrada, *Escort mean values and the characterization of power-law-decaying probability densities*, J. Math. Phys **50**, 043303 (2009).
- [3633] H. Mohammadzadeh, F. Adli and S. Nouri, *Perturbative thermodynamic geometry of nonextensive ideal classical, Bose, and Fermi gases*, Phys. Rev. E **94**, 062118 (2016) (8 pages).
- [3634] F. Adli and H. Mohammadzadeh, *Thermodynamic geometry of nonextensive quantum gases* [In Iranian], preprint (2019).
- [3635] R. Tsekov, *Boson/fermion Janus particles*, Chemistry **26**, 233-240 (2017).
- [3636] Y. Fang, G. Qiang, X. Liu, F. Chen and J. Zhang, *Understanding the large rotating magnetocaloric effect in $TbMn_{1-x}Fe_xO_3$ single crystals upon q-Fermi Dirac nonextensive statistics*, J. Alloys and Compounds **729**, 1020-1030 (2017), doi: 10.1016/j.jallcom.2017.09.049
- [3637] I.G. de Oliveira, M.A.S.M. Araujo, E.M.C. Abreu and M.J. Neves, *The magnetocaloric effect of a paramagnetic salt from the point of view of Tsallis thermostatistics*, Modern Physics Letters B 1950024 (2019) (10 pages), doi: 10.1142/S0217984919500246
- [3638] M. Masthay, C. Benton, L. Guerrieri and R. Keil, *The Tsallis entropic index q as a measure of distance from thermal equilibrium in paramagnetic spin lattices*, Nanomaterials and Nanostructures (2024).
- [3639] A.B. Brzo, P.A. Abdoul and M. Hameeda, *Thermodynamic properties of an ideal q -deformed Fermi gas*, preprint (2021).
- [3640] R.A. El-Nabulsi and W. Anukool, *Acceleration in quantum mechanics and electric charge quantization*, Modern Physics Letters A 2150185 (2021) (10 pages).
- [3641] D. Monteoliva, A. Plastino and A.R. Plastino, *Magic numbers and mixing degree in many-fermion systems*, Entropy **25**, 1206 (2023).
- [3642] R. Ben Hammou, A. El Aroui, N. Habiballah and M. Nassik, *Nonclassical correlations via Sharma-Mittal quantum discord in Heisenberg XYZ model with Dzyaloshinski-Moriya interaction*, Journal of Russian Laser Research **45** (2) (2024).
- [3643] A. Plastino and C. Tsallis, *Variational method in generalized statistical mechanics*, J. Phys. A **26**, L893 (1993).
- [3644] E.K. Lenzi, L.C. Malacarne and R.S. Mendes, *Perturbation and variational methods in nonextensive Tsallis statistics*, Phys. Rev. Lett. **80**, 218 (1998).
- [3645] Q. Lu, J. Kim and J.E. Straub, *Exploring the solid-liquid phase change of an adapted Dzugutov model using generalized replica exchange method*, J. Chem. Phys. B **116**, 8654-8661 (2012).
- [3646] L.R. Evangelista, L.C. Malacarne and R.S. Mendes, *Quantum corrections for general partition functions*, Physica A **253**, 507 (1998).
- [3647] A.K. Rajagopal, R.S. Mendes and E.K. Lenzi, *Quantum statistical mechanics for nonextensive systems - Prediction for possible experimental tests*, Phys. Rev. Lett. **80**, 3907 (1998).
- [3648] E.K. Lenzi, L.C. Malacarne and R.S. Mendes, *Path integral approach to the nonextensive canonical density matrix*, Physica A **278**, 201 (2000).
- [3649] S. Abe, *The thermal Green functions in nonextensive quantum statistical mechanics*, Eur. Phys. J. B **9**, 679 (1999).
- [3650] R.S. Mendes, K.S. Fa and E.K. Lenzi, *Variational method and non-Gaussian states based on Tsallis statistics*, preprint (1999).
- [3651] R.A. Treumann, *Generalized-Lorentzian path integrals*, Phys. Rev. E **57**, 5150 (1998).
- [3652] R.A. Treumann, *Quantum-statistical mechanics in the Lorentzian domain*, Europhys. Lett. **48**, 8 (1999).
- [3653] R.A. Treumann, *Gibbsian theory of power-law distributions*, preprint (2007), 0711.1676 [physics.plasm-ph].
- [3654] R.A. Treumann and W. Baumjohann, *"Gibbsian" approach to statistical mechanics yielding power law distributions*, preprint (2014), 1406.6639 [cond-mat.stat-mech].
- [3655] R.A. Treumann and W. Baumjohann, *Beyond Gibbs-Boltzmann-Shannon: General entropies - The Gibbs-Lorentzian example*, Frontiers in Physics (14 August 2014) (10 pages), doi: 10.3389/fphy.2014.00049
- [3656] R.A. Treumann and W. Baumjohann, *Generalised partition functions: Inferences on phase space distributions*, Ann. Geophys. **34**, 557-564 (2016), doi:10.5194/angeo-34-557-2016

- [3657] E.K. Lenzi, R.S. Mendes and A.K. Rajagopal, *Quantum statistical mechanics for nonextensive systems*, Phys. Rev. E **59**, 1398 (1999).
- [3658] E.K. Lenzi, *Generalizacao dos metodos variacional, perturbativo, das funcoes de Green e de integral de trajetoria para a mecanica estatistica nao extensiva*, Master Thesis (Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro, 1998).
- [3659] R.S. Mendes, *Field theoretical methods and nonextensive systems*, in *Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 66 (1999).
- [3660] A.K. Rajagopal, *Fractional powers of operators of Tsallis ensemble and their parameter differentiation*, in *Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 61 (1999).
- [3661] J.E. Straub and T.W. Whitfield, *An exact formulation of quantum statistical mechanics based on Feynman path integrals and Tsallis statistical distributions*, preprint (1998).
- [3662] T.W. Whitfield and J.E. Straub, *Enhanced sampling in numerical path integration: An approximation for the quantum statistical density Nonextensive thermodynamics of the two-site Hubbard model based on the nonextensive thermostatics*, Phys. Rev. E **64**, 066115 (2001).
- [3663] R.S. Mendes, K.S. Fa, E.K. Lenzi and J.N. Maki, *Perturbation expansion, Bogoliubov inequality and integral representations in nonextensive Tsallis statistics*, Eur. Phys. J. B **10**, 353 (1999).
- [3664] A.K. Rajagopal, *Quantum density matrix description of nonextensive systems*, in *Nonextensive Statistical Mechanics and Its Applications*, eds. S. Abe and Y. Okamoto, Series Lecture Notes in Physics (Springer-Verlag, Heidelberg, 2001) [ISBN 3-540-41208-5].
- [3665] E.K. Lenzi, R.S. Mendes and A.K. Rajagopal, *Quantum statistical mechanics for nonextensive systems II*, preprint (1999) [cond-matt/9904100].
- [3666] K.S. Fa, P.R.B. Pedreira, R.S. Mendes and E.K. Lenzi, *Variational method and q-function states based on Tsallis statistics*, preprint (2000).
- [3667] E.K. Lenzi and R.S. Mendes, *Collisionless Boltzmann equation for systems obeying Tsallis distribution*, Eur. Phys. J B **21**, 401 (2001).
- [3668] E.K. Lenzi, R.S. Mendes and A.K. Rajagopal, *Green functions based on Tsallis nonextensive statistical mechanics: Normalized q-expectation value formulation*, Physica A **286**, 503 (2000).
- [3669] J. Batle, M. Casas, A.R. Plastino and A. Plastino, *Tsallis based variational method for finding approximate wave functions*, Physica A **294**, 165 (2001).
- [3670] G. Kaniadakis, *Non linear kinetics underlying generalized statistics*, Physica A **296**, 405 (2001).
- [3671] G. Kaniadakis, P. Quarati and A.M. Scarfone, *Kinetic foundations of non-conventional statistics*, Physica A **305**, 76 (2002).
- [3672] G. Kaniadakis, *H-theorem and generalized entropies within the framework of non linear kinetics*, Phys. Lett. A **288**, 283 (2001).
- [3673] P.H. Chavanis, *Generalized thermodynamics and kinetic equations: Boltzmann, Landau, Kramers and Smoluchowski*, Physica A **332**, 89 (2004).
- [3674] G.A. Mendes, M.S. Ribeiro, R.S. Mendes, E.K. Lenzi and F. D. Nobre, *Nonlinear Kramers equation associated with nonextensive statistical mechanics*, Phys. Rev. E **91**, 052106 (2015) (8 pages).
- [3675] E.K. Lenzi, M.A. Ribeiro, M.E.K. Fuziki, M.K. Lenzi and H.V. Ribeiro, *Nonlinear diffusion equation with reaction terms: Analytical and numerical results*, Applied Mathematics and Computation **330**, 254-265 (2018).
- [3676] D. Marin, M.A. Ribeiro, H.V. Ribeiro and E.K. Lenzi, *A nonlinear Fokker-Planck equation approach for interacting systems: Anomalous diffusion and Tsallis statistics*, Phys. Lett. A **382** (29), 1903-1907 (2018), doi: 10.1016/j.physleta.2018.05.009
- [3677] E.K. Lenzi, R.S. Zola, M.P. Rosseto, R.S. Mendes, H.V. Ribeiro, L.R. da Silva and L.R. Evangelista, *Results for nonlinear diffusion equations with stochastic resetting*, Entropy **25**, 1647 (2023).
- [3678] E.K. Lenzi, M.P. Rosseto, D.W. Gryczak, L.R. Evangelista, L.R. da Silva, M.K. Lenzi and R.S. Zola, *Generalized Kinetic Equations with Fractional Time-Derivative and Nonlinear Diffusion: H-Theorem and Entropy*, Entropy **26**, 673 (2024).
- [3679] R.S. Zola, E.K. Lenzi, L.R. da Silva and M.K. Lenzi, *Entropy production in a fractal system with diffusive dynamics*, Entropy **25**, 1578 (2023).
- [3680] P.H. Chavanis and C. Sire, *Kinetic and hydrodynamic models of chemotactic aggregation*, Physica A **384**, 199-222 (2007).
- [3681] P.H. Chavanis, *Dynamics and thermodynamics of systems with long-range interactions: interpretation of the different functionals*, in *Dynamics and Thermodynamics of Systems with Long Range Interactions: Theory*

- and *Experiments*, eds. A. Campa, A. Giansanti, G. Morigi and F. Sylos Labini, American Institute of Physics Conference Proceedings **970**, 39-90 (2007).
- [3682] A. Giansanti, D. Moroni and A. Campa, *Universal behaviour in the static and dynamic properties of the α -XY model*, Chaos, Solitons and Fractals **13**, 407-416 (2002).
- [3683] Y. Liu, C. Xu, Z. Huang and B. Lin, *The internal energy expression of a long-range interaction complex system and its statistical physical properties*, Physica A **473**, 423-427 (2017).
- [3684] A. Campa and P.H. Chavanis, *The quasilinear theory in the approach of long-range systems to quasi-stationary states*, J. Stat. Mech. 053202 (2017).
- [3685] P.H. Chavanis and C. Sire, *Critical mass of bacterial populations in a generalized Keller-Segel model. Analogy with the Chandrasekhar limiting mass of white dwarf stars*, Physica A **387**, 1999-2009 (2008).
- [3686] S.K. Baek and B.J. Kim, *Free energy of a chemotactic model with nonlinear diffusion*, Scientific Reports **7**, 8909 (2017) (13 pages), doi:10.1038/s41598-017-09369-w
- [3687] P.H. Chavanis, *Hamiltonian and Brownian systems with long-range interactions: III. The BBGKY hierarchy for spatially inhomogeneous systems*, Physica A **387**, 787-805 (2008).
- [3688] P.H. Chavanis, *Hamiltonian and Brownian systems with long-range interactions: IV. General kinetic equations from the quasilinear theory*, Physica A **387**, 1504-1528 (2008).
- [3689] P.H. Chavanis and C. Sire, *On the meaning of Tsallis functional in astrophysics*, preprint (2004) [cond-mat/0409569].
- [3690] P.H. Chavanis, *Hamiltonian and Brownian systems with long-range interactions: II Kinetic equations and stability analysis*, Physica A **361**, 81-123 (2005).
- [3691] P.H. Chavanis and C. Sire, *Logotropic distributions*, Physica A **375**, 140-158 (2007).
- [3692] P.H. Chavanis and S. Kumar, *Comparison between the logotropic and Λ CDM models at the cosmological scale*, Journal of Cosmology and Astroparticle Physics **05**, 018 (2017) (40 pages).
- [3693] P.H. Chavanis and F. Bouchet, *On the coarse-grained evolution of collisionless stellar systems*, Astronomy and Astrophys. **430**, 771 (2005).
- [3694] P.H. Chavanis, *Coarse-grained distributions and superstatistics*, Physica A **359**, 177-212 (2006).
- [3695] P.H. Chavanis, *Quasi-stationary states and incomplete violent relaxation in systems with long-range interactions*, Physica A **365**, 102-107 (2006).
- [3696] P.H. Chavanis, *Nonlinear mean-field Fokker-Planck equations and their applications in physics, astrophysics and biology*, C. R. Physique **7**, 318-330 (2006).
- [3697] P.H. Chavanis, *Brownian particles with long- and short-range interactions*, Physica A **390**, 1546-1574 (2011).
- [3698] P.H. Chavanis, *Kinetic theory of collisionless relaxation for systems with long-range interactions*, Physica A **606**, 128089 (2022).
- [3699] C. Ricotta and L. Szeidle, *Towards a unifying approach to diversity measures: Bridging the gap between the Shannon entropy and Rao's quadratic index*, Theoretical Population Biol. **70**, 237-243 (2006).
- [3700] T.M. Rocha Filho, A. Figueiredo and M.A. Amato, *Entropy of classical systems with long-range interactions*, Phys. Rev. Lett. **95**, 190601 (2005) (4 pages).
- [3701] A. Rapisarda, A. Pluchino and C. Tsallis, *Comment on "Entropy of classical systems with long-range interactions" by Rocha Filho, Figueiredo and Amato*, preprint (2006) [cond-mat/0601409].
- [3702] A. Aliano, G. Kaniadakis and E. Miraldi, *Bose-Einstein condensation in the framework of κ -statistics*, Physica B **325**, 35 (2003).
- [3703] J. Du, *Nonextensive power law distributions and the q-kinetic theory for the systems with self-gravitating long-range interactions*, preprint (2006) [cond-mat/0603803].
- [3704] J. Du, *What does the nonextensive parameter stand for in self-gravitating systems?*, Astrophys. Space Sci. **305**, 247-251 (2006).
- [3705] W.-F. Lu, *A variational perturbation method in nonextensive Tsallis statistics*, preprint (2001) [cond-mat/0107553].
- [3706] A. Cavallo, F. Cosenza and L. De Cesare, *Two-time Green's functions and the spectral density method in nonextensive classical statistical mechanics*, Phys. Rev. Lett. **87**, 240602 (2001).
- [3707] A. Cavallo, F. Cosenza and L. De Cesare, *Two-time Green function technique in Tsallis' classical statistical mechanics*, Physica A **305**, 152 (2002).
- [3708] A. Cavallo, F. Cosenza and L. De Cesare, *Spectral density method in quantum nonextensive thermostatics and magnetic systems with long-range interactions*, Eur. Phys. J. B **50**, 73-76 (2006).
- [3709] A. Cavallo, F. Cosenza, L. De Cesare, *Two-time Green's functions and spectral density method in nonextensive quantum statistical mechanics*, Phys. Rev. E **77**, 051110 (2008) (20 pages).

- [3710] J.A.S. Lima, J.R. Bezerra and R. Silva, *Conservative force fields in nonextensive kinetic theory*, Physica A **316**, 289 (2002).
- [3711] J.R.B da Silva, *Teoria Cinetica Nao-Extensiva: Coeficientes de Transporte e Outras Aplicacoes Fisicas*, Doctor Thesis (Universidade Federal do Rio Grande do Norte, Natal, 2005).
- [3712] J.A.S. Lima and R. Silva, *The nonextensive gas: A kinetic approach*, Phys. Lett. A **338**, 272 (2005).
- [3713] F.A. da Costa and M.D.S. de Meneses, *Comment on “Conservative forces in nonextensive kinetic theory”*, preprint (2003) [cond-mat/0306220].
- [3714] J.A.S. Lima, J.R. Bezerra and R. Silva, *Reply to “Comment on conservative force fields in nonextensive kinetic theory”*, preprint (2003) [cond-mat/0306258].
- [3715] R. Silva, *The relativistic statistical theory and Kaniadakis entropy: an approach through a molecular chaos hypothesis*, Eur. Phys. J. B **54**, 499-502 (2006).
- [3716] R. Silva Jr., J.M. Silva and J.A. Lima, *Conservative force fields in non-Gaussian statistics*, Phys. Lett. A **372**, 5754-5757 (2008).
- [3717] T.J. Sherman and J. Rafelski, *Non-extensive Boltzmann equilibration dynamics*, preprint (2002) [physics/0204011].
- [3718] T. Sherman and J. Rafelski, *Generalization of Boltzmann equilibration dynamics*, in *Decoherence and Entropy in Complex Systems*, ed. H.-T. Elze, *Lecture Notes in Physics* **633** (Springer-Verlag, Berlin, 2004), page 377.
- [3719] R. Gallego, H. Wilming, J. Eisert and C. Gogolin, *What it takes to avoid equilibration*, Phys. Rev. A **98**, 022135 (2018).
- [3720] A. Lavagno, *Relativistic nonextensive thermodynamics*, Phys. Lett. A **301**, 13 (2002).
- [3721] J.L. Du, *Jean’s criterion in nonextensive statistical mechanics*, Physica A **335**, 107 (2004).
- [3722] W.F. Lu, T. Cai and C.K. Kim, *A variational perturbation approximation method in Tsallis non-extensive statistical physics*, Physica A **378**, 255-272 (2007).
- [3723] A.R. Plastino, *S_q entropy and self-gravitating systems*, Europhysics News **36**, 208 (2005) [Europhysics News Special Issue *Nonextensive Statistical Mechanics: New Trends, new perspectives*, eds. J.P. Boon and C. Tsallis (November/December 2005)].
- [3724] P.-H. Chavanis and C. Sire, *On the interpretations of Tsallis functional in connection with Vlasov-Poisson and related systems: Dynamics vs thermodynamics*, Physica A **356**, 419-446 (2005).
- [3725] P.H. Chavanis, *Statistical mechanics of self-gravitating systems in general relativity: I. The quantum Fermi gas*, preprint (2019), 1908.10806 [gr-qc].
- [3726] P.-H. Chavanis and C. Sire, *Virial theorem and dynamical evolution of self-gravitating Brownian particles in an unbounded domain. I. Overdamped models*, Phys. Rev. E **73**, 066103 (2006) (16 pages).
- [3727] T.S. Biro and G. Kaniadakis, *Two generalizations of the Boltzmann equation*, Phys. J. B **50**, 3-6 (2006).
- [3728] F. Markus, *Hamiltonian formulation as a basis of quantized thermal processes*, in *Variational and Extremum Principles in Macroscopic Systems*, eds. S. Sieniutycz and H. Farkas, Chapter **13**, 267-291 (Elsevier, Amsterdam, 2005).
- [3729] S. Cai, G.Z. Su and J.C. Chen, *Thermostatistic properties of a q -deformed ideal Fermi gas with a general energy spectrum*, J. Phys. A **40**, 11245-11254 (2007).
- [3730] P.-H. Chavanis, *General properties of nonlinear mean field Fokker-Planck equations*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 144-151 (New York, 2007).
- [3731] Pierre-Henri Chavanis, *Dynamics and thermodynamics of systems with long-range interactions: interpretation of the different functionals*, preprint (2009), 0904.2729 [cond-mat.stat-mech].
- [3732] F. Staniscia, P.H. Chavanis, and G. De Ninno, *Out-of-equilibrium phase transitions in the Hamiltonian mean-field model: A closer look*, Phys. Rev. E **83**, 051111 (2011) (18 pages).
- [3733] A. Lavagno, *Basic-deformed quantum mechanics*, Rep. Math. Phys. **64**, 79-91 (2009).
- [3734] J.M. Conroy, H.G. Miller and A.R. Plastino, *Thermodynamic consistency of the q -deformed Fermi-Dirac distribution in nonextensive thermostatics*, Phys. Lett. A **374**, 4581-4584 (2010).
- [3735] L. Hong, Z. Yang, Y. Zhu and W.A. Yong, *Boltzmann-equation based derivation of balance laws in irreversible thermodynamics*, preprint (2014), 1411.7102 [cond-mat.stat-mech].
- [3736] L. Hong, Y. Zhu and W.A. Yong, *A novel dissipation property of the master equation*, preprint (2014), 1411.7114 [physics.chem-ph].
- [3737] T. Bhattacharyya, P. Garg, R. Sahoo and P. Samantray, *Time evolution of temperature fluctuation in a non-equilibrated system*, Eur. Phys. J. A **52**, 283 (2016) (6 pages), doi: 10.1140/epja/i2016-16283-x
- [3738] M.R.A. Abdelmalik and E.H. van Brummelen, *Moment Closure Approximations of the Boltzmann Equation Based on -Divergences*, J. Stat. Phys. (2016), in press, doi: 10.1007/s10955-016-1529-5

- [3739] P. Jizba, J. Korbel and V. Zatloukal, *Tsallis thermostatics as a statistical physics of random chains*, Phys. Rev. E **95** (2), 022103 (2017) (13 pages).
- [3740] R. Yano, *Geometric random walk of finite number of agents under constant variance*, J. Stat. Mech. 053204 (2017) (32 pages).
- [3741] D.J. Zamora, M.C. Rocca, A. Plastino and G.L. Ferri, *q-Path entropy phenomenology for phase-space curves*, Physica A **490**, 1522-1531 (2018).
- [3742] D.J. Zamora, M.C. Rocca, A. Plastino and G.L. Ferri, *Effects of the q-entropic force in n-dimensions*, preprint (2017), 1711.03866 [physics.gen-ph].
- [3743] R. Yano and H. Kuroda, *Transport via the Boltzmann equation with anomalous collisions*, Phys. Rev. E **98**, 042150 (2018).
- [3744] H.S. Lima, *Princípio variacional de Bogoliubov e uma possível generalização através da entropia de Rényi*, Thesis (Universidade Estadual do Sudoeste da Bahia, Departamento de Ciências Exatas e Tecnológicas, Vitória da Conquista, 2019).
- [3745] K. Mlada, M. Pavelka and V. Klika, *Lack-of-fit reduction in the path-integral formalism*, preprint (2025), 2506.20242 [cond-mat.stat-mech].
- [3746] E. Lutz, *Anomalous diffusion and Tsallis statistics in an optical lattice*, Phys. Rev. A **67**, 051402(R) (2003).
- [3747] P. Douglas, S. Bergamini and F. Renzoni, *Tunable Tsallis distributions in dissipative optical lattices*, Phys. Rev. Lett. **96**, 110601 (2006) (4 pages).
- [3748] E. Lutz and F. Renzoni, *Beyond Boltzmann-Gibbs statistical mechanics in optical lattices*, Nature Physics **9**, 615-619 (2013), doi: www.nature.com/naturephysics 615
- [3749] W. Huntington, J. Glick, M. Borysow and D.J. Heinzen, *Intense continuous cold-atom source*, Phys. Rev. A **107**, 013302 (2023).
- [3750] Z. Meir, T. Sikorsky, R. Ben-shlomi, N. Akerman, Y. Dallal and R. Ozeri, *Dynamics of a ground-state cooled ion colliding with ultracold atoms*, Phys. Rev. Lett. **117**, 243401 (2016).
- [3751] M. Tomza, K. Jachymski, R. Gerritsma, A. Negretti, T. Calarco, Z. Idziaszek and P.S. Julienne, *Cold hybrid ion-atom systems*, preprint (2017), 1708.07832 [physics.atom-ph].
- [3752] V. Zaburdaev, S. Denisov and J. Klafter, *Levy walks*, Rev. Mod. Phys. **87**, 483-530 (2015).
- [3753] W. Niedenzu, T. Griesser and H. Ritsch, *Kinetic theory of cavity cooling and self-organisation of a cold gas*, EPL **96**, 43001 (2011) (6 pages).
- [3754] S.L.E.F. da Silva, *Newton's cooling law in generalised statistical mechanics*, Physica A (2020), in press.
- [3755] H. Ritsch, P. Domokos, F. Brennecke and T. Esslinger, *Cold atoms in cavity-generated dynamical optical potentials*, Rev. Mod. Phys. **85** (2), 553-601 (2013).
- [3756] A. Dechant, D.A. Kessler and E. Barkai, *Deviations from Boltzmann-Gibbs statistics in confined optical lattices*, Phys. Rev. Lett. **115**, 173006 (2015) (5 pages).
- [3757] A. Dechant, S. Tzvi Shafier, D.A. Kessler and Eli Barkai, *Heavy-tailed phase-space distributions beyond Boltzmann-Gibbs and equipartition: Statistics of confined cold atoms*, Phys. Rev. E **94**, 022151 (2016).
- [3758] H. Lavicka, V. Potocek, T. Kiss, E. Lutz and I. Jex, *Quantum walk with jumps*, Eur. Phys. J. D **64**, 119-129 (2011).
- [3759] X.X. Fang, K. An, B.T. Zhang, B.C. Sanders and H. Lu, *Maximal coin-position entanglement generation in a quantum walk for the third step and beyond regardless of the initial state*, preprint (2023), 2209.01727v2 [quant-ph].
- [3760] G.B. Bagci and U. Tirnakli, *Self-organization in dissipative optical lattices*, Chaos **19**, 033113 (2009) (6 pages).
- [3761] G. Gaeta, *Asymptotic symmetries in an optical lattice*, Phys. Rev. A **72**, 033419 (2005) (3 pages).
- [3762] S. Abe, *Dilatation symmetry of anomalous diffusion*, preprint (2003).
- [3763] S. Abe, *Dilatation symmetry of the Fokker-Planck equation and anomalous diffusion*, Phys. Rev. E **69**, 016102 (2004).
- [3764] E.M.F. Curado and F.D. Nobre, *Derivation of nonlinear Fokker-Planck equations by means of approximations to the master equation*, Phys. Rev. E **67**, 021107 (2003).
- [3765] L. Hong, C. Jia, Y. Zhu and W.A. Yong, *Novel dissipative properties of the master equation*, J. Math. Phys. **57**, 103303 (2016) (16 pages).
- [3766] J.-L. Wu and X.-M. Huang, *Generalized master equation for the nonextensive reaction-diffusion systems*, Wuli Xuebao/Acta Physica Sinica **55**, 6234-6237 (2006).
- [3767] J.L. Wu and H.J. Chen, *Fluctuation in nonextensive reaction-diffusion systems*, Physica Scripta **75**, 722-725 (2007).
- [3768] G.B. Bagci, *Nonextensive Reaction Rate*, preprint (2007), 0705.2050 [cond-mat.stat-mech].

- [3769] F.D. Nobre, E.M.F. Curado and G. Rowlands, *A procedure for obtaining general nonlinear Fokker-Planck equations*, Physica A **334**, 109 (2004).
- [3770] F.D. Nobre and E.M.F. Curado, *Tsallis distribution: A robust solution for nonlinear Fokker-Planck equations*, preprint (2003).
- [3771] T.D. Frank, *Generalized multivariate Fokker-Planck equations derived from kinetic transport theory and linear nonequilibrium thermodynamics*, Phys. Lett. A **305**, 150 (2002).
- [3772] T.D. Frank and R. Friedrich, *Estimating the nonextensivity of systems from experimental data: A nonlinear diffusion equation approach*, Physica A **347**, 65 (2005).
- [3773] T.D. Frank, *Modelling the stochastic single particle dynamics of relativistic fermions and bosons using nonlinear drift-diffusion equations*, Mathematical and Computer Modelling **42**, 1057-1062 (2005).
- [3774] T.D. Frank, *Exact solutions and Monte Carlo simulations of self-consistent Langevin equations: A case study for the collective dynamics of stock prices*, Internat. J. Mod. Phys. B **21**, 1099-1112 (2007).
- [3775] T.D. Frank, *Stochastic processes and mean field systems defined by nonlinear Markov chains: An illustration for a model of evolutionary population dynamics*, Braz. J. Phys. **41** (2-3), 129-134 (2011).
- [3776] K.S. Fa, *A class of nonlinear Langevin equation with the drift and diffusion coefficients separable in time and space driven by different noises*, Physica A (2019), in press.
- [3777] Zhi-Qiang Jiang, Wei Chen, Wei-Xing Zhou, *Scaling in the distribution of intertrade durations of Chinese stocks*, Physica A **387**, 5818-5825 (2008).
- [3778] G.H. Mu and W.X. Zhou, *Tests of nonuniversality of the stock return distributions in an emerging market*, Phys. Rev. E **82**, 066103 (2010) (8 pages).
- [3779] T. Princy, *Modeling and analysis of trading volume and stock return data using bivariate q-Gaussian distribution*, Annals of Data Science (2024).
- [3780] X. Jiang, *Modeling stock return distributions and pricing options*, preprint (2025), 2503.08666 [q-fin.MF].
- [3781] D. Peng, *Pricing of perpetual american put with fast diffusion process*, Acta Mathematica Scientia **32A**, 1056-1062 (2013) [In Chinese].
- [3782] L. Liu and Y. Cui, *European option based on least-squares method under non-extensive statistical mechanics*, Entropy **21**, 933 (2019), doi: 10.3390/e21100933
- [3783] G. Nayak, A.K. Singh and D. Senapati, *Computational modeling of non-Gaussian option price using non-extensive Tsallis' entropy framework*, Computational Economics (2020) (19 pages), doi: 10.1007/s10614-020-10015-3
- [3784] R. Ouhamma and M. Kamgarpour, *Learning Nash Equilibria in Zero-Sum Markov Games: A Single Time-scale Algorithm Under Weak Reachability*, preprint (2023), 2312.08008 [cs.GT].
- [3785] J. Konczer, *Statistical games - Playful approach to statistics*, preprint (2024), 2402.15892 [math.ST].
- [3786] T.D. Frank, *Nonlinear Fokker-Planck Equations: Fundamentals and Applications*, Series Synergetics (Springer, Berlin, 2005).
- [3787] J.L. McCauley, *A comment on the paper "Stochastic feedback, nonlinear families of Markov processes, and nonlinear Fokker-Planck equations" by T.D. Frank*, Physica A **382**, 445-452 (2007).
- [3788] T.D. Frank, *A mini-tutorial on measure-valued Markov processes and nonlinear martingale problems – As a reply to McCauley's comment*, Physica A **382**, 453-464 (2007).
- [3789] M. Sheraz, V. Preda and S. Dedu, *Non-extensive minimal entropy martingale measures and semi-Markov regime switching interest rate modeling*, AIMS Mathematics **5** (1), 300-310 (2019), doi: 10.3934/math.2020020
- [3790] V. Preda, S. Dedu, I. Iatan, I.D. Cernat and M. Sheraz, *Tsallis entropy for loss models and survival models involving truncated and censored random variables*, Entropy **24**, 1654 (2022).
- [3791] M. Sheraz and I. Nasir, *Information-theoretic measures and modeling stock market volatility: A comparative approach*, Risks **9**, 89 (2021), doi: 10.3390/risks9050089
- [3792] D.J.C. Koegelenberg and J.H. van Vuuren, *A dynamic price jump exit and re-entry strategy for intraday trading algorithms based on market volatility*, Expert Systems With Applications **243**, 122892 (2024).
- [3793] R.C. Sfetcu, S.C. Sfetcu and V. Preda, *Ordering Awad-Varma entropy and applications to some stochastic models*, Mathematics **9**, 280 (2021), doi: 10.3390/math9030280
- [3794] G. Ciuperca, V. Girardin and L. Lhote, *Computation and estimation of generalized entropy rates for denumerable Markov chains*, IEEE Transactions Informat. Theory **57** (7), 4026-4034 (2011).
- [3795] V. Girardin and L. Lhote, *Rescaling entropy and divergence rates*, IEEE Transactions on Information Theory (2015), in press, doi: 10.1109/TIT.2015.2476486
- [3796] T.D. Frank, *Numeric and exact solutions of the nonlinear Chapman-Kolmogorov equation: A case study for a nonlinear semi-group Markov model*, Int. J. Mod. Phys. B **23**, 3627-3641 (2009).

- [3797] E.K. Lenzi, L.C. Malacarne, R.S. Mendes and I.T. Pedron, *Anomalous diffusion, nonlinear fractional Fokker-Planck equation and solutions*, Physica A **319**, 245 (2003).
- [3798] J. Wang, W.-J. Zhang, J.-R. Liang, J.-B. Xiao and F.-Y. Ren, *Fractional nonlinear diffusion equation and first passage time*, Physica A **387**, 764-772 (2008).
- [3799] P.C. da Silva, L.R. da Silva, E.K. Lenzi, R.S. Mendes and L.C. Malacarne, *Anomalous diffusion and anisotropic nonlinear Fokker-Planck equation*, Physica A **342**, 16 (2004).
- [3800] E.K. Lenzi, M.K. Lenzi, T.M. Gimenez, L.R. da Silva, *Some results for an N-dimensional nonlinear diffusion equation with radial symmetry*, J. Eng. Math. **67**, 233-240 (2010).
- [3801] I.T. Pedron, R.S. Mendes, T.J. Buratta, L.C. Malacarne and E.K. Lenzi, *Logarithmic diffusion and porous media equations: An unified description*, Phys. Rev. E **72**, 031106 (2005) (5 pages).
- [3802] V. Schwammle, F.D. Nobre and C. Tsallis, *q-Gaussians in the porous-medium equation: Stability and time evolution*, Eur. Phys. J. B **66**, 537-546 (2008).
- [3803] J. Yao, C.L. Williams, F. Hussain and D.J. Kouri, *Generalized Fourier Transform method for solving nonlinear anomalous diffusion equations*, Applied Mathematics **10**, 1039-1047 (2019), doi: doi.org/10.4236/am.2019.1012072
- [3804] M.S. Ribeiro, F.D. Nobre and E.M.F. Curado, *Classes of N-Dimensional nonlinear Fokker-Planck equations associated to Tsallis entropy*, in Special Issue *Tsallis Entropy*, ed. A. Anastasiadis, Entropy **13**, 1928-1944 (2011).
- [3805] M.S. Ribeiro, *Termoestatística para sistemas complexos: um estudo analítico e computacional de sistemas nao-extensivos*, Doctoral Thesis (Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro, 2016).
- [3806] B.C.C. dos Santos and C. Tsallis, *Unificacao das equacoes estocasticas de Ito e Stratonovich e evolucao temporal para estados estacionarios q-Gaussianos*, communicated at the 2nd Workshop of the National Institute of Science and Technology for Complex Systems (Rio de Janeiro, 1-5 March 2010).
- [3807] B.C.C. dos Santos and C. Tsallis, *Time evolution towards q-Gaussian stationary states through unified Itô-Stratonovich stochastic equation*, Phys. Rev. E **82**, 061119 (2010) (9 pages).
- [3808] R. Guo and J.L. Du, *Power-law behaviors from the two-variable Langevin equation Ito's and Stratonovich's Fokker-Planck equations*, preprint (2012), arxiv 1212.3980
- [3809] C. Yin, R. Guo and J. Du, *The rate coefficients of unimolecular reactions in the systems with power-law distributions*, Physica A (2014), in press, doi: http://dx.doi.org/10.1016/j.physa.2014.04.021
- [3810] Y. Zhou and C. Yin, *Power-law Fokker-Planck equation of unimolecular reaction based on the approximation to master equation*, Physica A (2016), in press, doi: http://dx.doi.org/10.1016/j.physa.2016.07.060
- [3811] C. Yin and J. Du, *The power-law reaction rate coefficient for the barrierless reactions*, preprint (2014), 1404.6728 [physics.chem-ph].
- [3812] J.P. Boon and J.F. Lutsko, *Generalized diffusion equation*, Physica A **368**, 55-62 (2006).
- [3813] J.F. Lutsko and J.P. Boon, *Generalized diffusion: A microscopic approach*, Phys. Rev. E **77**, 051103 (2008) (13 pages).
- [3814] J.P. Boon, P. Grosfils and J.F. Lutsko, *Generalized diffusion and pretransitional fluctuations statistics*, in *Complex Systems - New Trends and Expectations*, eds. H.S. Wio, M.A. Rodriguez and L. Pesquera, Eur. Phys. J. Special Topics **143**, 209-216 (2007).
- [3815] J.P. Boon and J.F. Lutsko, *Nonlinear diffusion from Einstein's master equation*, Europhys. Lett. **80**, 60006 (2007).
- [3816] C.J. Tessone, A. Plastino and H.S. Wio, *Stochastic resonance and generalized information measures*, Physica A **326**, 37 (2003).
- [3817] B. Dybiec and E. Gudowska-Nowak, *Resonant activation in the presence of non-equilibrated baths*, Phys. Rev. E **69**, 016105 (2004).
- [3818] L. Kusmierz, M. Bier and E. Gudowska-Nowak, *Optimal potentials for diffusive search strategies*, J. Phys. A: Math. Theor. **50**, 185003 (2017)(14 pages), doi: 10.1088/1751-8121/aa6769
- [3819] G.A. Mendes, E.K. Lenzi, R.S. Mendes and L.R. da Silva, *Anisotropic fractional diffusion equation*, Physica A **346**, 271 (2004).
- [3820] W. Chen, H.G. Sun and X. Li, *Fractional derivative modeling in mechanics and engineering*, in *Fractional Diffusion Model, Anomalous Statistics and Random Process*, 115-157 (Springer, 2022).
- [3821] L.R. da Silva, L.S. Lucena, E.K. Lenzi, R.S. Mendes and K.S. Fa, *Fractional and nonlinear diffusion equation: Additional results*, Physica A **344**, 671 (2004).
- [3822] R.S. Mendes, C.A. Lopes, E.K. Lenzi and L.C. Malacarne, *Variational methods in nonextensive Tsallis statistics: A comparative study*, Physica A **344**, 562 (2004).

- [3823] F. Buscemi, P. Bordone and A. Bertoni, *Linear entropy as an entanglement measure in two-fermion systems*, Phys. Rev. A **75**, 032301 (2007) (7 pages).
- [3824] D.A. Stariolo, *The Langevin and Fokker-Planck equations in the framework of a generalized statistical mechanics*, Phys. Lett. A **185**, 262 (1994).
- [3825] D. Domingo, A. D’Onofrio and F. Flandoli, *Boundedness vs unboundedness of a noise linked to Tsallis q -statistics: The role of the overdamped approximation*, J. Math. Phys. **58**, 033301 (2017) (14 pages), doi: 10.1063/1.4977081
- [3826] A.R. Plastino and A. Plastino, *Non-extensive statistical mechanics and generalized Fokker-Planck equation*, Physica A **222**, 347 (1995).
- [3827] C. Tsallis and D.J. Bukman, *Anomalous diffusion in the presence of external forces: exact time-dependent solutions and their thermostistical basis*, Phys. Rev. E **54**, R2197 (1996).
- [3828] R.S. Mendes, E.K. Lenzi, L.C. Malacarne, S. Picoli and M. Jauregui, *Random walks associated with nonlinear Fokker-Planck equations*, Entropy **19**, 155 (2017) (11 pages), doi:10.3390/e19040155
- [3829] F. Anceschi and Y. Zhu, *On a spatially inhomogeneous nonlinear Fokker-Planck equation: Cauchy problem and diffusion asymptotics*, preprint (2021), 2102.12795 [math.AP].
- [3830] L.S.V. Santos, *Dinamica microscopica associada a equacao de Fokker-Planck nao linear*, Monografia (Universidade Estadual do Sudoeste da Bahia, 2019).
- [3831] L. Santos, *Microscopic dynamics of nonlinear Fokker-Planck equations*, Phys. Rev. E **103**, 032106 (2021).
- [3832] L. Santos, *Nonextensive stochastic dynamical foundations of nonlinear Fokker-Planck equations*, preprint (2022).
- [3833] L. Santos, *Nonextensive Ito-Langevin dynamics*, preprint (2022), 2203.14399 [cond-mat.stat-mech].
- [3834] G. Fasihi-Ramandi, *Hamilton’s gradient estimate for fast diffusion equations under geometric flow*, AIMS Mathematics **4** (3): 497?505 (2019), doi:10.3934/math.2019.3.497
- [3835] D. O’Malley, V.V. Vesselinov and J.H. Cushman, *Diffusive mixing and Tsallis entropy*, Phys. Rev. E **91**, 042143 (2015) (7 pages).
- [3836] R. Guo and J. Du, *The precise time-dependent solution of the Fokker-Planck equation with anomalous diffusion*, Annals of Physics **359**, 187-197 (2015).
- [3837] R. Guo, *Entropy and entropy production in Fokker-Plank equation under the generalized fluctuation-dissipation relation*, J. Stat. Mech.: Theory and Experiment, 043202 (2018)
- [3838] M.T. Araujo and E.D. Filho, *Particular solution for anomalous diffusion equation with source term*, J. Physics: Conference Series **285**, 012031 (2011) (6 pages).
- [3839] T. Kosztolowicz and K.D. Lewandowska, *First-passage time for subdiffusion: The nonadditive entropy approach versus the fractional model*, Phys. Rev. E **86**, 021108 (2012) (11 pages).
- [3840] J.L. Zhao, J.D. Bao and W.P. Gong, *Kramers escape rate in nonlinear diffusive media*, J. Chem. Phys. **124**, 024112 (2006).
- [3841] Y. Zhou and J. Du, *Kramers escape rate in overdamped systems with the power-law distribution*, Physica A **402**, 299-305 (2014), doi: http://dx.doi.org/10.1016/j.physa.2014.01.065
- [3842] M.A.F. dos Santos and E.K. Lenzi, *Entropic nonadditivity, H theorem, and nonlinear Klein-Kramers equations*, Phys. Rev. E **96**, 052109 (2017) (7 pages).
- [3843] Y.J. Zhou and C.T. Yin, *Time-dependent Kramers escape rate in overdamped system with power-law distribution*, Internat. J. Modern Phys. B **30** (17) (2016), doi: 10.1142/S0217979216500958
- [3844] J.S. Andrade Jr., G.F.T. da Silva, A.A. Moreira, F.D. Nobre and E.M.F. Curado, *Thermostatistics of overdamped motion of interacting particles*, Phys. Rev. Lett. **105**, 260601 (2010) (4 pages).
- [3845] Y. Levin and R. Pakter, *Comment on: Thermostatistics of overdamped motion of interacting particles*, Phys. Rev. Lett. **107**, 088901 (2011).
- [3846] J. S. Andrade Jr., G.F.T. da Silva, A.A. Moreira, F.D. Nobre and E.M.F. Curado, *Reply to the Comment by Levin and Parker*, Phys. Rev. Lett. **107**, 088902 (2011).
- [3847] J. S. Andrade Jr., G.F.T. da Silva, A.A. Moreira, F.D. Nobre and E.M.F. Curado, *Reply to Comment by Levin and Pakter*, preprint (2011).
- [3848] Y. Levin and R. Pakter, *Rejoinder on “Thermostatistics of overdamped motion of interacting particles”*, preprint (2011), 1105.1316 [cond-mat.stat-mech].
- [3849] Y. Levin, R. Pakter, F.B. Rizzato, T.N. Teles and F.P. da C. Benetti, *Nonequilibrium statistical mechanics of systems with long-range interactions: Ubiquity of core-halo distributions*, Phys. Rep. (2013), in press, doi: http://dx.doi.org/10.1016/j.physrep.2013.10.001, 1310.1078 [cond-mat.stat-mech].
- [3850] C.M. Vieira, H.A. Carmona, J.S. Andrade Jr. and A.A. Moreira, *General continuum approach for dissipative systems of repulsive particles*, Phys. Rev. E **93**, 060103(R) (2016).

- [3851] A.A. Moreira, C.M. Vieira, H.A. Carmona, J.S. Andrade, Jr. and C. Tsallis, *Overdamped dynamics of particles with repulsive power-law interactions*, Phys. Rev. E **98**, 032138 (2018).
- [3852] S. Curilef, A.R. Plastino and R.S. Wedemann, *Statistical dynamics of driven systems of confined interacting particles in the overdamped-motion regime*, Chaos **32**, 113134 (2022).
- [3853] A.R. Plastino, E.M.F. Curado, F.D. Nobre and C. Tsallis, *From the nonlinear Fokker-Planck to the Vlasov description and back: Confined interacting particles with drag*, Phys. Rev. E **97**, 022120 (2018) (10 pages).
- [3854] B. Atenas, S. Curilef and A.R. Plastino, *Nonlinear Vlasov and Fokker-Planck dynamics in confined systems with drag: A numerical study*, 3rd International Workshop on Statistical Physics, Journal of Physics: Conference Series **2839**, 012005 (2024).
- [3855] L.S. Lima, *Interplay between nonlinear Fokker-Planck equation and stochastic differential equation*, Probabilistic Engineering Mechanics (2022), in press, doi: 10.1016/j.probengmech.2022.103201
- [3856] B. Atenas and S. Curilef, *A statistical description for the quasi-stationary-states of the dipole-type Hamiltonian Mean Field model based on a family of Vlasov solutions*, Physica A **568**, 125722 (2021), doi: 10.1016/j.physa.2020.125722.
- [3857] S. Curilef, A.R. Plastino and E.M.F. Curado, *Multi-dimensional q -Gaussian densities describing systems of confined interacting particles with drag*, Eur. Phys. J. Plus **140**, 39 (2025).
- [3858] B. Atenas, *Dinamica y termodinamica del modelo d-HMF de campo medio fuera del equilibrio*, Doctor Thesis (Universidad Catolica del Norte, Antofagasta, Chile, 2011).
- [3859] A.R. Plastino, E.M.F. Curado, F.D. Nobre and C. Tsallis, *A Vlasov equation interpolating between Boltzmann and q -statistics through an H -theorem*, preprint (2020).
- [3860] M.S. Ribeiro and F.D. Nobre, *Repulsive particles under a general external potential: Thermodynamics by neglecting thermal noise*, Phys. Rev. E **94**, 022120 (2016) (10 pages).
- [3861] E.L. Albuquerque, U.L. Fulco, V.N. Freire, E.W.S. Caetano, M.L. Lyra and F.A.B.F. Moura, *DNA-based nanobiostructured devices: The role of the quasiperiodicity and correlation effects*, Phys. Rep. **535**, 139-209 (2014), doi: <http://dx.doi.org/10.1016/j.physrep.2013.10.004>
- [3862] M.F. Alfahad, M.E. Ghitany, A.N. Alotthman and S. Nadarajah, *A bimodal extension of the Log-Normal distribution on the real line with an application to DNA microarray data*, Mathematics **11**, 3360 (2023).
- [3863] M. Girotto, A.P. dos Santos and Y. Levin, *Vortex distribution in a confining potential*, Phys. Rev. E **88**, 032118 (2013) (5 pages).
- [3864] M.S. Ribeiro, F.D. Nobre and E.M.F. Curado, *Comment on "Vortex Distribution in a Confining Potential"*, Phys. Rev. E **90**, 026101 (2014) (4 pages).
- [3865] M. Girotto, A.P. dos Santos, R. Pakter and Y. Levin, *Reply to Comment on "Vortex distribution in a confining potential"*, Phys. Rev. E (2014), in press.
- [3866] M.S. Ribeiro, F.D. Nobre and E.M.F. Curado, *Time evolution of interacting vortices under overdamped motion*, Phys. Rev. E **85**, 021146 (2012) (8 pages).
- [3867] M.S. Ribeiro, F.D. Nobre and E.M.F. Curado, *Overdamped motion of interacting particles in general confining potentials: Time-dependent and stationary-state analyses*, Eur. Phys. J. B **85**, 399 (2012) (12 pages).
- [3868] E.M.F. Curado, A.M.C. Souza, F.D. Nobre and R.F.S. Andrade, *Carnot cycle for interacting particles in the absence of thermal noise*, Phys. Rev. E **89**, 022117 (2014) (6 pages).
- [3869] E. Guvenilir, F. Ozaydin, O.E. Mustecaplioglu and T. Hakioglu, *Work harvesting by q -deformed statistical mutations in an Otto engine*, preprint (2022), 2208.08565 [quant-ph].
- [3870] R.F.S. Andrade, A.M.C. Souza, E.M.F. Curado and F.D. Nobre, *A thermodynamical formalism describing mechanical interactions*, EPL **108**, 20001(2014) (6 pages).
- [3871] A.M.C. Souza, R.F.S. Andrade, F.D. Nobre and E.M.F. Curado, *Thermodynamic framework for compact q -Gaussian distributions*, Physica A **491**, 153-166 (2018).
- [3872] H.N. Karimvand, B. Lari, H. Hassanabadi and W.S. Chung, *The investigation of Carnot engine in the presence of deformed formalism*, Modern Physics Letters A **36** (35), 2150251 (2021).
- [3873] F.D. Nobre, E.M.F. Curado, A.M.C. Souza and R.F.S. Andrade, *Consistent thermodynamic framework for interacting particles by neglecting thermal noise*, Phys. Rev. E **91**, 022135 (2015) (12 pages).
- [3874] A.M.C. Souza and F.D. Nobre, *Thermodynamic framework for the ground state of a simple quantum system*, Phys. Rev. E **95**, 012111 (2017) (10 pages).
- [3875] A.M.C. Souza and F.D. Nobre, *Thermodynamical properties by neglecting thermal noise in quantum systems: Effects of ground-state perturbations*, Physica A (2019), in press.
- [3876] M.S. Ribeiro, *Estudo de equacoes de Fokker-Planck nao-lineares e aplicacoes*, Master Thesis (Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro, 2012).

- [3877] G.A. Casas, F.D. Nobre and E.M.F. Curado, *Entropy production and nonlinear Fokker-Planck equations*, Phys. Rev. E **86**, 061136 (2012) (6 pages).
- [3878] G.A. Casas, F.D. Nobre and E.M.F. Curado, *Generalized entropy production phenomena: A master-equation approach*, Phys. Rev. E **89**, 012114 (2014) (6 pages).
- [3879] M.S. Ribeiro, G.A. Casas and F.D. Nobre, *Second law and entropy production in a nonextensive system*, Phys. Rev. E **91**, 012140 (2015) (8 pages).
- [3880] M.S. Ribeiro, G.A. Casas and F.D. Nobre, *Multi-diffusive nonlinear Fokker-Planck equation*, J. Phys. A: Math. Theor. **50** 065001 (2017) (23 pages), doi: 10.1088/1751-8121/50/6/065001
- [3881] F.D. Nobre, A.M.C. Souza and E.M.F. Curado, *Effective-temperature concept: A physical application for nonextensive statistical mechanics*, Phys. Rev. E **86**, 061113 (2012) (6 pages).
- [3882] L. Conti, C. Lazzaro, G. Karapetyan, M. Bonaldi, M. Pegoraro, R.K. Thakur, P. De Gregorio and L. Rondoni, *Thermal noise of mechanical oscillators in steady states with a heat flux*, Phys. Rev. E **90**, 032119 (2014) (9 pages).
- [3883] Y. Shikano, T. Wada and J. Horikawa, *Nonlinear discrete-time quantum walk and anomalous diffusion*, preprint (2013), 1303.3432 [quant-ph].
- [3884] Y. Shikano, T. Wada and J. Horikawa, *Discrete-time quantum walk with feed-forward quantum coin*, Scientific Reports **4**, 4427 (2014) (7 pages), doi: 10.1038/srep04427
- [3885] K.E. Bassler, G.H. Gunaratne and J.L. Mc Cauley, *Markov processes, Hurst exponents, and nonlinear diffusion equations with application to finance*, Physica A **369**, 343-353 (2006).
- [3886] A. di Vita, *The persistent, anti-persistent and the Brownian: A toy model for investigating the connection between Hurst exponent and the emergence of oscillatory behaviour*, Pramana, J. Phys. **97**, 128 (2023).
- [3887] T.D. Frank, *Green functions and Langevin equations for nonlinear diffusion equations: A comment on "Markov processes, Hurst exponents, and nonlinear diffusion equations" by Bassler et al*, Physica A **387**, 773-778 (2008).
- [3888] J.L. Mc Cauley, G.H. Gunaratne and K.E. Bassler, *Linear vs. nonlinear diffusion and martingale option pricing*, preprint (2006) [cond-mat/0606035].
- [3889] X. Liu and X. Wang, *Semi-Markov regime switching interest rate term structure models – Based on minimal Tsallis entropy martingale measure*, Engineering Theory and Practice **37** (5), 1136-1143 (2017).
- [3890] C. Koukoulis and A. Karagrigoriou, *On entropy-type measures and divergences with applications in engineering, management and applied sciences*, Internat. J. Mathematical, Engineering and Management Sciences **6** (3), 688-707 (2021), doi: 10.33889/IJMEMS.2021.6.3.043
- [3891] K. Guhathakurta, B. Bhattacharya and A.R. Chowdhury, *Comparative analysis of asset pricing models based on Log-normal distribution and Tsallis distribution using recurrence plot in an emerging market*, in J.W. Kensinger, ed., *The Spread of Financial Sophistication through Emerging Markets Worldwide*, Research in Finance **32**, 35-73 (Emerald Group Publishing Limited).
- [3892] L. Borland, *The physics of finance: Collective dynamics in a complex world*, Understanding Complex Systems Volume Part F1, 75-90 (2016).
- [3893] L. Borland, *Financial market dynamics: A synergetic perspective*, in *Encyclopedia of Complexity and Systems Science*, N. Tsoulfanidis, Ed., (2020), doi: 10.1007/978-3-642-27737-5_694-1
- [3894] R. Gencay and N. Gradojevic, *The tale of two financial crises: An entropic perspective*, Entropy **19** (6), 244 (2017), doi:10.3390/e19060244
- [3895] J.F. Lutsko and J.P. Boon, *Non-extensive diffusion as nonlinear response*, Europhys. Lett **71**, 906-911 (2005).
- [3896] V.P. Shkilev, *Diffusion in a heterogeneous medium for low concentrations*, J. Theor. Experim. Phys. **105**, 1068-1074 (2007).
- [3897] V.P. Shkilev, *Model of superdiffusion*, J. Theor. Experim. Phys. **107**, 892-898 (2008).
- [3898] R.A. Treumann and W. Baumjohann, *Superdiffusion revisited in view of collisionless reconnection*, Ann. Geophys. **32**, 643-650 (2014).
- [3899] R.A. Treumann and W. Baumjohann, *Critical temperature in relativistic Lorentzian thermodynamics of massive bosons*, EPL **116**, 10003 (2016), doi: www.epljournal.org doi: 10.1209/0295-5075/116/10003
- [3900] A. Compte and D. Jou, *Non-equilibrium thermodynamics and anomalous diffusion*, J. Phys. A **29**, 4321 (1996).
- [3901] D.A. Stariolo, *Aging in models of non-linear diffusion*, Phys. Rev. E **55**, 4806 (1997).
- [3902] G. Drazer, H.S. Wio and C. Tsallis, *Anomalous diffusion with absorption: Exact time-dependent solutions.*, Phys. Rev. E **61**, 1417 (2000).
- [3903] G. Drazer, H.S. Wio and C. Tsallis, *Exact time-dependent solutions for anomalous diffusion with absorption*, Granular Matter **3**, 105 (2001).

- [3904] A.R. Plastino, M. Casas and A. Plastino, *A nonextensive maximum entropy approach to a family of nonlinear reaction-diffusion equations*, *Physica A* **280**, 289 (2000).
- [3905] M. Bologna, C. Tsallis and P. Grigolini, *Anomalous diffusion associated with nonlinear fractional derivative Fokker-Planck-like equation: Exact time-dependent solutions*, *Phys. Rev. E* **62**, 2213 (2000).
- [3906] F. Gharari, K. Arias-Calluari, F. Alonso-Marroquin and M.N. Najafi, *Space-time fractional porous media equation: Application on modeling of S&P500 price return*, *Phys. Rev. E* **104**, 054140 (2021).
- [3907] Y. Tang, F. Gharari, K. Arias-Calluari, F. Alonso-Marroquin and M.N. Najafi, *Variable order porous media equations: Application on modeling the S&P500 and Bitcoin price return*, *Phys. Rev. E* **109**, 024310 (2024).
- [3908] Y. Tang, *Quantitative investigation of univariate time series behavior in financial markets*, Doctor Thesis (2024).
- [3909] M. Bildirici, Y. Ucan and R. Tekercioglu, *A hybrid approach combining the Lie method and long short-term memory (LSTM) network for predicting the bitcoin return*, *Fractal Fract.* **8**, 413 (2024).
- [3910] M.E. Bildirici, O.O. Ersin and Y. Ucan, *Bitcoin, fintech, energy consumption, and environmental pollution nexus: Chaotic dynamics with threshold effects in tail dependence, contagion, and causality*, *Fractal Fract.* **8**, 540 (2024).
- [3911] G. Martelloni and F. Bagnoli, *Fractional and fractal dynamics approach to anomalous diffusion in porous media: application to landslide behavior*, *Geophysical Research Abstracts* **18**, EGU2016-17206-1 (2016).
- [3912] C. Tsallis and E.K. Lenzi, *Anomalous diffusion: Nonlinear fractional Fokker-Planck equation*, in *Strange Kinetics*, eds. R. Hilfer et al, *Chem. Phys.* **284**, 341 (2002) [Erratum: **287**, 295 (2003)].
- [3913] E.K. Lenzi, L.C. Malacarne, R.S. Mendes and I.T. Pedron, *Anomalous diffusion, nonlinear fractional Fokker-Planck equation and solutions*, preprint (2002) [cond-mat/0208332].
- [3914] J. Ma and Y. Liu, *Exact solutions for a generalized nonlinear fractional Fokker-Planck equation*, *Nonlinear Analysis: Real World Applications* **11**, 515-521 (2010).
- [3915] E.K. Lenzi, C. Anteneodo and L. Borland, *Escape time in anomalous diffusive media*, *Phys. Rev. E* **63**, 051109 (2001).
- [3916] V. Aquilanti, K.C. Mundim, M. Elango, S. Kleijn and T. Kasai, *Temperature dependence of chemical and biophysical rate processes: Phenomenological approach to deviations from Arrhenius law*, *Chem. Phys. Lett.* **498**, 209-213 (2010).
- [3917] N.D. Coutinho, V.H.C. Silva, K.C. Mundim and H.C.B. de Oliveira, *Description of the effect of temperature on food systems using the deformed Arrhenius rate law: deviations from linearity in logarithmic plots vs. inverse temperature*, *Rend. Fis. Acc. Lincei* **26**, 141-149 (2015), doi: 10.1007/s12210-015-0407-4
- [3918] L.Q. Galvao, C.S. Cruz, A.C.P. Rosa Junior and M.A. Moret, *Variational quantum simulation of a nonadditive relaxation dynamics in a qubit coupled to a finite-temperature bath*, preprint (2025), 2505.12013 [quant-ph].
- [3919] N.J.L. Agreda, *Aquilanti-Mundim deformed Arrhenius model in solid-state reactions -Theoretical evaluation using DSC experimental data*, *J. Therm. Anal. Calorim.* (2016), doi: 10.1007/s10973-016-5566-8
- [3920] V.H. Carvalho-Silva, V. Aquilanti, H.C.B. de Oliveira and K.C. Mundim, *Deformed transition-state theory: Deviation from Arrhenius behavior and application to bimolecular hydrogen transfer reaction rates in the tunneling regime*, *J. Computational Chemistry* **38**, 178-188 (2017), doi: 10.1002/jcc.24529
- [3921] V.H. Carvalho-Silva, N.D. Coutinho and V. Aquilanti, *Description of deviations from Arrhenius behavior in chemical kinetics and materials science*, *International Conference of Computational Methods in Sciences and Engineering 2016 (ICCMSE 2016)*, *AIP Conf. Proc.* **1790**, 020006 (2016) (4 pages), doi: 10.1063/1.4968632
- [3922] V.H. Carvalho-Silva, N.D. Coutinho and V. Aquilanti, *From the kinetic theory of gases to the kinetics of rate processes: On the verge of the thermodynamic and kinetic limits*, *Molecules* **25**, 2098 (2020), doi: 10.3390/molecules25092098
- [3923] V. Aquilanti, K.C. Mundim, S. Cavalli, D. De Fazio, A. Aguilar and J.M. Lucas, *Exact activation energies and phenomenological description of quantum tunneling for model potential energy surfaces. The $F + H_2$ reaction at low temperature*, *Chemical Physics* **398**, 186-191 (2012).
- [3924] V.H.C. Silva, V. Aquilanti, H.C.B. de Oliveira and K.C. Mundim, *Uniform description of non-Arrhenius temperature dependence of reaction rates, and a heuristic criterion for quantum tunneling vs classical non-extensive distribution*, *Chem. Phys. Lett.* **590**, 201-207 (2013).
- [3925] V.H. Carvalho, V. Aquilanti, H.C.B. de Oliveira and K.C. Mundim, *Deformed transition state theory: Inclusion of the tunneling effect by Euler exponential, limit of validity and description of bimolecular reactions*, XVIII Brazilian Symposium on Theoretical Chemistry - SBQT 2015 (Pirenopolis, GO, Brazil, 22-25 November 2015) (3 pages).

- [3926] V. Aquilanti, N.D. Coutinho and V.H. Carvalho-Silva, *Kinetics of low-temperature transitions and a reaction rate theory from non-equilibrium distributions*, Phil. Transactions Royal Society A **375**, 2092 (2017) (20 pages), doi: 10.1098/rsta.2016.0201
- [3927] N.D. Coutinho, Y.S. Silva, D. Fazio, S. Cavalli, V.H. Carvalho-Silva and V. Aquilanti, *Chemical kinetics under extreme conditions: Exact, phenomenological and first-principles computational approaches*, Rendiconti Accademia Nazionale delle Scienze detta dei XL, Memorie di Scienze Fisiche e Naturali **136**, Vol. XLII, Parte II, Tomo II, 115-129 (2018).
- [3928] V. Aquilanti, E.P. Borges, N.D. Coutinho, K.C. Mundim and V.H. Carvalho-Silva, *From statistical thermodynamics to molecular kinetics: the change, the chance and the choice*, *The Quantum World of Molecules* (Accademia Nazionale dei Lincei, 27-28 April 2017, Rome), Rendiconti Lincei, Scienze Fisiche e Naturali (2018), doi: 10.1007/s12210-018-0749-9
- [3929] R. Wild, M. Notzold, M. Simpson, T.D. Tran and R. Wester, *Tunnelling measured in a very slow ion-molecule reaction*, Nature **615**, 425 (2023).
- [3930] C. Tsallis, *Online Comment on "Tunnelling measured in a very slow ion-molecule reaction"*, Nature (17 May 2023), doi: 10.1038/s41586-023-05727-z
- [3931] C. Beck and C. Tsallis, *Anomalous velocity distributions in slow quantum-tunneling chemical reactions*, Phys. Rev. Research / Letter **7**, L012081 (2025).
- [3932] F.A.M. Castro, G.J. da Silva and K.C. Mundim, *Phenomenological description of transport phenomena: An alternative approach to generalize hopping mechanism*, preprint (2022).
- [3933] V.H. Carvalho-Silva, G.M. Leao, F.O. Sanches-Neto, S. Cavalli, D. De Fazio, V. Aquilanti and M.C. Nucci, *Renormalized chemical kinetics. Quantum mechanical rates, activation energies and sub-Arrhenius transitivity for the reactions of fluorine atoms with H₂ and HD*, Entropy **24** (2022).
- [3934] E.R. Sodre, B.C. Guido, P.E.N. de Souza, D.F.S. Machado, V.H. Carvalho-Silva, J.A. Chaker, C.C. Gatto, J.R. Correa, T.A. Fernandes and B.A.D. Neto, *Deciphering the Dynamics of organic nanoaggregates with AIEE effect and excited states: Lipophilic benzothiadiazole derivatives as selective cell imaging probes*, J. Org. Chem. **85**, 12614-12634 (2020), doi: 10.1021/acs.joc.0c01805
- [3935] V.H. Carvalho-Silva, N.D. Coutinho and V. Aquilanti, *Temperature dependence of rate processes beyond Arrhenius and Eyring: Activation and transitivity*, Frontiers in Chemistry **7**, 380 (2019).
- [3936] K.C. Mundim, S. Baraldi, H.G. Machado and F.M.C. Vieira, *Temperature coefficient (Q₁₀) and its applications in biological systems: Beyond the Arrhenius theory*, Ecological Modelling **431**, 109127 (2020).
- [3937] H.G. Machado, *O uso da inteligencia artificial e outras tecnologias na caracterizacao de fenomenos quimicos e biologicos*, Doctor Thesis (Instituto de Quimica, Universidade de Brasilia, 2022).
- [3938] S.F. de A. Morais, K.C. Mundim and D.A.C. Ferreira, *Non-conservation of activation energy barriers in the same chemical process: a cooperative (effect) proton transfer on (HF)_n molecular aggregates*, Theoretical Chemistry Accounts **139**, 164 (2020), doi: 10.1007/s00214-020-02681-1
- [3939] M. Mustakim and A.V.A. Kumar, *Sub-Arrhenius diffusion in a binary colloidal system*, preprint (2020), 2001.02592 [cond-mat.soft].
- [3940] M. Mustakim and A.V.A. Kumar, *Depletion induced demixing and crystallization in binary colloids subjected to an external potential barrier*, preprint (2021), 2108.07449 [cond-mat.soft].
- [3941] M. Mustakim and A.V.A. Kumar, *Sub-Arrhenius diffusion in a classical system: Binary colloidal mixture in an external potential*, Physica A **563**, 125462 (2021).
- [3942] K.R. Prathyusha, S. Saha and R. Golestanian, *Anomalous fluctuations in a droplet of chemically active colloids or enzymes*, Phys. Rev. Lett. **133**, 058401 (2024).
- [3943] D.F.S. Machado, *Calculo das Constantes Espectroscopicas e Energias Rovibracionais da Molecula de Cl₂ em seus Estados Eletronicos Fundamental e Excitados*, Master Thesis (Brasilia, 2013).
- [3944] L.C. Malacarne, R.S. Mendes, I.T. Pedron and E.K. Lenzi, *Nonlinear equation for anomalous diffusion: Unified power-law and stretched exponential exact solution*, Phys. Rev. E **63**, 030101 (2001).
- [3945] A.T. Silva, E.K. Lenzi, L.R. Evangelista, M.K. Lenzi and L.R. da Silva, *Fractional nonlinear diffusion equation, solutions and anomalous diffusion*, Physica A **375**, 65-71 (2007).
- [3946] V.P. Shkilev, *Mass transfer in nonuniform media*, Russian J. Physical Chemistry B **2**, 302-308 (2008).
- [3947] R.S. Zola, M.K. Lenzi, L.R. Evangelista, E.K. Lenzi, L.S. Lucena and L.R. Silva, *Exact solutions for a diffusion equation with a nonlinear external force*, Phys. Lett. A **372**, 2359-2363 (2008).
- [3948] C. Beck, *Stretched exponentials from superstatistics*, Physica A **365**, 96-101 (2006).
- [3949] A. Rigo, A.R. Plastino, M. Casas and A. Plastino, *Anomalous diffusion coupled with Verhulst-like growth dynamics: Exact time-dependent solutions*, Phys. Lett. A **276**, 97 (2000).

- [3950] P.C. Assis Jr., L.R. da Silva, E.K. Lenzi, L.C. Malacarne and R.S. Mendes, *Nonlinear diffusion equation, Tsallis formalism and exact solutions*, J. Math. Phys. **46**, 123303 (2005) (7 pages).
- [3951] E.P. Borges, P.C. Assis Jr., L.R. da Silva, E.K. Lenzi, L. Malacarne and R.S. Mendes, *Nonlinear diffusion equation, Tsallis formalism and exact solutions*, J. Math. Phys. **46** (12), 123303 (2005), 7 pp.1089-7658, MR2194028 (2006j:82057) 82C70 (82C31), MathSciNet Mathematical Reviews on the Web, American Mathematical Society (2013).
- [3952] P.C. Assis Jr., P.C. da Silva, L.R. da Silva, E.K. Lenzi and M.K. Lenzi, *Nonlinear diffusion equation and nonlinear external force: Exact solution*, J. Math. Phys. **47**, 103302 (2006) (7 pages).
- [3953] J.A. Cordeiro, M.V.B.T. Lima, R.M. Dias and F.A. Oliveira, *Morphology of growth by random walk deposition*, Physica A **295**, 209 (2001) [Proc. IUPAP Workshop on New Trends on Fractal Aspects of Complex Systems (16-20 October 2000, Maceio-AL, Brazil), ed. M.L. Lyra (Elsevier, Amsterdam, 2001)].
- [3954] H. Cetinel and O. Kayakan, *Nonextensive treatment of nucleation and growth in a thin layer*, Physica A **374**, 263-271 (2007).
- [3955] H. Cetinel, O. Kayacan and D. Ozaydin, *Investigation of nucleation and grain growth in 2-dimensional systems by using generalized Monte Carlo simulations*, Physica A **392**, 4121-4126 (2013).
- [3956] C. Bayindir, A.A. Altintas and F. Ozaydin, *Self-localized solitons of a q-deformed quantum system*, Commun. Nonlinear Sci. Numer. Simulat. **92**, 105474 (2020).
- [3957] A.L. Samgin, *A nonextensive approach to ionic transport*, Solid State Ionics **175**, 857 (2004).
- [3958] A. I. Olemskoi, *Hierarchical pattern of superdiffusion*, Pis'ma v Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki **71**, 412 (2000) [In Russian]; JETP Letters **71**, 285 (2000) [translated to English].
- [3959] A.I. Olemskoi, S.S. Borysov, I.A. Shuda, *Analytical and numerical studies of creation probabilities of hierarchical trees*, Cond. Matt. Phys. **14** (1), 14001: 1-6 (2011).
- [3960] C. Essex, C. Schulzky, A. Franz and K.H. Hoffmann, *Tsallis and Renyi entropies in fractional diffusion and entropy production*, Physica A **284**, 299 (2000).
- [3961] J. Prehl, C. Essex and K.H. Hoffmann, *The superdiffusion entropy production paradox in the space-fractional case for extended entropies*, Physica A **389**, 215-224 (2010).
- [3962] J. Prehl, C. Essex and K.H. Hoffmann, *Tsallis relative entropy and anomalous diffusion*, Entropy **14** (4), 701-716 (2012), Special Issue edited by A. Anastasiadis.
- [3963] A. Lavagno, *Statistiche ed equazioni cinetiche generalizzate nella fisica dei nuclei e dei sistemi a molti corpi*, PhD Thesis (Politecnico di Torino, 1998).
- [3964] L. Borland, *Ito-Langevin equations within generalized thermostatistics*, Phys. Lett. A **245**, 67 (1998).
- [3965] L. Borland, *Microscopic dynamics of the nonlinear Fokker-Planck equation: A phenomenological model*, Phys. Rev. E **57**, 6634 (1998).
- [3966] A. Di Vita, *The persistent, the anti-persistent and the Brownian: when does the Hurst exponent warn us of impending catastrophes?*, preprint (2021), 2104.02187 [physics.class-ph].
- [3967] L. Borland, F. Pennini, A.R. Plastino and A. Plastino, *The nonlinear Fokker-Planck equation with state-dependent diffusion - A nonextensive maximum entropy approach*, Eur. Phys. J. B **12**, 285 (1999).
- [3968] A. Lavagno and P. Quarati, *Anomalous diffusion and memory effects in non-extensive statistics*, preprint (1998).
- [3969] D.H. Zanette, *Statistical-thermodynamical foundations of anomalous diffusion*, in *Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 108 (1999).
- [3970] M.O. Caceres, *Non-markovian processes with long-range correlations: fractal dimension analysis*, in *Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 125 (1999).
- [3971] S.Y. Mirafzali and H.R. Baghshahi, *Non-Markovianity detection with coherence measures based on the Tsallis relative α entropies*, Physica A (2018), in press.
- [3972] L.M. Liu, Y.Y. Cui, J. Xu, C. Li, Q.H. Gao, *The non-Markovian property of q-Gaussian process*, Computers and Mathematics with Applications (2019), in press.
- [3973] D.O. Krimer, S. Putz, J. Majer and S. Rotter, *Non-Markovian dynamics of a single-mode cavity strongly coupled to an inhomogeneously broadened spin ensemble*, preprint (2014), 1410.0728 [quant-ph].
- [3974] S. Martinez, A.R. Plastino and A. Plastino, *Nonlinear Fokker-Planck equations and generalized entropies*, Physica A **259**, 183 (1998).
- [3975] S. Jespersen, R. Metzler and H.C. Fogedby, *Levy flights in external force fields: Langevin and fractional Fokker-Planck equations, and their solutions*, preprint (1998) [cond-mat/9810176].
- [3976] L.R. da Silva, L.S. Lucena, P.C. da Silva, E.K. Lenzi and R.S. Mendes, *Multidimensional nonlinear diffusion equation: Spatial time dependent diffusion coefficient and external forces*, Physica A **357**, 103-108 (2005).

- [3977] T.D. Frank and A. Daffertshofer, *Nonlinear Fokker-Planck equations whose stationary solutions make entropy-like functionals stationary*, Physica A **272**, 497 (1999).
- [3978] T.D. Frank and A. Daffertshofer, *Exact time-dependent solutions of the Renyi Fokker-Planck equation and the Fokker-Planck equations related to the entropies proposed by Sharma and Mittal*, Physica A **285**, 351-366 (2000).
- [3979] T.D. Frank, *On nonlinear and nonextensive diffusion and the second law of thermodynamics*, Phys. Lett. A **267**, 298 (2000).
- [3980] T.D. Frank and A. Daffertshofer, *H-theorem for nonlinear Fokker-Planck equations related to generalized thermostatics*, Physica A **295**, 455 (2001).
- [3981] T.D. Frank and A. Daffertshofer, *Multivariate nonlinear Fokker-Planck equations and generalized thermostatics*, Physica A **292**, 392 (2001).
- [3982] T.D. Frank, *Autocorrelation functions of nonlinear Fokker-Planck equations*, Eur. Phys. J. B **37**, 139 (2004).
- [3983] T.D. Frank, *On a general link between anomalous diffusion and nonextensivity*, J. Math. Phys. **43**, 344 (2002).
- [3984] T.D. Frank, *Nonextensive cutoff distributions of postural sway for the old and the young*, Physica A **388**, 2503-2510 (2009).
- [3985] E.S. dos Santos, *Flutuacoes posturais no equilibrio estatico: Adaptacoes com a posicao de perna unica*, Master Thesis (Universidade Estadual de Maringa, 2013).
- [3986] T.D. Frank, *Lyapunov and free energy functionals of generalized Fokker-Planck equations*, Phys. Lett. A **290**, 93 (2001).
- [3987] T.D. Frank, *A Langevin approach for the microscopic dynamics of nonlinear Fokker-Planck equations*, Physica A **301**, 52 (2001).
- [3988] T.D. Frank, *Complete description of a generalized Ornstein-Uhlenbeck process related to the nonextensive Gaussian entropy*, Physica A **340**, 251 (2004).
- [3989] R.S. Mendes and C. Anteneodo, *Comment on "Anomalous spreading of power-law quantum wave packets"*, preprint (2000) [cond-mat/0003366].
- [3990] J. Batle, A.R. Plastino, M. Casas and A. Plastino, *Quantum evolution of power-law mixed states*, Physica A **308**, 233-244 (2002).
- [3991] J. Batle, M. Casas, A.R. Plastino and A. Plastino, *Supersymmetry and the q-MaxEnt treatment*, Physica A **305**, 316-322 (2002).
- [3992] J. Batle, A.R. Plastino, M. Casas and A. Plastino, *Inclusion relations among separability criteria*, J. Phys. A **37**, 895 (2004).
- [3993] J. Batle, M. Casas, A.R. Plastino and A. Plastino, *Quantum entropies and entanglement*, Int. J. Quantum Information **3**, 99 (2005).
- [3994] K. Modi, A. Brodutch, H. Cable, T. Paterek and V. Vedral, *The classical-quantum boundary for correlations: Discord and related measures*, Rev. Mod. Phys. **84**, 1655-1707 (2012).
- [3995] M.A. Jafarizadeh, H. Zahir and N. Karimi, *Quantum discord for generalized Bloch sphere states*, Eur. Phys. J. D (2014) **68**, 136 (2014), doi: 10.1140/epjd.e2014-40677-6
- [3996] X.W. Hou, Z.P. Huang and S. Chen, *Quantum discord through the generalized entropy in bipartite quantum states*, Eur. Phys. J. D (2014) **68**, 87 (2014) (5 pages), doi: 10.1140/epjd/e2014-40518-8
- [3997] G. Bellomo, A. Plastino, A.P. Majtey and A.R. Plastino, *Comment on "Quantum discord through the generalized entropy in bipartite quantum states"*, Eur. Phys. J. D **68**, 337 (2014) (4 pages), doi: 10.1140/epjd/e2014-50474-x
- [3998] F. Holik, G.M. Bosyk and G. Bellomo, *Quantum information as a non-Kolmogorovian generalization of Shannon's theory*, Entropy **17**, 7349-7373 (2015), doi:10.3390/e17117349
- [3999] A.C.S. Costa and R.M. Angelo, *Bayes' rule, generalized discord, and nonextensive thermodynamics*, Phys. Rev. A **87**, 032109 (2013) (6 pages).
- [4000] R.M. Angelo and A.D. Ribeiro, *Complementarity as corollary*, preprint (2013), 1304.2286 [quant-ph].
- [4001] M.H. Partovi, *Entanglement detection using majorization uncertainty bounds*, Phys. Rev. A **86**, 022309 (2012) (9 pages).
- [4002] A.E. Rastegin, *On uncertainty relations and entanglement detection with mutually unbiased measurements*, preprint (2014), 1407.7333 [quant-ph].
- [4003] T. Munakata and S. Mitsuoka, *Langevin dynamics for generalized thermodynamics*, J. Phys. Soc. Japan **69**, 92 (2000).
- [4004] G. Kaniadakis and G. Lapenta, *Microscopic dynamics underlying anomalous diffusion*, Phys. Rev. E **62**, 3246 (2000).

- [4005] L.C. Malacarne, R.S. Mendes, I.T. Pedron and E.K. Lenzi, *A generalized nonlinear equation for anomalous diffusion: exact solution*, preprint (2000).
- [4006] E.K. Lenzi, R.S. Mendes, K.S. Fa, L.C. Malacarne and L.R. da Silva, *Anomalous diffusion: Fractional Fokker-Planck equation and its solutions*, J. Math. Phys. **44**, 2179-2185 (2003).
- [4007] E.K. Lenzi, R.S. Mendes, K.S. Fa, L.S. Moraes, L.R. da Silva and L.S. Lucena, *Nonlinear fractional diffusion equation: Exact results*, J. Math. Phys. **46**, 083506 (2005).
- [4008] E.K. Lenzi, G.A. Mendes, R.S. Mendes, L.R. da Silva and L.S. Lucena, *Exact solutions to nonlinear nonautonomous space-fractional diffusion equations with absorption*, Phys. Rev. E **67**, 051109 (2003).
- [4009] I.T. Pedron, R.S. Mendes, L.C. Malacarne and E.K. Lenzi, *Nonlinear anomalous diffusion equation and fractal dimension: Exact generalized Gaussian solution*, Phys. Rev. E **65**, 041108 (2002).
- [4010] D. Jou, J. Casas-Vazquez and M. Criado-Sancho, *Thermodynamics of Fluids Under Flow* (Springer-Verlag, Berlin, 2000), Chapter 7.
- [4011] L.C. Malacarne, R.S. Mendes, I.T. Pedron and E.K. Lenzi, *N-dimensional nonlinear Fokker-Planck equation with time-dependent coefficients*, Phys. Rev. E **65**, 052101 (2002).
- [4012] T.D. Frank, *Generalized Fokker-Planck equations derived from generalized linear nonequilibrium thermodynamics*, Physica A **310**, 397 (2002).
- [4013] E.K. Lenzi, R.S. Mendes and C. Tsallis, *Crossover in diffusion equation: Anomalous and normal behaviors*, Phys. Rev. E **67**, 031104 (2003).
- [4014] A.M. Reynolds, *Lagrangian stochastic modeling of anomalous diffusion in two-dimensional turbulence*, Phys. Fluids **14**, 1442 (2002).
- [4015] A.M. Reynolds, *On the application of nonextensive statistics to Lagrangian turbulence*, Phys. Fluids **15**, L1 (2003).
- [4016] A.M. Reynolds, *Superstatistical Lagrangian stochastic modeling*, Physica A **340**, 298 (2004).
- [4017] L.K. Isaacson, *Transitional intermittency exponents through deterministic boundary-layer structures and empirical entropic indices*, Entropy **16**, 2729-2755 (2014), doi:10.3390/e160
- [4018] L.K. Isaacson, *Entropy generation through a deterministic boundary-layer structure in warm dense plasma*, Entropy **16**, 6006-6032 (2014), doi:10.3390/e16116006
- [4019] L.K. Isaacson, *Entropy generation through deterministic spiral structures in a corner boundary-layer flow*, Entropy **17**, 5304-5332 (2015), doi:10.3390/e17085304
- [4020] L.K. Isaacson, *Entropy generation through deterministic spiral structures in corner flows with sidewall surface mass injection*, Entropy **18**, 47 (2016) (21 pages), doi:10.3390/e18020047
- [4021] L.K. Isaacson, *Entropy generation through non-equilibrium ordered structures in corner flows with sidewall mass injection*, Entropy **18**, 279 (2016) (23 pages), doi:10.3390/e18080279
- [4022] L.K. Isaacson, *Entropy generation rates through the dissipation of ordered regions in Helium boundary-layer flows*, Entropy **19**, 278 (2017) (22 pages), doi:10.3390/e19060278
- [4023] L.K. Isaacson, *Entropy generation through the interaction of laminar boundary-layer flows: Sensitivity to initial conditions*, J. Modern Phys. **9**, 1660-1689 (2018), doi: <http://www.scirp.org/journal/jmp>
- [4024] A.K. Aringazin and M.I. Mazhitov, *Phenomenological Gaussian screening in the nonextensive statistics approach to fully developed turbulence*, preprint (2002) [cond-mat/0212642].
- [4025] A.K. Aringazin and M.I. Mazhitov, *Gaussian factor in the distribution arising from the nonextensive statistics approach to fully developed turbulence*, preprint (2003) [cond-mat/0301040].
- [4026] A.K. Aringazin and M.I. Mazhitov, *The PDF of fluid particle acceleration in turbulent flow with underlying normal distribution of velocity fluctuations*, Phys. Lett. A **313**, 284 (2003).
- [4027] A.K. Aringazin and M.I. Mazhitov, *Stochastic models of Lagrangian acceleration of fluid particle in developed turbulence*, Int. J. Mod. Phys. B **18**, 3095-3168 (2004).
- [4028] C. Anteneodo and C. Tsallis, *Multiplicative noise: A mechanism leading to nonextensive statistical mechanics*, J. Math. Phys. **44**, 5194 (2003).
- [4029] J.L. Du, *Stochastic dynamical theory of power-law distributions induced by multiplicative noise*, preprint (2011), 1103.1184 [cond-mat.stat-mech].
- [4030] G. Bormetti and D. Delpini, *Exact moment scaling from multiplicative noise*, Phys. Rev. E **81**, 032102 (2010) (4 pages).
- [4031] C. Anteneodo and R. Riera, *Additive-multiplicative stochastic models of financial mean reverting processes*, Phys. Rev. E **72**, 026106 (2005).
- [4032] Y. Yin and P. Shang, *Modified cross sample entropy and surrogate data analysis method for financial time series*, Physica A **433**, 17-25 (2015).

- [4033] A. Njegovanovic, *Third law of thermodynamics / Entropy and financial trading through quantum and Shannon's theory of information*, World Journal of Economics and Finance **5** (2), 115-124 (2019).
- [4034] S. Li, J. He and K. Song, *Network entropies of the chinese financial market*, Entropy **18**, 331 (2016) (9 pages), doi:10.3390/e18090331
- [4035] G. Malhotra, *Mathematical study of risk in financial markets*, Doctor Thesis (Delhi Technological University, 2019).
- [4036] V. Svoboda, *Generalized stochastic processes with applications to financial markets*, Master Thesis (Czech Technical University in Prague, Faculty of Nuclear Sciences and Physical Engineering, Department of Physics, 2016).
- [4037] B.J. Zubillaga, A.L.M. Vilela, C. Wang, K.P. Nelson and H.E. Stanley, *A Three state opinion formation model for financial markets*, preprint (2019), 1905.04370 [physics.soc-ph].
- [4038] B.J. Zubillaga Herrera, *The statistical mechanics of societies: Opinion formation dynamics and financial markets*, Doctor Thesis (Boston University Graduate School of Arts and Sciences, 2020).
- [4039] L. Borland, *Financial market models*, in *Complexity and Synergetics*, 257-273 (2017, Springer, Heidelberg).
- [4040] S. Devi, *Financial market dynamics: Superdiffusive or not?*, MPRA Paper No. 73327 (2016), mpra.ub.uni-muenchen.de/73327/, JSTAT (2017), doi: 0.1088/1742-5468/aa8199
- [4041] Z. Pan, Q. Ma, J. Ding and L. Wang, *Research on the stock correlation networks and network entropies in the Chinese green financial market*, Eur. Phys. J. B **94**, 56 (2021), doi: 10.1140/ep_jb/s10051-021-00063-5
- [4042] S. Devi, *Financial portfolios based on Tsallis relative entropy as the risk measure*, preprint (2019), arxiv 1901.04945
- [4043] J. Gava and J. Turc, *The properties of alpha risk parity portfolios*, Entropy **24**, 1631 (2022).
- [4044] S. Devi, *Asymmetric Tsallis distributions for modelling financial market dynamics*, preprint (2021), arxiv 2102.04532
- [4045] M. Xu, P. Shang and J. Huang, *Modified generalized sample entropy and surrogate data analysis for stock markets*, Commun. Nonlinear Sci. Numer. Simulat. **35**, 17-24 (2016).
- [4046] Y. Wang and P. Shang, *Analysis of financial stock markets through the multiscale cross-distribution entropy based on the Tsallis entropy*, Nonlinear Dyn. **94** (2), 1361-1376 (2018), doi: 10.1007/s11071-018-4429-1
- [4047] G. Qin and P. Shang, *Analysis of time series based on a new entropy plane by using weighted dispersion pattern*, Internat. J. Bifurcation and Chaos **31** (9), 2150128 (2021).
- [4048] A. Dmitriev, V. Silchev and V. Dmitriev, *Possibilities and limitations of deterministic nonlinear dynamic model of the stock market*, WSEAS Transactions on Business and Economics **14**, 311-321 (2017).
- [4049] I. Kalaitzoglou and S. Arvanitis, *Time will tell! Towards the construction of instantaneous indicators of different agent-types*, Working Paper 06-2024 (Department of Economics - Athens University of Economics and Business, 2024).
- [4050] A. Kundu, *Stock market volatility in some selected countries - A thermodynamic approach*, Econophysics, Sociophysics & Other Multidisciplinary Sciences Journal **7** (1), 30-33 (2017).
- [4051] M. Sheraz, V. Preda and S. Dedu, *Tsallis and Kaniadakis entropy measures for risk neutral densities*, International Conference on Computer Aided Systems Theory ? EUROCAST 2017, 55-63 (2017), Lecture Notes in Computer Science **10672** (2017).
- [4052] F. Li, *Modelling the stock market using a multi-scale approach*, Master Thesis (University of Leicester, School of Management, University of Leicester, 2017).
- [4053] L. Qiu, T. Yang, Y. Yin, C. Gu and H. Yang, *Multifractals embedded in short time series: An unbiased estimation of probability moment*, Phys. Rev. **94**, 062201 (2016)
- [4054] C. Cadavid, M.E. Puerta, J.D. Velez and J.F. Garcia, *q-exponential behavior of expected aggregated supply curves in deregulated electricity markets*, preprint (2016),1601.07515 [math.OC].
- [4055] D. Xu and C. Beck, *Transition from lognormal to χ^2 -superstatistics for financial time series*, Physica A **453**, 173-183 (2016), doi: <http://dx.doi.org/10.1016/j.physa.2016.02.057>
- [4056] B. Schafer, C. Beck, K. Aihara, D. Witthaut and M. Timme, *Non-Gaussian power grid frequency fluctuations characterized by Levy-stable laws and superstatistics*, Nature Energy (2018) (8 pages), doi: 10.1038/s41560-017-0058-z
- [4057] B. Hartmann, G. Odor, I. Papp, K. Benedek, S. Deng and J. Kelling, *Dynamical heterogeneity and universality of power-grids*, Sustainable Energy, Grids and Networks **39**, 101491 (2024).
- [4058] O.J. Tapiero, *The relationship between risk and incomplete states uncertainty: Tsallis entropy perspective*, Algorithmic Finance **2** (2) (2013).
- [4059] T. Liu, P. Zhang, W.S. Dai and M. Xie, *An intermediate distribution between Gaussian and Cauchy distributions*, Physica A **391**, 5411-5421 (2012).

- [4060] J. Chen, T. Liu, Z. Huang and G. Su, *A statistical theory of complex systems*, preprint (2015), arxiv 1506.07281.
- [4061] C.-Y. Lee, *Characteristics of the volatility in the Korea composite stock price index*, *Physica A* **388**, 3837-3850 (2009).
- [4062] G. Nikola and G. Ramazan, *Financial applications of nonextensive entropy*, *IEEE Signal Processing Magazine (Applications Corner)* 116 (September 2011) (7 pages).
- [4063] C.S. Tapiero and P. Vallois, *Financial modelling and memory: Mathematical system*, in *Future Perspectives in Risk Models and Finance* **211**, 149-246 (2014), doi: 10.1007/978-3-319-07524-2₆
- [4064] C.A. Vegh, G. Vuletin, D. Riera-Crichton, J.P. Medina, D. Friedheim, L. Morano and L. Venturi, *Sobre incertidumbre y cisnes negros – Como lidiar con riesgo en America Latina y el Caribe (From known unknowns to black swans: How to manage risk in Latin America and the Caribbean)*, Banco Internacional de Reconstruccion y Fomento / World Bank (2018).
- [4065] L.P.G. Figueiredo, R. Bufalo and T. Cardoso-Bufalo, *The stochastic least action principle and the Tsallis entropy: an approach for the black swan events*, communicated at the III Encontro Nacional de Fisica Estatistica (Brazil, November 2021).
- [4066] T. Cardoso-Bufalo, R. Bufalo, L.P.G. Figueiredo, Q.A. Wang and F.L. Alves, *A stochastic least action principle applied in the description of black swan events*, preprint (2021), 2.04861 [cond-mat.stat-mech].
- [4067] Q. Jiang, Q. Ma and X. Liu, *Research on the stock correlation network entropy and its influencing factors in the Chinese interbank market*, *Mathematical Problems in Engineering*, ID 9941148 (2021) (8 pages), doi: 10.1155/2021/9941148
- [4068] T.R.S. Moura, G.M. Viswanathan, M.A.A. da Silva, J.C. Cressoni and L.R.da Silva, *Transient superdiffusion in random walks with a q-exponentially decaying memory profile*, *Physica A* **453**, 259-263 (2016), doi: <http://dx.doi.org/10.1016/j.physa.2016.02.005>
- [4069] M.A.A da Silva, E.C. Rocha, J.C. Cressoni, L.R. da Silva and G.M. Viswanathan, *Non-Levy stable random walk propagators for a non-Markovian walk with both superdiffusive and subdiffusive regimes*, *Physica A* **538**, 122793 (2020).
- [4070] T.R.S. Moura, *Transiente superdifusivo em caminhadas aleatorias com perfil de memoria q-exponencial*, Doctor Thesis (Universidade Federal do Rio Grande do Norte, Natal, 2016).
- [4071] J. de Souza and S.M.D. Queiros, *Effective multifractal features of high-frequency price fluctuations time series and l-variability diagrams*, *Chaos, Solitons and Fractals* **42**, 2512-2521 (2009).
- [4072] C. Anteneodo, *Non-extensive random walks*, *Physica A* **358**, 289-298 (2005).
- [4073] H. Hasegawa, *N-dependent multiplicative-noise contributions in finite N-unit Langevin models: Augmented moment approach*, *J. Phys. Soc. Jpn.* **75**, 033001 (2006).
- [4074] H. Hasegawa, *Stationary and dynamical properties of information entropies in nonextensive systems*, preprint (2007), 0711.3923 [cond-mat.stat-mech].
- [4075] H. Hasegawa, *Stationary and dynamical properties of information entropies in nonextensive systems. II*, preprint (2008), 0809.1237 [cond-mat.stat-mech].
- [4076] H. Hasegawa, *Generalized Fisher information matrix in nonextensive systems with spatial correlation*, *Phys. Rev. E* **80**, 051125 (2009) (8 pages).
- [4077] H. Hasegawa, *A moment approach to non-Gaussian colored noise*, *Physica A* **384**, 241-258 (2007).
- [4078] H. Hasegawa, *A moment-based approach to bounded non-Gaussian colored noise*, *Bounded noises in Physics, Biology, and Engineering* **109-116** (2013), doi: 10.1007/978-1-4614-7385-5₇2013
- [4079] L. He, L. Cao and J. Zhang, *Delay segmented tristable stochastic resonance system driven by non-gaussian colored noise and its application in bearing fault detection*, *Phys. Scr.* **99**, 075254 (2024).
- [4080] A.A.G. Cortines and R. Riera Freire, *Non-extensive behavior of a stock market index at microscopic time scales*, *Physica A* **377**, 181-192 (2007).
- [4081] A.A.G. Cortines, R. Riera and C. Anteneodo, *Measurable inhomogeneities in stock trading volume flow*, *Europhys. Lett.* **83**, 30003 (2008) (5 pages).
- [4082] D. Stosic, D. Stosic and T. Stosic, *Nonextensive triplets in stock market indices*, *Physica A* **525**, 192-198 (2019).
- [4083] J.H. Zhang and J. Wang, *Modeling and simulation of the market fluctuations by the finite range contact systems*, *Simulation Modelling Practice and Theory* **18** (6), 910-925 (2010).
- [4084] J.X. de Carvalho, R. Riera Freire and L. Moriconi, *Opcoes: calculo a partir da flutuacao empirica da volatilidade*, communicated at the 2nd Workshop of the National Institute of Science and Technology for Complex Systems (Rio de Janeiro, 1-5 March 2010).

- [4085] R. Rak, S. Drozd and J. Kwapien, *Nonextensive statistical features of the Polish stock market fluctuations*, Physica A **374**, 315-324 (2007).
- [4086] M. Watorek, J. Kwapien and S. Drozd, *Financial return distributions: Past, present, and COVID-19*, Entropy **23**, 884 (2021).
- [4087] J. Kwapien, P. Blasiak, S. Drozd and P. Oswiecimka, *Genuine multifractality in time series is due to temporal correlations*, Phys. Rev. E **107**, 034139 (2023).
- [4088] L. Bil, D. Grech and E. Podhajska, *Methods of non-extensive statistical physics in analysis of price returns on Polish stock market*, Proceedings of the 8th Polish Symposium of Physics in Economy and Social Sciences FENS, (Rzeszow, November 4-6, 2015), Acta Physica Polonica A **129** (5), 986-992 (2016).
- [4089] E. Bil, D. Grech and M. Zienowicz, *Asymmetry of price returns – Analysis and perspectives from a non-extensive statistical physics point of view*, Plos One **12** (11), e0188541 (2017) (24 pages), doi: 10.1371/journal.pone.0188541
- [4090] D. Xu, *Superstatistics and symbolic dynamics of share price returns on different time scales*, Doctor Thesis (Queen Mary College, University of London, 2017).
- [4091] S. Drozd, M. Forczek, J. Kwapien, P. Oswiecimka and R. Rak, *Stock market return distributions: From past to present*, Physica A **383**, 59-64 (2007).
- [4092] S. Drozd, J. Kwapien, P. Oswiecimka and R. Rak, *Quantitative features of multifractal subtleties in time series*, Europhys. Lett. **88**, 60003 (2009) (6 pages).
- [4093] S. Drozd, J. Kwapien, P. Oswiecimka and R. Rak, *The foreign exchange market: return distributions, multifractality, anomalous multifractality and Epps effect*, New J. Phys. **12**, 105003 (2010) (23 pages)
- [4094] R. Rak and D. Grech, *Quantitative approach to multifractality induced by correlations and broad distribution of data*, Physica A **508**, 48-66 (2018), doi: 10.1016/j.physa.2018.05.059
- [4095] G.F. Gu, F. Ren, X.H. Ni, W. Chen and W.X. Zhou, *Empirical regularities of opening call auction in Chinese stock market*, Physica A **389**, 278-286 (2010).
- [4096] T.S. Biro and A. Jakovac, *Power-law tails from multiplicative noise*, Phys. Rev. Lett. **94**, 132302 (2005).
- [4097] Z. Tang, Y. Xu, L. Ruan, G. van Buren, F. Wang and Z. Xu, *Spectra and radial flow at RHIC with Tsallis statistics in a blast-wave description*, Phys. Rev. C **79**, 051901 (2009) (5 pages).
- [4098] I. Aizenberg, Z. Citron and A. Milov, *Can transverse mass scaling shed light on the event-activity dependence of Y-meson production at the LHC?*, Phys. Rev. D **107**, 014012 (2023).
- [4099] G. Che, J. Gu and W. Zhang, *Identified particle spectra in Pb-Pb and p-Pb collisions with a modified Tsallis blast-wave model*, preprint (2020), 2010.14880 [nucl-th].
- [4100] G. Che, J. Gu, W. Zhang and H. Zheng, *Identified particle spectra in Pb-Pb, Xe-Xe and p-Pb collisions with Tsallis blast-wave model*, J. Physics G: Nuclear and Particle Physics **48**, 095103 (2021) (21 pages), doi: 10.1088/1361-6471/ac09dc
- [4101] A. Akhil and S.K. Tiwari, *Exploring anisotropic flow via the Boltzmann transport equation employing the Tsallis blast wave description at LHC energies*, J. Phys. G: Nucl. Part. Phys. **51**, 035002 (2024).
- [4102] H. Ding, L. Cheng, T. Dai, E. Wang and W.N. Zhang, *The spectrum of low-pT J/y in heavy-ion collisions in a statistical two-body fractal model*, Entropy **25**, 1655 (2023).
- [4103] A.K. Singh, A. Akhil, S.K. Tiwari and P. Pareek, *Nuclear modification factor in Pb-Pb and p-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV at LHC energies using Boltzmann transport equation with Tsallis blast wave description*, preprint (2023), 2309.17071 [nucl-th].
- [4104] J.Y. Chen, M.Y. Duan, F.H. Liu, K.K. Olimov, *Extracting kinetic freeze-out properties in high energy collisions using a multi-source thermal model*, preprint (2023), 2309.05923 [nucl-th].
- [4105] M. Shao, L. Yi, Z. Tang, H. Chen, C. Li and Z. Xu, *Examine the species and beam-energy dependence of particle spectra using Tsallis statistics*, preprint (2009), 0912.0993 [nucl-ex].
- [4106] J.A.S. Lima, J.R. Bezerra and R. Silva, *Conservative force fields in nonextensive kinetic theory*, Physica A **316**, 289-296 (2002).
- [4107] R. Luzzi, A.R. Vasconcellos and J.G. Ramos, *Unconventional predictive statistical mechanics I: On the proper characterization of the so-called nonextensive thermo-statistics with structural informational entropies*, preprint (2002).
- [4108] A.R. Vasconcellos, J.G. Ramos and R. Luzzi, *Unconventional predictive statistical mechanics II: Theory and experiment and "Path to sufficiency"*, preprint (2002).
- [4109] R. Luzzi, A.R. Vasconcellos and J.G. Ramos, *Non-equilibrium statistical mechanics of complex systems: An overview*, Rivista del Nuovo Cimento **30**, 95-157 (2007).
- [4110] C.G. Rodrigues, F.S. Vannucchi and R. Luzzi, *Sobre modelagem matematica e formalismos estatisticos de sistemas complexos*, Revista Brasileira de Ensino de Fisica **42**, e201900090 (2020).

- [4111] M. Shiino, *Nonlinear Fokker-Planck equation exhibiting bifurcation phenomena and generalized thermostatics*, J. Math. Phys. **43**, 2654 (2002).
- [4112] M. Shiino, *Nonlinear Fokker-Planck equations with and without bifurcations and generalized thermostatics*, J. Korean Phys. Soc. **40**, 1037 (2002).
- [4113] M. Shiino, *Stability analysis of mean-field-type nonlinear Fokker-Planck equations associated with a generalized entropy and its applications to the self-gravitating system*, Phys. Rev. E **67**, 056118 (2003).
- [4114] M. Shiino, *Generalized entropies and associated free energies characterized by nonlinear Fokker-Planck equations*, communicated at the Research Institute of Mathematical Science Workshop on Mathematical Aspects of Generalized Entropies and their Applications (7-9 July 2009, Kyoto).
- [4115] M. Shiino, *Nonlinear Fokker-Planck equations associated with generalized entropies: Dynamical characterization and stability analyses*, J. Phys. C Series **201**, 012004 (2010) (10 pages).
- [4116] J. Luczka and B. Zaborek, *Brownian motion: A case of temperature fluctuations*, Acta Physica Polonica B **35**, 2151 (2004).
- [4117] F. Brouers and O. Sotolongo-Costa, *Generalized fractal kinetics in complex systems (application to biophysics and biotechnology)*, Physica A **368**, 165-175 (2006).
- [4118] M. Ausloos and R. Lambiotte, *Brownian particle having a fluctuating mass*, Phys. Rev. E **73**, 011105 (2006) (7 pages).
- [4119] B. Wang, X. Zhang, Y. Sun, Z. Qu and X. Li, *The transport phenomenon of inertia Brownian particle in periodic systems with non-Gaussian noise*, Modern Phys. Lett. B, 1950004 (2019) (8 pages), doi: 10.1142/S0217984919500040
- [4120] R.S. Gonzalez, *Difusao anomala: Transicao entre os regimes localizado e estendido na caminhada do turista unidimensional*, Masther Thesis (Unuversity of Sao Paulo, Ribeirao Preto, August 2006).
- [4121] P. Troncoso, O. Fierro, S. Curilef and A.R. Plastino, *A family of evolution equations with nonlinear diffusion, Verhulst growth, and global regulation: Exact time-dependent solutions*, Physica A **375**, 457-466 (2007).
- [4122] A. Fronczak, P. Fronczak and J.A. Holyst, *Microscopic explanation of non-Debye relaxation for heat transfer*, Physica A **375**, 571-576 (2007).
- [4123] V. Schwammle, E.M.F. Curado and F.D. Nobre, *A general nonlinear Fokker-Planck equation and its associated entropy*, Eur. Phys. J. B **58**, 159-165 (2007).
- [4124] V. Schwammle, F.D. Nobre and E.M.F. Curado, *Consequences of the H-theorem from nonlinear Fokker-Planck equations*, Phys. Rev. E **76**, 041123 (2007) (8 pages).
- [4125] V. Schwammle, E.M.F. Curado and F.D. Nobre, *Dynamics of normal and anomalous diffusion in nonlinear Fokker-Planck equations*, Eur. Phys. J. B **70**, 107-116 (2009).
- [4126] G. Sicuro, P. Rapcan and C. Tsallis, *Nonlinear inhomogeneous Fokker-Planck equations: entropy and free-energy time evolution*, Phys. Rev. E **94**, 062117 (2016) (7 pages).
- [4127] P. Rapcan, G. Sicuro and C. Tsallis, *Free-energy formalism for inhomogeneous nonlinear Fokker-Planck equations*, Proceedings of the 31st International Colloquium in Group Theoretical Methods in Physics, Eds. Duarte, S., Gazeau, J.-P., Faci, S., Micklitz, T., Scherer, R., and Toppan, F., 401-404 (2017, Springer).
- [4128] R.S. Wedemann, A.R. Plastino, and C. Tsallis, *Curl forces and the nonlinear Fokker-Planck equation*, Phys. Rev. E **94**, 062105 (2016) (10 pages).
- [4129] A.R. Plastino and R.S. Wedemann, *Nonlinear Fokker-Planck equation approach to systems of interacting particles: Thermostatistical features related to the range of the interactions*, Entropy **22**, 163 (2020), doi: 10.3390/e22020163
- [4130] R.S. Wedemann and A.R. Plastino, *Generalized thermostatics and the nonequilibrium landscape description of neural network dynamics*, Lecture Notes in Computer Science book series **14258**, 300-311 (2023).
- [4131] A.R. Plastino, F.D. Nobre and R.S. Wedemann, *Multispecies effects in the equilibrium and out-of-equilibrium thermostatics of overdamped motion*, Phys. Rev. E **102**, 022107 (2020).
- [4132] A.R. Plastino, R.S. Wedemann and F.D. Nobre, *H-theorems for systems of coupled nonlinear Fokker-Planck equations*, EPL (2022), in press, doi: 10.1209/0295-5075/ac7c30
- [4133] V.T.F. de Luca, *Equacao de Fokker-Planck nao-linear: Evolucao temporal na presenca de forza rotacional e potencial assimetrico*, Master Thesis (Instituto de Matematica e Estatistica, Universidade do Estado do Rio de Janeiro, 2018).
- [4134] A.R. Plastino, R.S. Wedemann, E.M.F. Curado, F.D. Nobre and C. Tsallis, *Nonlinear drag forces and the thermostatics of overdamped motion*, Phys. Rev. E **98**, 012129 (2018)(8 pages).
- [4135] R.S. Wedemann and A.R. Plastino, *Thermostatistical features of overdamped motion with anisotropic drag forces*, Eur. Phys. J. Special Topics **229**, 809-818 (2020).

- [4136] A.R. Plastino, R.S. Wedemann and C. Tsallis, *Nonlinear Fokker-Planck equation for an overdamped system with drag depending on direction*, *Symmetry* **13**, 1621 (2021), doi: 10.3390/sym13091621.
- [4137] V.T.F. de Luca, R.S. Wedemann and A.R. Plastino, *Neuronal asymmetries and Fokker-Planck dynamics*, *International Conference on Artificial Neural Networks: Artificial Neural Networks and Machine Learning*, Springer Lecture Notes in Computer Science **11141**, 703-713 (2018),
- [4138] J. Du, *Possible dynamics of the Tsallis distribution from a Fokker-Planck equation (I)*, preprint (2009), 0905.4310 [cond-mat.stat-mech].
- [4139] M.A. Fuentes and M.O. Caceres, *Computing the non-linear anomalous diffusion equation from first principles*, *Phys. Lett. A* **372**, 1236-1239 (2008).
- [4140] E.K. Lenzi, P.R.G. Fernandes, T. Petrucci, H. Mukai, H.V. Ribeiro, M.K. Lenzi and G. Goncalves, *Anomalous diffusion and electrical response of ionic solutions*, *Int. J. Electrochem. Sci.*, **8**, 2849-2862 (2013).
- [4141] E.K. Lenzi, M.K. Lenzi, H.V. Ribeiro and L.R. Evangelista, *Extensions and solutions for nonlinear diffusion equations and random walks*, *Proc. R. Soc. A* **475**, 20190432 (2019), doi: dx.doi.org/10.1098/rspa.2019.0432
- [4142] V. Schwammle, E.M.F. Curado and F.D. Nobre, *Nonlinear Fokker-Planck equations related to standard thermostats*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 152-156 (New York, 2007).
- [4143] J. Dolbeault, P. Markowich, D. Oelz and C. Schmeiser, *Non linear diffusions as limit of kinetic equations with relaxation collision kernels*, *Arch. Rational Mech. Anal.* **186**, 133-158 (2007).
- [4144] C.L. Ho and R. Sasaki, *Deformed Fokker-Planck equations*, *Progress Theor. Phys.* **18**, 667-674 (2007).
- [4145] J.L. Wu and H.J. Chen, *Generalized master equation for non-extensive reaction-diffusion systems*, *Modern Phys. Lett. B* **21**, 103-108 (2007).
- [4146] G.B. Bagci, *Nonextensive reaction rate*, *Physica A* **386**, 79-84 (2007).
- [4147] W. Quapp and A. Zech, *Transition state theory with Tsallis statistics*, *J. Comput. Chem.* **31**, 573-585 (2010).
- [4148] J.L. Du, *Transition state theory: A generalization to nonequilibrium systems with power-law distributions*, *Physica A* **391**, 1718-1728 (2012).
- [4149] C.T. Yin and J.L. Du, *The power-law TST rate coefficient for an elementary bimolecular reaction*, *Physica A* (2014), in press, doi: <http://dx.doi.org/10.1016/j.physa.2013.10.038>
- [4150] C.T. Yin and J.L. Du, *The collision theory rate coefficient for power-law distributions*, *Physica A* (2014), in press, doi: <http://dx.doi.org/10.1016/j.physa.2014.03.057>
- [4151] C.T. Yin, Y.J. Zhou and J.L. Du, *The power-law TST reaction rate coefficient with tunneling correction*, *Physica A* **413**, 294-300 (2014).
- [4152] Y.J. Zhou and J.L. Du, *The mean first passage time in energy-diffusion controlled regime with power-law distributions*, preprint (2013), 1310.7191 [cond-mat.stat-mech].
- [4153] W.B. Chen, J. Wang, W.Y. Qiu and F.Y. Ren, *Solutions for a time-fractional diffusion equation with absorption: Influence of different diffusion coefficients and external forces*, *J.Phys. A* **41**, 045003 (2008) (10 pages).
- [4154] T.D. Frank and S. Mongkolsakulvong, *A nonextensive thermostistical approach to the Haissinski theory of accelerator beams*, *Physica A* **387**, 4828-4838 (2008).
- [4155] S. Mongkolsakulvong and T.D. Frank, *Canonical-dissipative limit cycle oscillators with a short-range interaction in phase space*, *Condensed Matter Physics* **13** (1), 13001 (2010) (18 pages).
- [4156] H. Hasegawa, *Stationary and dynamical properties of information entropies in nonextensive systems*, *Phys. Rev. E* **77**, 031133 (2008) (16 pages).
- [4157] L. Wei, Q.A. Wang and A. Le Mehaute, *Maximum path information and Fokker-Planck equation*, *Chinese Phys. Lett.* **25**, 1165-1167 (2008).
- [4158] J. Wang, W.-J. Zhang, J.-R. Liang, P. Zhang and F.-Y. Ren, *Solutions of fractional nonlinear diffusion equation and first passage time: Influence of initial condition and diffusion coefficient*, *Physica A* **387**, 4547-4552 (2008).
- [4159] L.J. Lv, J.B. Xiao, F.Y. Ren and L. Gao, *Solutions for multidimensional fractional anomalous diffusion equations*, *J. Math. Phys.* **49**, 073302 (2008) (9 pages).
- [4160] L.J. Lv, J.B. Xiao, L. Zhang and L. Gao, *Solutions for a generalized fractional anomalous diffusion equation*, *J. Comp. Appl. Math.* **225**, 301-308 (2009).
- [4161] V.O. Kharchenko, *Entropy-driven phase transitions with influence of the field-dependent diffusion coefficient*, *Physica A* **388**, 268-276 (2009).
- [4162] G. Goncalves, M.K. Lenzi, L.S. Moraes, E.K. Lenzi and M.F. Andrade, *Difusao anomala e equacoes fracionarias de difusao*, *Acta Sci. Technol.* **27**, 123-131 (2005).

- [4163] E.K. Lenzi, M.A.F. dos Santos, F.S. Michels, R.S. Mendes and L.R. Evangelista, *Solutions of some nonlinear diffusion equations and generalized entropy framework*, Entropy **15**, 3931-3940 (2013), doi:10.3390/e1509931
- [4164] R.F.C. Badini, G. Goncalves, M.K. Lenzi, O.A.A. Santos, L.M.M. Jorge and E.K. Lenzi, *Equacao de difusao nao linear, solucoes e difusao anomala*, Acta Sci. Technol **29**, 165-171 (2007).
- [4165] H. Zhang, W. Xu and Y. Xu, *The study on a stochastic system with non-Gaussian noise and Gaussian colored noise*, Physica A **388**, 781-788 (2009).
- [4166] B. Wang, Y.Q. Sun and X.D. Tang, *Effects of non-Gaussian noise on a calcium oscillation system*, Chin. Phys. B **22** (1), 010501 (2013) (3 pages).
- [4167] C.-J. Wang and D.-C. Mei, *Transient properties of a bistable kinetic system with time-delayed feedback and non-Gaussian noise: mean first-passage time*, Mod. Phys. Lett. B **22**, 2677-2687 (2008).
- [4168] A. Rossani and A.M. Scarfone, *Generalized Pearson distributions for charged particles interacting with an electric and/or a magnetic field*, Physica A **388**, 2354-2366 (2009).
- [4169] J. Ruseckas, *Modeling Tsallis distributions by nonlinear stochastic differential equations with application to financial markets*, communication at the APFA7 and Tokyo Tech-Hitotsubashi Interdisciplinary Conference (Tokyo, 1 to 5 March 2009).
- [4170] O. Herscovici and T. Mansour, *Tsallis p, q -deformed Touchard polynomials and Stirling numbers*, Russian J. Math. Phys. **24** (1), 37-50 (2017).
- [4171] O. Herscovici, T. Kim, T. Mansour and S.H. Rim, *Differential equations for p, q -Touchard polynomials*, preprint (2016).
- [4172] O. Herscovici and T. Mansour, *New degenerated polynomials arising from non-classical umbral calculus*, preprint (2018), [math.NT].
- [4173] O. Herscovici, *Study of the p, q -deformed Touchard polynomials*, preprint (2019), 1904.07674 [math.CO].
- [4174] O. Herscovici, *Unified generating function for set partitions*, preprint (2022), 2208.12325 [math.CO].
- [4175] N. Mansour, T. Toghrai, A. El Boukili, A. Benami, A.K. Daoudia and M.B. Sedra, *The dynamics of static hairy black holes and thermodynamics through gravitational decoupling in quantum space*, International Journal of Modern Physics A **39**, 2450151 (2024).
- [4176] A.A. Marinho and F.A. Brito, *Hybrid deformed algebra*, preprint (2019), 1904.07843 [cond-mat.stat-mech].
- [4177] A.A. Marinho and F.A. Brito, *Hybrid deformed statistics*, Eur. Phys. J. Plus (2022) **137**, 277 (2022).
- [4178] A. Kononovicius and V. Gontis, *Preventing endogenous extreme events in herding dominant agent-based financial market*, preprint (2014), 1409.8024 [q-fin.ST].
- [4179] A. Kononovicius and V. Gontis, *Herding interactions as an opportunity to prevent extreme events in financial markets*, Eur. Phys. J. B **88**, 189 (2015) (6 pages), doi: 10.1140/epjb/e2015-60160-0
- [4180] V. Gontis, *Understanding the nature of memory in the order flow of financial markets*, communication at Sigma-Phi (Chania, 2023).
- [4181] V. Gontis, *Discrete q -exponential limit order cancellation time distribution*, Fractal Fract. **7** (8), 581 (2023).
- [4182] V. Gontis, *Double stochastic opinion dynamics with fractional inflow of new opinions*, Fractal and Fractional **8** (9) (2024).
- [4183] G.F. Gu and W.X. Zhou, *On the probability distribution of stock returns in the Mike-Farmer model*, Eur.Phys. J. B **67**, 585-592 (2009).
- [4184] Z. Haba, *Relativistic diffusion*, Phys. Rev. E **79**, 021128 (2009) (9 pages).
- [4185] E.K. Lenzi, M.K. Lenzi, L.R. Evangelista, L.C. Malacarne and R.S. Mendes, *Solutions for a fractional nonlinear diffusion equation with external force and absorbent term*, J. Stat. Mech. P02048 (2009) (14 pages).
- [4186] F. Michael, *Notes on the Klein-Gordon equation*, preprint (2010), 1004.1543 [cond-mat.stat-mech].
- [4187] E.K. Lenzi, L.R. da Silva, M.K. Lenzi, M.A.F. dos Santos, H.V. Ribeiro and L.R. Evangelista, *Intermittent motion, nonlinear diffusion equation and Tsallis formalism*, Entropy **19**, 42 (2017) (11 pages), doi:10.3390/e19010042
- [4188] O. Kayacan, S. Sahin and F. Tastan, *A study for boronizing process within nonextensive thermostatics*, Mathematical and Computational Applications **15**(1), 14-24 (2010).
- [4189] J.L. Du, *Some dynamical property of the Tsallis distribution from a Fokker-Planck equation*, Chinese Physics B **19**, (4), 040501 (2010).
- [4190] M. Akimoto and A. Suzuki, *Generalized entropies and the Langevin and Fokker-Planck equations*, J. Korean Phys. Soc. **40** (6), 974-978 (2002).
- [4191] D. Eroglu, M. Ozkan and G.B. Bagci, *q -thermostatics of noise-driven Van der Pol oscillator*, Physica A **390**, 1417-1423 (2011).
- [4192] W. Li, Q.A. Wang and A. Le Mehaute, *Maximum path information and Fokker-Planck Equation*, preprint (2010), 1011.3678 [cond-mat.stat-mech].

- [4193] Y.V. Lysogorskiy, Q.A. Wang and D.A. Tayurskii, *Study of energy fluctuation effect on the statistical mechanics of equilibrium systems*, J. Phys.: Conf. Series **394**, 012006 (2012) (7 pages).
- [4194] A.M. Mariz and C. Tsallis, *Unified long-memory mesoscopic mechanism consistent with nonextensive statistical mechanics*, Phys. Lett. A **376**, 3088-3091(2012).
- [4195] Z. Huang, C. Ou, B. Lin, G. Su, J. Chen, *The available force in long-duration memory complex systems and its statistical physical properties*, EPL **103**, 10011 (2013) (5 pages) doi: 10.1209/0295-5075/103/10011
- [4196] Z. Huang, C. Ou, B. Lin, G. Su and J. Chen, *Conditional statistical properties of the complex systems having long-duration memory*, Physica A **409**, 138-145 (2014), doi: <http://dx.doi.org/10.1016/j.physa.2014.05.013>
- [4197] Z. Gonzalez Arenas, D.G. Barci and C. Tsallis, *Nonlinear inhomogeneous Fokker-Planck equation within a generalized Stratonovich prescription*, Phys. Rev. E **90**, 032118 (2014)(5 pages).
- [4198] M. Jauregui, A.L.F. Lucchi, J.H.Y. Passos and R.S. Mendes, *Stationary solution and H theorem for a generalized Fokker-Planck equation*, Phys. Rev. E **104**, 034130 (2021).
- [4199] A. Grassi and A. Raudino, *A Fokker-Planck equation for a piecewise entropy functional defined in different space domains. An application to solute partitioning at the membrane-water interface*, Physica A **395**, 171-182 (2014), doi: <http://dx.doi.org/10.1016/j.physa.2013.09.029>
- [4200] G. Tian, Z. Wang, X. Yin, Z. Li, X. Shi, Z. Lu, C. Zhou, Y. Yu and Y. Guo, *Mining network traffic anomaly based on adjustable piecewise entropy*, IEEE 23rd International Symposium on Quality of Service (IWQoS) (2015).
- [4201] J. Ibrahim and S. Gajin, *Entropy-based network traffic anomaly classification method resilient to deception*, Computer Science and Information Systems (2021), in press, 10.2298/CSIS123456789X
- [4202] B. Bleijerveld, *A scalable recommendation system for selective retention of DDoS traffic: Entropy-based network traffic analysis*, Master Thesis (Faculty of Electrical Engineering, Mathematics and Computer Science, 2024).
- [4203] P. Garbaczewski, V. Stephanovich, D. Kedzierski, *Heavy-tailed targets and (ab)normal asymptotics in diffusive motion*, Physica A **390**, 990-1008 (2011).
- [4204] Y. Hasegawa and M. Arita, *Noise-intensity fluctuation in Langevin model and its higher-order Fokker-Planck equation*, Physica A **390**, 1051-1063 (2011).
- [4205] U. Tirnakli, H.J. Jensen and C. Tsallis, *Restricted random walk model as a new testing ground for the applicability of q-statistics*, Europhys. Lett. **96**, 40008 (2011) (5 pages).
- [4206] J. Zand, U. Tirnakli and H.J. Jensen, *On the relevance of q-distribution functions: The return time distribution of restricted random walker*, J. Phys. A: Math. Theor. **48**, 425004 (2015) (9 pages), doi:10.1088/1751-8113/48/42/425004
- [4207] S.V. Iyengar and J. Balakrishnan, *The q-deformed Tinkerbell map*, Chaos **28**, 113102 (2018).
- [4208] U. Tirnakli and E.P. Borges, *The standard map: From Boltzmann-Gibbs statistics to Tsallis statistics*, Scientific Reports **6**, 23644 (2016) (8 pages), doi: 10.1038/srep23644
- [4209] G. Ruiz, U. Tirnakli, E.P. Borges and C. Tsallis, *Statistical characterization of the standard map*, J. Stat. Mech. 063403 (2017) (14 pages).
- [4210] G. Ruiz, U. Tirnakli, E.P. Borges and C. Tsallis, *Statistical characterization of discrete conservative systems: The web map*, Phys. Rev. E **96**, 042158 (2017) (10 pages).
- [4211] U. Tirnakli, C. Tsallis and K. Cetin, *Dynamical robustness of discrete conservative systems: Harper and generalized standard maps*, J. Stat. Mech. 063206 (2020).
- [4212] K. Cetin, U. Tirnakli and B.M. Boghosian, *A generalization of the Standard Map and its statistical characterization*, Scientific Reports **12**, 8575 (2022).
- [4213] K. Cetin, U. Tirnakli, D.F.M. Oliveira and E.D. Leonel, *Statistical mechanical characterization of billiard systems*, Chaos, Solitons and Fractals **178**, 114331 (2024).
- [4214] C. Beck, U. Tirnakli and C. Tsallis, *Generalization of the Gauss map: A jump into chaos with universal features*, Phys. Rev. E **110**, 064213 (2024).
- [4215] M.A. Pires, C. Tsallis and E.M.F. Curado, *Composing α -Gauss and logistic maps: Gradual and sudden transitions to chaos*, preprint (2025), 2505.15709 [nlin.CD].
- [4216] U. Tirnakli and C. Tsallis, *Extensive numerical results for integrable case of standard map*, Nonlinear Phenomena in Complex Systems **23** (2), 149-152 (2020), doi: 10.33581/1561-4085-2020-23-2-149-152
- [4217] A. Bountis, J.J.P. Veerman and F. Vivaldi, *Cauchy distributions for the integrable standard map*, Phys. Lett. A **384**, 126659 (2020).
- [4218] J.J.P. Veerman, P. J. Oberly and L.S. Fox, *Statistics of a family of piecewise linear maps*, Physica D **427**, 133019 (2021).
- [4219] L.S. Fox, *Statistics of a family of piecewise linear maps*, communication (2020).

- [4220] J.J. P. Veerman, L.S. Fox and P.J. Oberly, *A remarkable summation formula, lattice tilings, and fluctuations*, The American Mathematical Monthly (2021), in press.
- [4221] A. Bountis, *Complex dynamics and statistics of 1-D Hamiltonian lattices: Long range interactions and supratransmission*, Nonlinear Phenomena in Complex Systems **23** (2), 133-148 (2020).
- [4222] A. Pluchino, A. Rapisarda and C. Tsallis, *Noise, synchrony and correlations at the edge of chaos*, Phys. Rev. E **87**, 022910 (2013) (5 pages).
- [4223] U. Tirnakli and C. Tsallis, *A closer look at coupled logistic maps at the edge of chaos*, preprint (2015), 1503.08685 [cond-mat.stat-mech].
- [4224] U. Tirnakli and C. Tsallis, *Noisy coupled logistic maps in the vicinity of chaos threshold*, Chaos **26**, 043114 (2016) (7 pages).
- [4225] K. Cetin, O. Afsar and U. Tirnakli, *Limit behaviour and scaling relations of two kinds of noisy logistic map in the vicinity of chaos threshold and their robustness*, Physica A **424**, 269-282 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2014.12.029>
- [4226] K. Cetin, O. Afsar and U. Tirnakli, *Generalized Pesin-like identity and scaling relations at chaos threshold of the Rossler system*, Entropy **20**, 216 (2018), doi: 10.3390/e20040216
- [4227] M.A. Moret, L.Q. Antonio and H.B.B. Pereira, *Classical and fractal analysis of vehicle demand on the ferry-boat system*, Physica A **391**, 1657-1661 (2012).
- [4228] L. Gou, Y. Liu, Y. Zhang, Z. Zhu, D. Peng and J. Dou, *Estimating the instability criterion of vehicles in urban flooding by an entropic method*, Urban Climate **41**, 101069 (2022).
- [4229] V.P. Koverda and V.N. Skokov, *Maximum entropy in a nonlinear system with a $1/f$ power spectrum*, Physica A **391**, 21-28 (2012).
- [4230] V.P. Koverda and V.N. Skokov, *Entropy maximum in a nonlinear system with the $1/f$ fluctuation spectrum*, Technical Physics **56** (11), 1539-1545 (2011).
- [4231] V.P. Koverda and V.N. Skokov, *Maximum entropy and determinate action on random processes with a $1/f$ spectrum*, Doklady Physics **57** (6), 229-232 (Pleiades Publishing, 2012) [Original russian published in Doklady Akademii Nauk **444** (6), 616-619 (2012)].
- [4232] V.P. Koverda and V.N. Skokov, *Stability of Random Processes with the $1/f^\alpha$ spectrum*, Doklady Physics **63** (11), 451-454 (Pleiades Publishing, 2018) [Original russian published in Doklady Akademii Nauk **483** (1) (2018)].
- [4233] V.P. Koverda and V.N. Skokov, *Stability of a random process with a $1/f$ spectrum under deterministic action*, Technical Physics **58** (4), 467-470 (Pleiades Publishing, 2013) [Original Russian published in Zhurnal Tekhnicheskoi Fiziki **83** (4), 1-5 (2013)].
- [4234] V.P. Koverda and V.N. Skokov, *Governing stochastic equation for a self-similar random process*, Physica A (2023), in press, doi: 10.1016/j.physa.2023.129141
- [4235] A.V. Blank, N.A. Suhareva and M.V. Tsyganov, *Q-parametric positional parameters of the collimated wave beam at the atmospheric path output*, Zhurnal Radioelektroniki - Journal of Radio Electronics (8)1689-1719 (2020), doi: 10.30898/1684-1719.2020.8.1 [In Russian].
- [4236] A. Blank, N. Suhareva and M. Tsyganov, *Discrimination information for intensity distributions of a collimated wave beam*, Chaos, Solitons and Fractals **152**, 111469 (2021).
- [4237] V.P. Koverda, V.N. Skokov, and A. V. Vinogradov, *Stability of low-frequency pulsations in a transient heat transfer regime upon phase transitions*, ISSN 0018-151X, High Temperature **51** (3), 421-425 (2013) [Original Russian published in Teplofizika Vysokikh Temperatur, **51** (3), 471-476 (2013)].
- [4238] V.P. Koverda and V.N. Skokov, *Oscillations and waves in a spatially distributed system with a $1/f$ spectrum*, Physica A **492**, 1-9 (2018).
- [4239] V.P. Koverda and V.N. Skokov, *Oscillations and waves in a nonlinear system with the $1/f$ spectrum*, Technical Physics **63** (5), 634-640 (2018) [Original Russian published in Zhurnal Tekhnicheskoi Fiziki **88** (5), 655-662 (2018)].
- [4240] V.N. Skokov and V.P. Koverda, *An Entropy-based stability analysis of extreme fluctuations in a system featuring a $1/f$ spectrum*, Doklady Physics **62** (11), 491-494 (2017) [Doklady Akademii Nauk **477** (1), 26-29 (2017)].
- [4241] V.P. Koverda and V.N. Skokov, *Determination of preferential exponent α in random processes with a $1/f^\alpha$ power spectrum*, Physica A **511**, 263-271 (2018), doi: 10.1016/j.physa.2018.07.046
- [4242] V.P. Koverda and V.N. Skokov, *The entropy maximum in scale-invariant processes with $1/f^\alpha$ power spectrum: The effect of white noise anisotropy*, Technical Physics Letters **45** (5), 439-442 (2019).
- [4243] L.J. Lv, J.B. Xiao, F.Y. Ren and L. Gao, *Solutions for multidimensional fractional anomalous diffusion equations*, preprint (2012), 1201.2466 [math-ph].

- [4244] J. Prehl, F. Boldt, C. Essex and K.H. Hoffmann, *Time evolution of relative entropies for anomalous diffusion*, Entropy **15**, 2989-3006 (2013), doi:10.3390/e15082989
- [4245] T. Kosztolowicz and K.D. Lewandowska, *The nonextensive entropy approach versus the stochastic in describing subdiffusion*, preprint (2012), 1201.3121 [cond-mat.stat-mech] .
- [4246] B. Wang and X.Q. Wu, *Stationary properties of a single-mode laser system with non-Gaussian and Gaussian noise*, Chin. Phys. B **20** (11), 114207 (2011) (4 pages).
- [4247] I. Rouse and S. Willitsch, *Superstatistical velocity distributions of cold trapped ions in molecular-dynamics simulations*, Phys. Rev. A **92**, 053420 (2015) (12 pages).
- [4248] I. Rouse and S. Willitsch, *Superstatistical energy distributions of an ion in an ultracold buffer gas*, Phys. Rev. Lett. **118**, 143401 (2017) (6 pages).
- [4249] I. Rouse and S. Willitsch, *Energy distributions of an ion in a radio-frequency trap immersed in a buffer gas under the influence of additional external forces*, Phys. Rev. A **97**, 042712 (2018).
- [4250] I. Rouse and S. Willitsch, *The energy distribution of an ion in a radiofrequency trap interacting with a nonuniform neutral buffer gas*, Molecular Physics **117** (21), 3120-3131 (2019), doi: 10.1080/00268976.2019.1581952
- [4251] I.J. Rouse, *A miniaturised hybrid ion-atom chip trap and the non-equilibrium statistical mechanics of trapped ions*, Doctor Thesis (University of Basel, 2018).
- [4252] M. Pinkas, Z. Meir, T. Sikorsky, R. Ben-Shlomi, N. Akerman and R. Ozeri, *Effect of ion-trap parameters on energy distributions of ultra-cold atom-ion mixtures*, New J. Phys. **22**, 013047 (2020).
- [4253] I.V. Krasnov, *Kinetic model of the bichromatic dark trap for atoms*, Laser Phys. bf **27**, 085501 (2017) (10 pages).
- [4254] I.V. Krasnov, *Bichromatic dark trap immersed in a buffer gas with an admixture of resonant atoms*, Laser Phys. bf **30**, 085501 (2020) (10 pages).
- [4255] M.J. Bales, P. Fierlinger and R. Golub, *Nonextensive statistics in spin precession*, preprint (2016), 1602.01082 [nucl-ex].
- [4256] J. Biesheuvel, J.-Ph. Karr, L. Hilico, K.S.E. Eikema, W. Ubachs and J.C.J. Koelemeij, *Probing QED and fundamental constants through laser spectroscopy of vibrational transitions in HD*, Nature Communications **7**, 10385 (2016) (7 pages), doi: 10.1038/ncomms10385 — www.nature.com/naturecommunications
- [4257] J. Biesheuvel, J.-Ph. Karr, L. Hilico, K.S.E. Eikema, W. Ubachs and J.C.J. Koelemeij, *High-precision spectroscopy of the HD+ molecule at the 1 – p.p.b. level*, Appl. Phys. B **123**, 23 (2017) (22 pages), doi: 10.1007/s00340-016-6576-8
- [4258] A. Ajoy, B. Safvati, R. Nazaryan, J.T. Oon, B. Han, P. Raghavan, R. Nirodi, A. Aguilar, K. Liu, X. Cai, X. Lv, E. Druga, C. Ramanathan, J.A. Reimer, C.A. Meriles, D. Suter and A. Pines, *Hyperpolarized relaxometry based nuclear T1 noise spectroscopy in hybrid diamond quantum registers*, preprint (2019), 1902.06204 [quant-ph].
- [4259] J.L. Du, *Power-law distributions and fluctuation-dissipation relation in the stochastic dynamics of two-variable Langevin equations*, preprint (2012), 1202.0707 [cond-mat.stat-mech].
- [4260] A. Takatsu, *Wasserstein geometry of porous medium equation*, Annales de l' Institut Henri Poincare - Analyse non lineaire **29** (2), 217-232 (2012).
- [4261] A. Takatsu, *Some evolution equations as Wasserstein gradient flows*, preprint (2014).
- [4262] M.H. Duong, *Asymptotic equivalence of the discrete variational functional and a rate-large-deviation-like functional in the Wasserstein gradient flow of the porous medium equation*, preprint (2013), 1307.5184 [math.AP].
- [4263] D.S.P. Salazar and G.L. Vasconcelos, *Multicanonical distribution: Statistical equilibrium of multiscale systems*, Phys. Rev. E **86**, 050103(R) (2012) (5 pages).
- [4264] G.L. Vasconcelos and D.S.P. Salazar, *Multicanonical distribution and the origin of power laws*, preprint (2012), 1208.5624 [cond-mat.stat-mech].
- [4265] G.C. Wu, *Variational iteration method for the q -diffusion equation on time scales*, Heat Transfer Research **44** (5), 393-398 (2013).
- [4266] S.H. Joo, *q-Calculus revisited*, preprint (2021), 2106.03855 [math.GM].
- [4267] D.Y. Zheng, I. Akkus and G. Kizilaslan, *New representations of Pascal matrix via operational q-calculus*, Honam Mathematical J. **44** (1), 26-35 (2022).
- [4268] O. Cybulski, V. Babin and R. Holyst, *Minimization of the Renyi entropy production in the stationary states of the Brownian process with matched death and birth rates*, Phys. Rev. E **69**, 016110 (2004).
- [4269] O. Cybulski, V. Babin and R. Holyst, *Minimization of the Renyi entropy production in the space-partitioning process*, Phys. Rev. E **71**, 046130 (2005).

- [4270] O. Cybulski, D. Matysiak, V. Babin and R. Holyst, *Pattern formation in nonextensive thermodynamics: Selection criterion based on the Renyi entropy production*, J. Chem. Phys. **122**, 174105 (2005).
- [4271] T.D. Frank, *Short-time correlations of many-body systems described by nonlinear Fokker-Planck and Vlasov-Fokker-Planck equations*, Phys. Lett. A **337**, 224 (2005).
- [4272] J.L. Zhao and J.D. Bao, *Transition state theory rate in nonlinear environment: The under-damping case*, Comm. Theor. Phys. **44**, 752-756 (2005).
- [4273] Y. Zhou and C. Yin, *Applications of power-law transition state theory to the reaction of a hydroxyl radical with molecular hydrogen and the respiration in Camellia Japonica*, Physica A (2104), in press, doi: <http://dx.doi.org/10.1016/j.physa.2014.09.048>
- [4274] T.D. Frank and S. Mongkolsakulvong, *On strongly nonlinear autoregressive models: Implications for the theory of transient and stationary responses of many-body systems*, Fluctuation Noise Lett. **12** (4), 1350022 (2013) (27 pages), doi: 10.1142/S0219477513500223
- [4275] S. Anagnostidis, D. Pavlo, L. Biggio, L. Noci, A. Lucchi and T. Hofmann, *Dynamic context pruning for efficient and interpretable autoregressive transformers*, preprint (2023), 2305.15805 [cs.CL].
- [4276] P. Kumar, S. Narayanan and S. Gupta, *Finite element solution of Fokker-Planck equation of nonlinear oscillators subjected to colored non-Gaussian noise*, Probabilistic Engineering Mechanics **38**, 143-155 (2014), doi: <http://dx.doi.org/10.1016/j.probenmech.2014.07.002>
- [4277] Y. Guo and J. Tan, *Effects of Non-Gaussian noise on the upper bound of the time derivative of entropy in a stochastic dissipative dynamical system*, Chinese J. Phys. **52** (5), 1539-1548 (2014).
- [4278] J. Anderson E.J. Kim and S. Moradi, *A fractional Fokker-Planck model for anomalous diffusion*, Phys. Plasmas **21**, 122109 (2014) (8 pages).
- [4279] J. Anderson, S. Moradi and T. Rafiq, *Non-linear Langevin and fractional Fokker-Planck equations for anomalous diffusion by Levy stable processes*, Entropy **20**, 760 (2018), doi: 10.3390/e20100760
- [4280] S. Asgarani, *Families of Fokker-Planck equations and the associated entropic form for a distinct steady-state probability distribution with a known external force field*, Phys. Rev. E **91**, 022104 (2015) (5 pages).
- [4281] R. Yano, *Problems with the linear q-Fokker Planck equation*, J. Stat. Mech. P05005 (2015) (10 pages).
- [4282] P.H. Chavanis, *Generalized stochastic Fokker-Planck equations*, Entropy **17**, 3205-3252 (2015), doi:10.3390/e17053205
- [4283] P.H. Chavanis, *The Generalized stochastic Smoluchowski equation*, Entropy **21**, 1006 (2019), doi: 10.3390/e21101006
- [4284] K.D. Lewandowska and T. Kosztolowicz, *Zastosowanie entropii niedaddytywnych w opisie subdyfuzji*, ISBN 978-83-942947-3-1 Portal CZM (2015) (15 pages).
- [4285] A.O. Bolivar, *Anomalous Brownian motion via linear Fokker-Planck equations*, preprint (2017), arxiv 1701.02670
- [4286] V. Saxena and K. Shah, *Time evolution of Tsallis distribution in Paul trap*, IEEE Transactions on Plasma Science **45** (6), 918-924 (2017).
- [4287] V. Saxena and K. Shah, *Plasma dynamics in a dual-frequency Paul trap using Tsallis distribution*, IEEE Transactions on Plasma Science (3), (2018), doi: 10.1109/TPS.2018.2803799
- [4288] V. Saxena, *Collective dynamics Inside Paul trap with stray electric field using nonextensive distribution function*, IEEE Transactions on Plasma Science (2020).
- [4289] A. Kansal, V. Saxena and C. Pathak, *Dynamics Inside a dual-frequency Paul trap in the presence of excess micromotion*, IEEE Transactions on Plasma Science (2023).
- [4290] I. Ghosh, V. Saxena and A. Krishnamachari, *Study of Tsallis distribution of plasma inside Paul trap using 3D color-map plots*, IEEE (2023).
- [4291] M.A.F. dos Santos, M.K. Lenzi and E.K. Lenzi, *Nonlinear Fokker-Planck equations, H-theorem, and entropies*, Chinese J. Phys. **55** (4), 1294-1299 (2017), doi: 10.1016/j.cjph.2017.07.003
- [4292] A. Ohara, *Behavioral analysis of certain nonlinear diffusion equations via information geometry*, communication at GSO18 (2018).
- [4293] J. Naudts, *Deformed exponential families in statistical physics and beyond*, communication at GSO18 (2018).
- [4294] B.G. da Costa, I.S. Gomez and E.P. Borges, *Deformed Fokker-Planck equation: inhomogeneous medium with a position-dependent mass*, Phys. Rev. E **102**, 062105 (2020).
- [4295] J. Luczka, *Comment on "Deformed Fokker-Planck equation: Inhomogeneous medium with a position-dependent mass"*, Phys. Rev. E **103**, 036101 (2021).
- [4296] B.G. da Costa, I.S. Gomez and E.P. Borges2, *Reply to "Comment on 'Deformed Fokker-Planck equation: Inhomogeneous medium with a position-dependent mass' "*, Phys. Rev. E **103**, 036102 (2021).

- [4297] M.A.F. dos Santos, F.D. Nobre and E.M.F. Curado, *Monitoring Levy-process crossovers*, Communications in Nonlinear Science and Numerical Simulation (2020), in press, doi: 10.1016/j.cnsns.2020.105490
- [4298] M.A.F. dos Santos, F.D. Nobre and E.M.F. Curado, *Entropic form emergent from superstatistics*, Phys. Rev. E **107**, 014132 (2023).
- [4299] A.V. Kolesnichenko, *On the construction of a family of anomalous-diffusion Fokker-Planck-Kolmogorov's equations based on the Sharma-Taneja-Mittal entropy functional*, Mathematica Montisnigri **LI** (2021).
- [4300] J.H.Y. Passos, *Possível origem de termos em equações de Fokker-Planck não-lineares*, Master Thesis (Departamento de Física, Universidade Estadual de Maringá, 2021).
- [4301] V.D. Calderon, I. Gallo-Mendez and P.S. Moya, *Caracterizando la estacionariedad de un sistema acoplado, finito y tipo Langevin*, XXIII Simposio Chileno de Física (Chile, 22-24 November 2022).
- [4302] I.S. Gomez, B.G. da Costa and M.A.F. dos Santos, *Inhomogeneous Fokker-Planck equation from framework of Kaniadakis statistics*, Comm. Nonlinear Science and Numerical Simulation **119**, 107131 (2023).
- [4303] I. Gallo-Mendez and P.S. Moya, *Understanding the level of turbulence by asymmetric distributions: a motivation for measurements in space plasmas*, Astrophys. Journal **952**, 30 (2023).
- [4304] G.M. Yoshitome, *Equações de Fokker-Planck, formas entropicas, exponenciais e logaritmos generalizados*, Master Thesis (Universidade Estadual de Maringá, 2021).
- [4305] B.K. Shivamoggi and N. Tuovila, *Application of the direct interaction approximation to generalized stochastic models in the turbulence problem*, preprint (2024), 2412.02820 [math-ph].
- [4306] B.K. Shivamoggi and N. Tuovila, *Direct Interaction Approximation for generalized stochastic models in the turbulence problem*, preprint (2025), 2412.02820 [math-ph].
- [4307] B.K. Shivamoggi and N. Tuovila, *Application of the direct interaction approximation in turbulence theory to generalized stochastic models*, Chaos **35**, 063124 (2025).
- [4308] C. Runfola and G. Pagnini, *Generalized Fokker-Planck equation for superstatistical systems*, Physica D **467**, 134247 (2024).
- [4309] C. Tsallis, *Extensive versus nonextensive physics*, in *New trends in magnetism, magnetic materials and their applications*, eds. J.L. Morán-López and J.M. Sanchez (Plenum Press, New York, 1994) page 451.
- [4310] A. Chame and E.V.L. de Mello, *The fluctuation-dissipation theorem in the framework of the Tsallis statistics*, J. Phys. A **27**, 3663 (1994).
- [4311] M.O. Caceres, *Irreversible thermodynamics in the framework of Tsallis entropy*, Physica A **218**, 471 (1995).
- [4312] A. Chame and E.V.L. de Mello, *The Onsager reciprocity relations within Tsallis statistics*, Phys. Lett. A **228**, 159 (1997).
- [4313] L. Peng, Y. Zhu and L. Hong, *Generalized Onsager's reciprocal relations for the master and Fokker-Planck equations*, Phys. Rev. E **97**, 062123 (2018).
- [4314] L. Peng, H. Qian and L. Hong, *Thermodynamics of Markov processes with nonextensive entropy and free energy*, Phys. Rev. E **101**, 022114 (2020).
- [4315] A.K. Rajagopal, *Dynamic linear response theory for a nonextensive system based on the Tsallis prescription*, Phys. Rev. Lett. **76**, 3469 (1996).
- [4316] R. Guo and J.L. Du, *The adiabatic static linear response function in nonextensive statistical mechanics*, preprint (2014), 1408.3278 [cond-mat.stat-mech].
- [4317] H. Uys and H.G. Miller, *Generalized statistics and the fluctuation-dissipation theorem*, preprint (2001) [cond-mat/0105542].
- [4318] C. Beck and E.G.D. Cohen, *Superstatistical generalization of the work fluctuation theorem*, Physica A **344**, 393 (2004).
- [4319] J.L. Lopez-Picon, O. Obregon and J. Rios-Padilla, *Ensemble fluctuations related to generalized (probability-dependent) entropies and their work fluctuation theorem*, Eur. Phys. J. Plus **137**, 342 (2022).
- [4320] H. Umpierrez and S. Davis, *Fluctuation theorems in nonextensive statistics*, preprint (2019), 1909.12816 [cond-mat.stat-mech].
- [4321] C. Beck, *Superstatistical Brownian motion*, in *Complexity and Nonextensivity: New Trends in Statistical Mechanics*, eds. M. Sakagami, N. Suzuki and S. Abe, Prog. Theor. Phys. Suppl. **162**, 29-36 (2006).
- [4322] S. Yan, F. Sakata and Y. Zhuo, *Characteristic features of nonequilibrium transport processes in finite systems*, Phys. Lett. A **319**, 60 (2003).
- [4323] G. Baez, F. Leyvraz, H. Larralde and R.A. Mendez-Sanchez, *A fluctuation dissipation theorem for markovian systems in metastable state*, communicated at the Symposium "Nonlinearity, Nonequilibrium and Complexity: Questions and Perspectives in Statistical Physics" (28 Nov - 2 Dec 2005, Tepoztlan, Mexico).
- [4324] G. Baez and R.A. Mendez-Sanchez, *On the metastable autocorrelation and susceptibility of Markovian systems*, Physica A **372**, 362-367 (2006).

- [4325] A.A. Budini, *A generalized fluctuation relation for power-law distributions*, Phys. Rev. E **86**, 011109 (2012) (12 pages).
- [4326] A.A. Budini, *Extended q -Gaussian and q -exponential distributions from gamma random variables*, Phys. Rev. E **91**, 052113 (2015) (11 pages).
- [4327] P. Kostrobij, R. Tokarchuk, M. Tokarchuk and B. Markiv, *Zubarev nonequilibrium statistical operator in Renyi statistics. Reaction-diffusion processes*, Condensed Matter Physics **17** (3), 33005 (2014) (9 pages), doi: 10.5488/CMP.17.33005 <http://www.icmp.lviv.ua/journal>
- [4328] P.P. Kostrobij, O.V. Viznovych, B.B. Markiv and M.V. Tokarchuk, *Generalized kinetic equations for dense gases and liquids in the Zubarev nonequilibrium statistical operator method and Renyi statistics*, Theor. Math. Phys. **184** (1), 1020-1032 (2015).
- [4329] P.A. Glushak, B.B. Markiv and M.V. Tokarchuk, *Zubarev's nonequilibrium statistical operator method in the generalized statistics of multiparticle systems*, Theor. Math. Phys. **194** (1), 57-73 (2018).
- [4330] A. Di Vita, *On the response of power law distributions to fluctuations*, Eur. Phys. J. B **92**, 255 (2019).
- [4331] H. Umpierrez and S. Davis, *Fluctuation theorems in q -canonical ensembles*, Physica A (2020), in press, doi: 10.1016/j.physa.2020.125337
- [4332] B.M. Boghosian, *Thermodynamic description of the relaxation of two-dimensional turbulence using Tsallis statistics*, Phys. Rev. E **53**, 4754 (1996).
- [4333] A. Cabo and S. Curilef, *On the statistical physics of metastable and non-equilibrium stationary state*, preprint (2007), 0709.0069[cond-mat.stat-mech].
- [4334] V. Garcia-Morales, J. Cervera and J. Pellicer, *Coupling theory for counterion distributions based in Tsallis statistics*, Physica A **339**, 482-490 (2004).
- [4335] V. Garcia-Morales and S. Mafe, *Monolayer-protected metallic nanoparticles: Limitations of the concentric sphere capacitor model*, J. Phys. Chem. C **111**, 7242-7250 (2007).
- [4336] D. Xiao, X. Peng, Y. Yuan, Q. Cai, H. Qiu, T. Hu, H. Zhang, S. Wu, X. Li, J. Chang, Y. Zhu, J. Wu, X. Zhang, Z. Wang, J. Li and S. Liu, *Innovation for measuring the distribution function with nonextensive single electric probe*, AIP Advances **11**, 085228 (2021), doi: 10.1063/5.0063272
- [4337] A. Allagui, H. Benaoum and O. Olendski, *On the Gouy-Chapman-Stern model of the electrical double-layer structure with a generalized Boltzmann factor*, Physica A (2021), in press, doi: 10.1016/j.physa.2021.126252
- [4338] A. Allagui, H. Benaoum, A. Elwakil and M.A. Alshabi, *Non-exponential discharge dynamics in electrochemical capacitors*, Proc. SPIE 12090, Energy Harvesting and Storage: Materials, Devices, and Applications XII, 1209006 (2022), doi: 10.1117/12.2632777
- [4339] A. Allagui, H. Benaoum and A.S. Elwakil and M. Alshabi, *Extended RC impedance and relaxation models for dissipative electrochemical capacitors*, IEEE Transactions on Electron Devices (2022).
- [4340] V. Garcia-Morales and K. Krischer, *Superstatistics in nanoscale electrochemical systems*, PNAS **108** (49), 19535-19539 (2011).
- [4341] V. Garcia-Morales, *The $p\lambda n$ fractal decomposition: Nontrivial partitions of conserved physical quantities*, Chaos, Solitons and Fractals **83**, 27-37 (2016).
- [4342] V. Garcia-Morales, J. Cervera and J. Pellicer, *Correct thermodynamic forces in Tsallis thermodynamics: Connection with Hill nanothermodynamics*, Phys. Lett. A **336**, 82 (2005).
- [4343] V. Garcia-Morales and J. Pellicer, *Microcanonical foundation of nonextensivity and generalized thermostatics based on the fractality of phase space*, Physica A **361**, 161-172 (2006).
- [4344] V. Garcia-Morales, *Universal map for substitution systems*, preprint (2013), 1309.5254 [math-ph].
- [4345] V. Garcia-Morales, *Substitution systems and nonextensive statistics*, Physica A **440**, 110-117 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2015.07.035>
- [4346] A. Namdari and Z.S. Li, *An entropy-based approach for modeling lithium-ion battery capacity fade*, IEEE (2020).
- [4347] A. Sarkar, *Calculations of Renyi entropy, Tsallis entropy and Onicescu information energy for helium, lithium and beryllium atoms using an analytic correlated wave function*, Chemical Physics Letters **815**, 140343 (2023).
- [4348] A. Allagui, H. Benaoum and C. Wang, *Deformed Butler-Volmer models for convex semilogarithmic current-overpotential profiles of Li-ion batteries*, preprint (2022), 2201.03282 [physics.app-ph].
- [4349] E.F. Sarmiento, *Generalization of the single-site Callen identity within Tsallis statistics*, Physica A **218**, 482 (1995).
- [4350] L.R. da Silva and H.E. Stanley, *Duality-based approximation for the critical point of the square lattice Ising ferromagnet within Tsallis statistics*, Physica A **234**, 497 (1996).
- [4351] A.R. Plastino, A. Plastino and C. Tsallis, *The classical N -body problem within a generalized statistical mechanics*, J. Phys. A **27**, 5707 (1994).

- [4352] A.R. Plastino and J.A.S. Lima, *Equipartition and virial theorems within general thermostistical formalisms*, Phys. Lett. A **260**, 46 (1999).
- [4353] J.A.S. Lima and A.R. Plastino, *On the classical energy equipartition theorem*, Braz. J. Phys. **30**, 176 (2000)
- [4354] M. Portesi and A. Plastino, *Generalized entropy as a measure of quantum uncertainty*, Physica A **225**, 412 (1996).
- [4355] A.K. Rajagopal, *The Sobolev inequality and the Tsallis entropic uncertainty relation*, Phys. Lett. A **205**, 32 (1995).
- [4356] O.U. Akturk, E. Akturk and M. Tomak, *Can Sobolev inequality be written for Sharma-Mittal entropy?*, Int. J. Theor. Phys. **47**, 3310-3320 (2008).
- [4357] N. Ioku, *Attainability of the best Sobolev constant in a ball*, Mathematische Annalen (2018) (16 pages), doi: 10.1007/s00208-018-1776-7
- [4358] M. Hashizume and N. Ioku, *$W^{1,p}$ approximation of the Moser-Trudinger inequality*, preprint (2022).
- [4359] M. Portesi and A. Plastino, *Generalized entropic uncertainty relations with Tsallis entropy*, Proc. IV International Conference on Squeezed States and Uncertainty Relations (FICSSUR-95, Taiyuan, China), NASA Conference Publications Series (1995), in press.
- [4360] F. Pennini, A. Plastino and A.R. Plastino, *Power-law distributions, Fisher information, and thermal uncertainty*, preprint (2001) [cond-mat/01110135].
- [4361] M.A. Portesi, *Radiacion coherente y teoria de la informacion*, PhD Thesis (Universidad de La Plata - Argentina, 1995).
- [4362] D.B. Ion and M.L.D. Ion, *Entropic lower bound for the quantum scattering of spinless particles*, Phys. Rev. Lett. **81**, 5714 (1998).
- [4363] M.L.D. Ion and D.B. Ion, *Optimal bounds for Tsallis-like entropies in quantum scattering*, Phys. Rev. Lett. **83**, 463 (1999).
- [4364] D.B. Ion and M.L.D. Ion, *Angle-angular-momentum entropic bounds and optimal entropies for quantum scattering of spinless particles*, Phys. Rev. E **60**, 5261 (1999).
- [4365] D.B. Ion and M.L.D. Ion, *Optimality, entropy and complexity for nonextensive quantum scattering*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13**, Number 3, 547 (Pergamon-Elsevier, Amsterdam, 2002).
- [4366] M.L.D. Ion and D.B. Ion, *Limited entropic uncertainty as new principle of quantum physics*, Phys. Lett. B **474**, 395 (2000).
- [4367] M.L.D. Ion and D.B. Ion, *Strong evidences for correlated nonextensive quantum statistics in hadronic scatterings*, Phys. Lett. B **482**, 57 (2000).
- [4368] D.B. Ion and M.L.D. Ion, *Evidences for nonextensivity conjugation in hadronic scattering systems*, Phys. Lett. B **503**, 263 (2001).
- [4369] D.B. Ion and M.L. Ion, *Nonextensive quantum statistics and saturation of the PMD-SQS optimality limit in hadron-hadron scattering*, Physica A **340**, 501 (2004).
- [4370] D.B. Ion and M.L.D. Ion, *Principle of Minimum Distance in Space of States as New Principle in Quantum Physics*, preprint (2007), 0710.0672 [physics.gen-ph].
- [4371] D.B. Ion and M.L.D. Ion, *Principle of minimum distance in space of states as new principle in quantum physics*, Romanian Reports in Physics **59**, 1045-1080 (2007).
- [4372] D.B. Ion and M.L.D. Ion, *Saturation of optimal entropic resonance limits in pion-nucleus scattering in $\Delta(1236)$ -elementary resonance region*, Rom. J. Phys. **58** (9-10), 1280-1297 (2013).
- [4373] M. Gazdzicki and M.I. Gorenstein, *Power law in hadron production*, Phys. Lett. B **517**, 250 (2001).
- [4374] A. Ghosh and P. Chaudhuri, *Generalized position and momentum Tsallis entropies*, Int. J. Theor. Phys. **39**, 2423 (2000). rfo
- [4375] A. Ghosh and A. Basu, *A Generalized relative (α, β) -entropy: Geometric properties and applications to robust statistical inference*, Entropy **20**, 347 (2018), doi: 10.3390/e20050347
- [4376] A. Ghosh and A. Basu, *Scale-invariant generalization of Renyi entropy and related optimizations under Tsallis' nonextensive framework*, preprint (2019), 1901.01981 [math.ST].
- [4377] F. Pennini, A. Plastino, A.R. Plastino and M. Casas, *How fundamental is the character of thermal uncertainty relations?*, Phys. Lett. A **302**, 156 (2002).
- [4378] G. Wilk and Z. Wlodarczyk, *Uncertainty relations in terms of Tsallis entropy*, Phys. Rev. A **79**, 062108 (2009) (6 pages).
- [4379] I. Bialynicki-Birula and L. Rudnicki, *Comment on "Uncertainty relations in terms of the Tsallis entropy"*, Phys. Rev. A **81**, 026101 (2010) (2 pages).

- [4380] T. Linowski, C. Gneiting and L. Rudnicki, *Stabilizing entanglement in two-mode Gaussian states*, Phys. Rev. A **102**, 042405 (2020).
- [4381] G. Wilk and Z. Wlodarczyk, *Generalized thermodynamic uncertainty relations*, Physica A **390**, 3566-3572 (2011).
- [4382] M. Rybczynski and Z. Wlodarczyk, *Energy conservation and the prevalence of power distributions*, Eur. Phys. J. A **54**, 190 (2018), doi: 10.1140/epja/i2018-12631-2
- [4383] M. Rybczynski and Z. Wlodarczyk, *Correspondence of multiplicity and energy distributions*, Eur. Phys. J. A **57**, 3 (2021).
- [4384] M. Rybczynski and Z. Wlodarczyk, *Inelasticity resulting from rapidity spectra analysis*, New J. Phys. **22**, 113002 (2020).
- [4385] S. Sharma, G. Chaudhary, K. Sandeep, A. Singla and M. Kaur, *Multiplicity moments using Tsallis statistics in high-energy hadron-nucleus interactions*, Internat. J. Mod. Phys. E **29** (4), 2050021 (2020) (15 pages), doi: 10.1142/S0218301320500214
- [4386] S. Sarkar, R. Aggarwal and M. Kaur, *Nonextensive statistical effects in ep at HERA and pp at ISR interactions*, preprint (2023), 2309.03711 [hep-ph].
- [4387] A. Luis, *Contradictory uncertainty relations*, preprint (2011), 1104.2127 [quant-ph].
- [4388] A. Luis, *Effect of fluctuation measures on the uncertainty relations between two observables: Different measures lead to opposite conclusions*, Phys. Rev. A **84**, 034101 (2011) (4 pages).
- [4389] A. Luis, *Contradictory entropic joint uncertainty relations for complementary observables in two-level systems*, preprint (2013), 1306.5211 [quant-ph].
- [4390] A. Luis, G.M. Bosyk and M. Portesi, *Entropic measures of joint uncertainty: Effects of lack of majorization*, Physica A **444**, 905-913 (2016).
- [4391] A.E. Rastegin, *Uncertainty and certainty relations for the Pauli observables in terms of the Renyi entropies of order $\alpha \in (0; 1]$* , Commun. Theor. Phys. **61** (3), 293-298 (2014).
- [4392] A.E. Rastegin, *Renyi and Tsallis formulations of noise-disturbance trade-off relations*, Quantum Information and Computation **16** (3-4), 313 - 331 (2016).
- [4393] A.E. Rastegin, *On conclusive eavesdropping and measures of mutual information in quantum key distribution*, Quantum Inf. Process **15**, 1225-1239 (2016), doi: 10.1007/s11128-015-1198-3
- [4394] A.E. Rastegin, *Quantum coherence measures based on the Tsallis relative entropies*, preprint (2015), 1512.06652 [quant-ph].
- [4395] L. Sun, Y.H. Tao and L.S. Li, *The Tsallis relative 2-entropy of coherence under mutually unbiased bases*, Internat. J. Theoretical Physics **62**,167 (2023).
- [4396] A.E. Rastegin, *Quantum-coherence quantifiers based on the Tsallis relative α entropies*, Phys. Rev. A **93**, 032136 (2016) (9 pages).
- [4397] A.E. Rastegin, *Coherence quantifiers from the viewpoint of their decreases in the measurement process*, IOP (2018), in press, doi: 10.1088/1751-8121/aab348
- [4398] H. Zhao and C.S. Yu, *Remedying the strong monotonicity of the coherence measure in terms of the Tsallis relative α entropy*, preprint (2017), 1704.04876 [quant-ph].
- [4399] D. Gemici-Deveci and E. Aydiner, *Entropy, inequality and statistical complexity for the modified Poschl-Teller potential in non-extensive formalism*, 5th International Conference on Mathematical Modeling in Physical Sciences (IC-MSquare 2016), J. Phys. Conference Series **738**, 012044 (2016) (6 pages), doi:10.1088/1742-6596/738/1/012044
- [4400] C.O. Edet, P.O. Amadi, A.N. Ikot, U.S. Okorie, A. Tas and G. Rampho, *Thermodynamic properties of the superstatistics and normal statistics of the Schrodinger equation with generalized trigonometric Poschl-Teller potential*, preprint (2019), arxiv 1912.00148.
- [4401] A.N. Ikot, U.S. Okorie, G. Osobonye, P.O. Amadi, C.O. Edet, M.J. Sithole, G.J. Rampho and R. Sever, *Superstatistics of Schrodinger equation with pseudo-harmonic potential in external magnetic and Aharanov-Bohm fields*, Heliyon **6**, e03738 (2020).
- [4402] A.E. Rastegin, *Renyi and Tsallis entropies related to eigenfunctions of quantum graphs*, J. Phys. A: Math. Theor. **50**, 215204 (2017) (17 pages).
- [4403] A.A. Silva, F.M. Andrade and D. Bazeia, *Scattering entropies of quantum graphs with several channels*, European Physical Journal Plus **139** (7) (2024).
- [4404] Y. Sun and S. Luo, *Coherence as uncertainty*, Phys. Rev. A **103**, 042423 (2021).
- [4405] C.G. Gal, A. Giorgini and M. Grasselli, *The separation property for 2D Cahn-Hilliard equations: Local, nonlocal, and fractional energy cases*, preprint (2022).

- [4406] C.G. Gal, M. Grasselli, A. Poiatti and J.L. Shomberg, *Multi-component Cahn-Hilliard systems with singular potentials: Numerical results and cascading phenomena*, preprint (2024).
- [4407] A. Vershynina, *α -genuine Tsallis coherence monotone*, preprint (2022), 2208.06840 [quant-ph].
- [4408] A. Vershynina, *Coherence as entropy increment for Tsallis and Renyi entropies*, Quantum Information Processing **22**, 127 (2023).
- [4409] M.L. Guo, Z.X. Jin, J.M. Liang, B. Li and S.M. Fei, *Parameterized coherence measure*, preprint (2023), 2306.11973 [quant-ph].
- [4410] T. Suguro, *Stability of the logarithmic Sobolev inequality and uncertainty principle for the Tsallis entropy*, Nonlinear Anal. TMA **250**, 113644 (2025).
- [4411] Y.H. Yang, X.Z. Liu, X.Z. Zheng, J.L. Jiang, X. Yang, S.M. Fei, Z. Ma, Z. Wang and M.X. Luo, *Experimental characterization of quantumness using the uncertainty principle, coherence, and nonlocality*, preprint (2025), 2506.21051 [quant-ph].
- [4412] B. Cheng and Z. Wu, *Uncertainty relations for unified (α, β) -relative entropy of coherence under mutually unbiased equiangular tight frames*, preprint (2025), 2506.09779 [quant-ph].
- [4413] A. Plastino, A.R. Plastino and H.G. Miller, *Tsallis nonextensive thermostatics and Fisher's information measure*, Physica A **235**, 577 (1997).
- [4414] F. Pennini and A. Plastino, *Fisher's information measure in a Tsallis' nonextensive setting and its application to diffusive processes*, Physica A **247**, 559 (1997).
- [4415] M. Casas, L. Chimento, F. Pennini, A. Plastino and A.R. Plastino, *Fisher information in a Tsallis non-extensive environment*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13**, Number 3, 451 (Pergamon-Elsevier, Amsterdam, 2002).
- [4416] S. Luo, *Spatial quantum Zeno effect*, Physica A **317**, 509 (2003).
- [4417] S. Furuichi, *On the maximum entropy principle and the minimization of the Fisher information in Tsallis statistics*, J. Math. Phys. **50**, 013303 (2009) (12 pages).
- [4418] S. Furuichi, *On generalized Fisher informations and Cramer-Rao type inequalities*, J. Phys. C Series **201**, 012016 (2010) (5 pages).
- [4419] S. Furuichi, *A generalized Fannes' inequality*, preprint (2010), 1001.1390 [quant-ph].
- [4420] S. Furuichi, *Matrix trace inequalities on the Tsallis entropies*, preprint (2010), 1001.1388 [cond-mat.stat-mech].
- [4421] H.A. Tanaka, *Nonlinear problems and Holder's inequality*, IEICE Fundamentals Review **9** (3), 219-228 (2016).
- [4422] S. Kim, *Operator entropy and fidelity associated with the geometric mean*, Linear Algebra and its Applications **438**, 2475-2483 (2013).
- [4423] K. Kumar, B. Mallick, T. Patro and N. Ganguly, *Fidelity of entanglement and quantum entropies: unveiling their relationship in quantum states and channels*, preprint (2025), 2506.11506 [quant-ph].
- [4424] A. Andai, *On the geometry of generalized Gaussian distributions*, J. Multivariate Analysis **100**, 777-793 (2009).
- [4425] G.M. Bosyk, G. Bellomo, S. Zozor, M. Portesi and P.W. Lamberti, *Unified entropic measures of quantum correlations induced by local measurements*, Physica A **462**, 930-939 (2016).
- [4426] G. Bellomo, *Repercusiones cuanticas de los estados classicamente correlacionados - Aspectos informacionales y computacionales*, Doctor Thesis (Universidad Nacional de La Plata, Facultad de Ciencias Exactas, 2017).
- [4427] W. Bukaew and S. Yoo-Kong, *One-parameter generalised Fisher information*, preprint (2021), 2107.10578 [math.ST].
- [4428] W. Bukaew and S. Yoo-Kong, *The q -deformed Hamiltonian, Lagrangian, entropy and Fisher information*, Forum for Interdisciplinary Mathematics (2022).
- [4429] D.H. Zanette, *Generalized Kolmogorov entropy in the dynamics of multifractal generation*, Physica A **223**, 87 (1996).
- [4430] C. Tsallis, A.R. Plastino and W.-M. Zheng, *Power-law sensitivity to initial conditions - New entropic representation*, Chaos, Solitons and Fractals **8**, 885-891 (1997).
- [4431] G. Savvidy, *Extended Kolmogorov entropy*, preprint (2020), arXiv:submit/3152147 [hep-th] 28 Apr 2020
- [4432] N. Korabel and E. Barkai, *Pesin-type identity for intermittent dynamics with a zero Lyapunov exponent*, Phys. Rev. Lett. **102**, 050601 (2009).
- [4433] A.M. Meson and F. Vericat, *Invariant of dynamical systems: a generalized entropy*, J. Math. Phys. **37**, 4480 (1996).
- [4434] A.M. Meson and F. Vericat, *Lyapunov exponents and generalized forms of the entropy*, preprint (1998).
- [4435] A.M. Meson and F. Vericat, *One-parameter families of measure-theoretic and topological entropies*, preprint (1998).

- [4436] A.M. Meson, *Formas generalizadas de la entropia*, Doctor Thesis (Universidad Nacional de La Plata, Argentina, 2000).
- [4437] A.M. Meson and F. Vericat, *Relations between some quantities in classical thermodynamics and abstract dynamics. Beyond hyperbolicity*, J. Dynam. Cont. Sys. **9** (3), 437-448 (2003).
- [4438] A.M. Meson and F. Vericat, *On the Kolmogorov-like generalization of Tsallis entropy, correlation entropies and multifractal analysis*, J. Math. Phys. **43**, 904 (2002).
- [4439] F. Falniowski, *On the connections of generalized entropies with Shannon and Kolmogorov-Sinai entropies*, Entropy **16**, 3732-3753 (2014), doi:10.3390/e16073732
- [4440] Q. Liu and S.L. Peng, *A revised generalized Kolmogorov-Sinai-like entropy and Markov shifts*, preprint (2007) 0704.2814 [nlin.CD].
- [4441] Q. Liu, K.F. Cao and S.L. Peng, *A generalized Kolmogorov-Sinai-like entropy under Markov shifts in symbolic dynamics*, Physica A **388**, 4333-4344 (2009).
- [4442] K. Lee, S. Choi and S. Oh, *Sparse Markov decision processes with causal sparse Tsallis entropy regularization for reinforcement learning*, preprint (2017), 1709.06293 [cs.LG].
- [4443] K. Lee, S. Kim, S. Lim, S. Choi and S. Oh, *Tsallis reinforcement learning: A unified framework for maximum entropy reinforcement learning*, preprint (2019), 1902.00137 [cs.LG].
- [4444] Y. Choi, K. Lee and S. Oh, *Distributional deep reinforcement learning with a mixture of gaussians*, International Conference on Robotics and Automation (ICRA) (Montreal, Canada, May 20-24, 2019).
- [4445] X. Li, W. Yang and Z. Zhang, *A regularized approach to sparse optimal policy in reinforcement learning*, Proceedings 33rd Conference on Neural Information Processing Systems - NeurIPS (2019, Vancouver, Canada).
- [4446] K. Lee, S. Kim, S. Lim, S. Choi, M. Hong, J. Kim, Y.L. Park and S. Oh, *Generalized Tsallis entropy reinforcement learning and its application to soft mobile robots*, preprint (2020).
- [4447] P.A. Alemany, *Possible connection of the generalized thermostatics with a scale invariant statistical thermodynamics*, Phys. Lett. A **235**, 452 (1997).
- [4448] R.S. Johal, *An interpretation of Tsallis statistics based on polydispersity*, preprint (1999) [cond-mat/9909389].
- [4449] C. Tsallis, L.R. da Silva, R. S. Mendes, R.O. Vallejos and A.M. Mariz, *Specific heat anomalies associated with Cantor-set energy spectra*, Phys. Rev. E **56**, R4922 (1997).
- [4450] A.K. Golmankhaneh, *Tsallis entropy on thin Cantor-like sets*, preprint (2020).
- [4451] A.K. Golmankhaneh, *Tsallis entropy on fractal sets*, Journal of Taibah University for Science **15** (1), 543-549 (2021), doi:10.1080/16583655.2021.1991717
- [4452] U.M.S. Costa, M.L. Lyra, A.R. Plastino and C. Tsallis, *Power-law sensitivity to initial conditions within a logistic-like family of maps: Fractality and nonextensivity*, Phys. Rev. E **56**, 245 (1997).
- [4453] M.L. Lyra and C. Tsallis, *Nonextensivity and multifractality in low-dimensional dissipative systems*, Phys. Rev. Lett. **80**, 53 (1998).
- [4454] M.L. Lyra, *Weak chaos: Power-law sensitivity to initial conditions and nonextensive thermostatics*, Ann. Rev. Comp. Phys. , ed. D. Stauffer (World Scientific, Singapore, 1998), page 31.
- [4455] A. Fulop, *Statistical complexity of the quasiperiodical damped systems*, preprint (2018), 1811.02958 [nlin.CD].
- [4456] A. Fulop, *Statistical complexity of the kicked top model considering chaos*, preprint (2020), 2011.08507 [nlin.CD].
- [4457] A. Fulop, *Nonlinearity of the non-Abelian lattice gauge field theory according to the spectra of Kolmogorov-Sinai entropy and complexity*, preprint (2021), 2112.00637 [nlin.CD].
- [4458] K. Morino and S. Miyazaki, *Fractal basin boundary of chaotic phase synchronization*, communicated at the Research Institute of Mathematical Science Workshop on Mathematical Aspects of Generalized Entropies and their Applications (7-9 July 2009, Kyoto).
- [4459] H. Tanaka, *A hidden mechanism governing synchronization limit and Tsallis entropy maximization*, communicated at the Social Modelling and Simulations and Econophysics Colloquium - SMSEC2014 (4 to 6 November 2014, Kobe).
- [4460] M. Proks, *Analysis of financial time series*, Doctor Thesis (Department of Physics, Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University, Prague, 2017).
- [4461] G. Wang, S. Zheng and J. Wang, *Nonlinear complexity and chaotic behaviors on finite-range stochastic epidemic financial dynamics*, Internat. J. of Bifurcation and Chaos **29** (6), 1950083 (2019) (22 pages), doi: 10.1142/S0218127419500834
- [4462] H.A. Tanaka, I. Nishikawa, J. Kurths, Y. Chen and I.Z. Kiss, *Optimal synchronization of oscillatory chemical reactions with complex pulse, square, and smooth waveforms signals maximizes Tsallis entropy*, EPL **111**, 50007 (2015) (6 pages), doi: 10.1209/0295-5075/111/50007

- [4463] A. Chiolerio, M. Gagliano, S. Pilia, P. Pilia, G. Vitiello, M. Dehshibi and A. Adamatzky, *Bioelectrical synchronization of Picea abies during a solar eclipse*, R. Soc. Open Sci. **12**, 241786 (2025).
- [4464] F.A. Tamarit, S.A. Cannas and C. Tsallis, *Sensitivity to initial conditions and nonextensivity in biological evolution*, Eur. Phys. J. B **1**, 545 (1998).
- [4465] U. Tirnakli and M. Lyra, *Damage spreading in the Bak-Sneppen model: Sensitivity to the initial conditions and the equilibration dynamics*, Int. J. Mod. Phys. C **14**, 805 (2003).
- [4466] M.L. Lyra and U. Tirnakli, *Damage spreading in the Bak-Sneppen and ballistic deposition models: Critical dynamics and nonextensivity*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 329 (2004).
- [4467] U. Tirnakli and M.L. Lyra, *Critical dynamics of anisotropic Bak-Sneppen model*, Physica A **342**, 151 (2004).
- [4468] A.R.R. Papa and C. Tsallis, *Imitation games: Power-law sensitivity to initial conditions and nonextensivity*, Phys. Rev. E **57**, 3923 (1998).
- [4469] U. Tirnakli, C. Tsallis and M.L. Lyra, *Circular-like maps: Sensitivity to the initial conditions, multifractality and nonextensivity*, Eur. Phys. J. B **11**, 309 (1999).
- [4470] U. Tirnakli, *Asymmetric unimodal maps: Some results from q -generalized bit cumulants*, Phys. Rev. E **62**, 7857 (2000).
- [4471] U. Tirnakli, C. Tsallis and M.L. Lyra, *Asymmetric unimodal maps at the edge of chaos*, Phys. Rev. E **65**, 036207 (2002).
- [4472] U. Tirnakli, *Dissipative maps at the chaos threshold: Numerical results for the single-site map*, Physica A **305**, 119 (2002).
- [4473] R.S. Johal and U. Tirnakli, *Tsallis versus Renyi entropic form for systems with q -exponential behaviour: The case of dissipative maps*, Physica A **331**, 487 (2004).
- [4474] R. Cafiero, A. Valleriani and J.L. Vega, *Damage-spreading in the Bak-Sneppen model without noise*, Eur. Phys. J. B **4**, 405 (1998).
- [4475] C. Anteneodo and C. Tsallis, *Breakdown of the exponential sensitivity to the initial conditions: Role of the range of the interaction*, Phys. Rev. Lett. **80**, 5313-5316 (1998).
- [4476] N. Defenu, T. Donner, T. Macri, G. Pagano, S. Ruffo and A. Trombettoni, *Long-range interacting quantum systems*, preprint (2021), 2109.01063 [cond-mat.quant-gas].
- [4477] Y.Y. Yamaguchi and K. Kaneko, *Collective $1/f$ fluctuation by pseudo-Casimir-invariants*, preprint (2018), 1808.09158 [nlin.CD].
- [4478] G.B. De Luca, N. De Ponti, A. Mondino and A. Tomasiello, *Gravity from thermodynamics: optimal transport and negative effective dimensions*, SciPost Phys. **15**, 039 (2023).
- [4479] T.L. Van Den Berg, D. Fanelli and X. Leoncini, *Stationary states and fractional dynamics in systems with long-range interactions*, Europhys. Lett. **89** (5), 50010 (2010), (6 pages).
- [4480] A.R.R. Papa, *Estudo mecanico-estatístico de sistemas biológicos complexos*, PhD Thesis (Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro-Brazil, 1997).
- [4481] G.R. Guerberoff, *A generalized Kolmogorov-Sinai entropy*, preprint (1998).
- [4482] F. Calvo, *Chaos and dynamical coexistence in Lennard-Jones clusters*, J. Chem. Phys. **108**, 6861 (1998).
- [4483] F.C. Santos, I.C. Moreira and M.A. de Almeida, *O expoente PTZ para um mapeamento racional*, communicated at the XX Encontro Nacional de Física da Matéria Condensada (10-14 June 1997, Caxambu, Brazil).
- [4484] I.C. Moreira and M.Q. Lopes, *Controle do estado final*, communicated at the XX Encontro Nacional de Física da Matéria Condensada (10-14 June 1997, Caxambu, Brazil).
- [4485] U. Tirnakli, C. Tsallis and M.L. Lyra, *Ilk kosullara baglilik ve nonekstensiflik parametresinin fiziksel anlami uzerine*, Communication at the 17th National Physics Congress of the Turkish Physical Society (23-31 October 1998, Antalya).
- [4486] S. Denisov, *Fractal binary sequences: Tsallis thermodynamics and Zipf law*, Phys. Lett. A **235**, 447 (1997).
- [4487] K. Gangopadhyay, *A survey into evidence of Zipf's law among Indian socio-economic variables*, Working Paper IIMK/WPS/223/EA/2017/07 (2017).
- [4488] C. Tsallis and M.P. de Albuquerque, *Are citations of scientific papers a case of nonextensivity?*, Eur. Phys. J. B **13**, 777 (2000).
- [4489] Z.Q. You, X.P. Han and T. Hadzibeganovic, *The role of research efficiency in the evolution of scientific productivity and impact: An agent-based model*, Phys. Lett. A (2016), in press.
- [4490] R. da Silva, F. Kalil, J.P.M. de Oliveira and A.S. Martinez, *Universality in bibliometrics*, Physica A **391**, 2119-2128 (2012).
- [4491] A. Bletsas and J.N. Sahalos, *Hirsch index rankings require scaling and higher moment*, Journal of the American Society for Information Science and Technology **60** (12), 2577-2586 (2009).

- [4492] R. Wang, X. Qiu, S. Wang, X. Zhang and L. Huang, *Ranking nodes in complex networks based on TsRank*, Physica A **624**, 128942 (2023).
- [4493] A. Eftekharian and M. Razmkhah, *The effect of imperfect rankings on Tsallis entropy in ranked set sampling scheme*, Statistics (2025).
- [4494] H. Fuks and M. Krzeminski, *Topological structure of dictionary graphs*, J. Phys. A **42**, 375101 (2009) (12 pages).
- [4495] P. Honeine, *Entropies of overcomplete kernel dictionaries*, Bulletin of Mathematical Sciences and Applications **16**, 1-19 (2016), doi:10.18052/www.scipress.com/BMSA.16.1
- [4496] A.D. Anastasiadis, Marcelo P. de Albuquerque, M.P. de Albuquerque and D.B. Mussi, *Tsallis q -exponential describes the distribution of scientific citations - A new characterization of the impact*, Scientometrics **83**, 205-218 (2010), DOI 10.1007/s11192-009-0023-0.
- [4497] A.D. Anastasiadis, Marcelo P. de Albuquerque and M.P. de Albuquerque, *A characterization of the scientific impact of Brazilian institutions*, Braz. J. Phys. **39** (2A), 511-518 (2009).
- [4498] W. Zhu, B. Ma and L. Kang, *Technology convergence among various technical fields: improvement of entropy estimation in patent analysis*, Scientometrics (2022), doi: 10.1007/s11192-022-04557-6
- [4499] G. Siudem, B. Zoogala-Siudem, A. Cena and M. Gagolewski, *Three dimensions of scientific impact*, PNAS Latest Articles (2020), doi: 10.1073/pnas.2001064117
- [4500] P.D. Batista, I.C. Marques, L.H. de Almeida Fauth and M.O.R. Brandao, *Web of Science: showing a bug today that can mislead scientific research output prediction*, SAGE Open, 1-7 (2018)
- [4501] M. Brzezinski, *Power laws in citation distributions: evidence from Scopus*, Scientometrics (2015) (9 pages), doi: 10.1007/s11192-014-1524-z
- [4502] R. Basurto-Flores, L. Guzman-Vargas, S. Velasco, A. Medina and A. Calvo Hernandez, *On entropy research analysis: cross-disciplinary knowledge transfer*, Scientometrics (2018) (17 pages), doi: 10.1007/s11192-018-2860-1
- [4503] A. Pluchino, G. Burgio, A. Rapisarda, A.E. Biondo, A. Pulvirenti, A. Ferro and T. Giorgino, *Exploring the role of interdisciplinarity in physics: Success, talent and luck*, preprint (2019), 1901.03607 [physics.soc-ph].
- [4504] M.L. Wallace, V. Lariviere and Y. Gingras, *Modeling a century of citation distributions*, J. Informetrics **3**, 296-303 (2009).
- [4505] L. Bertoli-Barsotti and T. Lando, *On a formula for the h -index*, J. Informetrics **9** (4), 762-776 (2015).
- [4506] L. Bertoli-Barsotti and T. Lando, *A geometric model for the analysis of citation distributions*, Internat. J. Mathematical Models and Methods in Applied Sciences **9**, 315-319 (2015).
- [4507] H.M. Gupta, J.R. Campanha and R.A.G. Pesce, *Power-law distributions for the Citation Index of scientific publications and scientists*, Braz. J. Phys. **35**, 981-986 (2005).
- [4508] H.M. Gupta, J.R. Campanha and S.J. Schinaider, *Size limiting in Tsallis statistics*, Physica A **387**, 6745-6751 (2008).
- [4509] M.L. Wallace, V. Larivitisre and Y. Gingras, *Modeling a century of citation distributions*, preprint (2008), 0810.1426 [physics.soc-ph].
- [4510] D. Koutsoyiannis and Z.W. Kundzewicz, *Editorial - Quantifying the impact of hydrological studies*, Hydrological Sciences Journal **52**, 3-17 (Feb. 2007).
- [4511] D. Koutsoyiannis, *Entropy as an explanatory concept and modelling tool in hydrology*, lecture delivered at the Dipartimento di Idraulica,Trasporti e Strade, Universita di Roma "La Sapienza" (Roma, 1 October 2008).
- [4512] V.P. Singh, *Tsallis entropy theory for derivation of infiltration equations*, Transactions of the ASABE **53** (2), 447-463 (2010).
- [4513] H.J. Cui and V.P. Singh, *One-dimensional velocity distribution in open channels using Tsallis entropy*, J. Hydrological Engineering **19** (2), 290-298 (2014).
- [4514] H. Luo, V. Singh and A. Schmidt, *study of 1D entropy-based and conventional deterministic velocity distribution equations for open channel flows*, J. Hydrology **563**, 679-693 (2018).
- [4515] M. Kumbhakar, R.K. Ray, S.K. Chakraborty, K. Ghoshal and V.P. Singh, *Mathematical modelling of streamwise velocity profile in open channels using Tsallis entropy*, Commun. Nonlinear Sci. Numer. Simulat. **94**, 105581 (2021).
- [4516] S. Chakraborty and B. Pradhan, *On weighted cumulative Tsallis residual and past entropy measures*, Communications in Statistics - Simulation and Computation (2021), doi: 10.1080/03610918.2021.1897623
- [4517] S. Chakraborty and K. Mali, *Biomedical image segmentation using fuzzy multilevel soft thresholding system coupled modified cuckoo search*, Biomedical Signal Processing and Control **72**, 103324 (2022).
- [4518] J. Zhang, Y. Guo, L. Zhou, L. Wang and W. Wu, *Constructing hierarchical attentive functional brain networks for early AD diagnosis*, Medical Image Analysis (2024), in press.

- [4519] S. Chakraborty and K. Mali, *A balanced hybrid cuckoo search algorithm for microscopic image segmentation*, Soft Computing (2023).
- [4520] B. Liu, C. Desrosiers, I.B. Ayed and J. Dolz, *Segmentation with mixed supervision: Confidence maximization helps knowledge distillation*, Medical Image Analysis **83**, 102670 (2023).
- [4521] M. Kumbhakar, *Streamwise velocity profile in open-channel flow based on Tsallis relative entropy*, Chaos **30**, 073136 (2020), doi: 10.1063/1.5144867
- [4522] M. Kumbhakar, R.K. Ray, K. Ghoshal and V.P. Singh, *On the role of Tsallis entropy index for velocity modelling in open channels*, Physica A **557**, 124901 (2020).
- [4523] G. Zhang, X. Su and V.P. Singh, *Modelling groundwater-dependent vegetation index using entropy theory*, Ecological Modelling **416**, 108916 (2020).
- [4524] S. Khorram and F. Ghasemi, *Spatiotemporal variation in total sediment load concentration and related factors of shoreline waters based on disorder power index*, Iranian Journal of Science and Technology, Transactions of Civil Engineering (2020), doi: doi.org/10.1007/s40996-020-00347-3
- [4525] A. Gholami, H. Bonakdari and A. Mohammadian, *A method based on the Tsallis entropy for characterizing threshold channel bank profiles*, Physica A (2019), in press, doi: 10.1016/j.physa.2019.121089
- [4526] Z. Zhu and J. Yu, *Estimating the bed-load layer thickness in open channels by Tsallis entropy*, Entropy **21**, 123 (2019), doi: 10.3390/e21020123
- [4527] H.D. Salas, G. Poveda and O.J. Mesa, *Testing the Beta-Lognormal model in Amazonian rainfall fields using the generalized space q-entropy*, Entropy **19**, 685 (2017) (25 pages), doi: 10.3390/e19120685
- [4528] H. Bonakdari and M. Moazamnia, *Modeling of velocity fields by the entropy concept in narrow open channels*, KSCE Journal of Civil Engineering (2014) (11 pages), doi: 10.1007/s12205-013-0173-8
- [4529] M. Kumbhakar and K. Ghoshal, *Two dimensional velocity distribution in open channels using Renyi entropy*, Physica A **450**, 546-559 (2016), doi: http://dx.doi.org/10.1016/j.physa.2016.01.046
- [4530] M. Kumbhakar and K. Ghoshal, *One-dimensional velocity distribution in open channels using Renyi entropy*, Stoch. Environ. Res. Risk Assess **31** (4), 949-959 (2017), doi: 10.1007/s00477-016-1221-y
- [4531] H. Bonakdari, M. Tooshmalani and Z. Sheikha, *Predicting shear stress distribution in rectangular channels using entropy concept*, Internat. J. of Engineering, Transactions A: Basics **28** (3), 360-367 (2015).
- [4532] N. Su, *Theory of infiltration: Infiltration into swelling soils in a material coordinate*, J. Hydrology **395**, 103-108 (2010).
- [4533] G. Garau, M. Silvetti, S. Vasileiadis, E. Donner, S. Diquattro, S. Deiana, E. Lombi and P. Castaldi, *with metal(loid)s*, Soil Biology and Biochemistry **111**, 25-35 (2017).
- [4534] V.P. Singh, *Hydrologic synthesis using entropy theory: Review*, J. Hydrologic Engineering (ASCE), 421-433 (May 2011).
- [4535] V.P. Singh and H.J. Cui, *Modeling sediment concentration in debris flow by Tsallis entropy*, Physica A **420**, 49-58 (2015), doi: http://dx.doi.org/10.1016/j.physa.2014.10.075
- [4536] K. Ghoshal, M. Kumbhakar and V.P. Singh, *Distribution of sediment concentration in debris flow using Renyi entropy*, Physica A **521**, 267-281 (2019), doi: 10.1016/j.physa.2019.01.081
- [4537] Z. Zhu, H. Wang, B. Pang, J. Dou and D. Peng, *Comparison of conventional deterministic and entropy-based methods for predicting sediment concentration in debris flow*, Water **11**, 439 (2019), doi: 10.3390/w11030439
- [4538] Z. Zhu, *A simple explicit expression for the flocculation dynamics modeling of cohesive sediment based on entropy considerations*, Entropy **20**, 845 (2018), doi: 10.3390/e20110845
- [4539] A.J. Holanda, I.T. Pisa, O. Kinouchi, A.S. Martinez and E.E.S. Ruiz, *Thesaurus as a complex network*, Physica A **344**, 530 (2004).
- [4540] L.C. Malacarne and R.S. Mendes, *Regularities in football goal distributions*, Physica A **286**, 391 (2000).
- [4541] R.S. Mendes, L.C. Malacarne and C. Anteneodo, *Statistics of football dynamics*, Eur. Phys. J. B **57**, 357-363 (2007).
- [4542] Y. Neuman, N. Israeli, D. Vilenchik and Y. Cohen, *Entropy in soccer games*, preprint (2017).
- [4543] Y. Neuman, N. Israeli, D. Vilenchik and Y. Cohen, *The adaptive behavior of a soccer team: An entropy-based analysis*, Entropy **20**, 758 (2018), doi: 10.3390/e20100758
- [4544] M. Buiatti, P. Grigolini and L. Palatella, *A non extensive approach to the entropy of symbolic sequences*, Physica A **268**, 214 (1999).
- [4545] H.V. Ribeiro, E.K. Lenzi, R.S. Mendes, G.A. Mendes and L.R. da Silva, *Symbolic sequences and Tsallis entropy*, Braz. J. Phys. **39**, 444-447 (2009).
- [4546] M.A. Re and R.K. Azad, *Generalization of entropy based divergence measures for symbolic sequence analysis*, Plos One **9** (4), e93532 (2014) (11 pages).

- [4547] H.M. Gupta, J.R. Campanha and F.D. Prado, *Gradually truncated power law distribution: university entrance examination*, communication at the IUPAP International Conference on "New Trends in the Fractal Aspects of Complex Systems", Maceio-Brazil, 16-20 October 2000.
- [4548] H.M. Gupta and J.R. Campanha, *Tsallis statistics and gradually truncated Levy flight-distribution of an economical index*, Physica A **309**, 381 (2002).
- [4549] S.A. Cannas, *Phase diagram of a stochastic cellular automaton with long-range interactions*, Physica A **258**, 32 (1998).
- [4550] C. Tsallis, *Nonextensive statistical mechanics: Some open computational questions*, Computers in Science and Engineering (1999), in press.
- [4551] C.R. da Silva, H.R. da Cruz and M.L. Lyra, *Low-dimensional non-linear dynamical systems and generalized entropy*, in *Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 144 (1999).
- [4552] A.I. Olemskoi, *Hierarchical representation of generalized (nonadditive) thermodynamics*, JETP Lett. **69**, 423 (1999).
- [4553] R.S. Johal and R. Rai, *Nonextensive thermodynamic formalism for chaotic dynamical systems*, Physica A **282**, 525 (2000).
- [4554] M.S. Hussein and M.P. Pato, *Fractal structure of random matrices*, Physica A **285**, 383-391 (2000).
- [4555] J. Evans and F. Michael, *Towards a non-extensive random matrix theory*, preprint (2002) [cond-mat/0207472].
- [4556] F. Toscano, R.O. Vallejos and C. Tsallis, *Random matrix ensembles from nonextensive entropy*, Phys. Rev. E **69**, 066131 (2004).
- [4557] M.P. Pato, *Disordered random walks*, Brazilian J. Phys. (2021), doi: 10.1007/s13538-020-00818-y
- [4558] A.Y. Abul-Magd, *Nonextensive random matrix theory approach to mixed regular-chaotic dynamics*, Phys. Rev. E **71**, 066207 (2005).
- [4559] A.Y. Abul-Magd, *Superstatistics in random matrix theory*, Physica A **361**, 41-54 (2005).
- [4560] A.Y. Abul-Magd, *Random matrix theory within superstatistics*, Phys. Rev. E **72**, 066114 (2005) (9 pages).
- [4561] A.Y. Abul-Magd, *Superstatistical random-matrix-theory approach to transition intensities in mixed systems*, Phys. Rev. E **73**, 056119 (2006) (6 pages).
- [4562] A.Y. Abul-Magd, *Nonextensive and superstatistical generalizations of random-matrix theory*, Eur. Phys. J. B **70**, 39-48 (2009).
- [4563] A.Y. Abul-Magd, G. Akkeman and P. Vivo, *Superstatistical generalizations of Wishart-Laguerre ensembles of random matrices*, J. Phys. A **42**, 175207 (2009) (21 pages).
- [4564] P. Diez-Valle, F. Martinez-Garcia, J.J. Garcia-Ripoll and D. Porras, *Learning generalized statistical mechanics with matrix product states*, preprint (2024), 2409.08352 [cond-mat.stat-mech].
- [4565] P. Rabassa and C. Beck, *Superstatistical analysis of sea-level fluctuations*, Physica A **417**, 18-28 (2015).
- [4566] J.L. Guo and Q. Suo, *Upper entropy axioms and lower entropy axioms for superstatistics*, preprint (2014), 1406.4124 [math.PR].
- [4567] J.L. Guo and Q. Suo, *Upper entropy axioms and lower entropy axioms*, Annals of Physics **355**, 217-223 (2015).
- [4568] A.M.C. de Souza, *Estudos sobre o ensemble de Wishart-Tsallis de matrizes aleatorias*, communicated at the 2nd Workshop of the National Institute of Science and Technology for Complex Systems (Rio de Janeiro, 1-5 March 2010).
- [4569] G.E. Crooks, *Beyond Boltzmann-Gibbs statistics: Maximum entropy hyperensembles out of equilibrium*, Phys. Rev. E **75**, 041119 (2007) (5 pages).
- [4570] J. Naudts, *Generalised thermostatics using hyperensembles*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 84-89 (New York, 2007).
- [4571] A.Y. Abul-Magd, *Nonextensive random-matrix theory based on Kaniadakis entropy*, Phys. Lett. A **361**, 450-454 (2007).
- [4572] A. Macedo-Filho, D.A. Moreira, R. Silva and L.R. da Silva, *Maximum entropy principle for Kaniadakis statistics and networks*, Phys. Lett. A **377** (12), 842-846 (2013).
- [4573] N.T.C.M. Souza, D.H.A.L. Anselmo, V.D. Mello and R. Silva, *Analysis of fractal groups of the type $d - (m, r)$ -Cantor within the framework of Kaniadakis statistics*, Phys. Lett. A **378**, 1691-1694 (2014), doi: <http://dx.doi.org/10.1016/j.physleta.2014.04.030>
- [4574] D.H.A.L. Anselmo, M.S. Vasconcelos, R. Silva and V.D. Mello, *Non-additive model for specific heat of electrons*, Phys. Lett. A **380**, 3454-3459 (2016).

- [4575] N.T.C.M. Souza, D.H.A.L. Anselmo, R. Silva, M.S. Vasconcelos and V.D. Mello, *A κ -statistical analysis of the Y-chromosome*, EPL **108**, 38004 (2014) (5 pages), doi: www.epljournal.org doi: 10.1209/0295-5075/108/38004
- [4576] T. Xiong and K. Bu, *Quantum entropy reveals chromosomal disorder of ancestry tracts in genetic admixture*, bioRxiv preprint (2023) doi: 10.1101/2023.02.12.528199
- [4577] M.G. Marmarelis, R. Littman, F. Battaglin, D. Niedzwiecki, A. Venook, J.L. Ambite, A. Galstyan, H.J. Lenz and G.V. Steeg, *q-Diffusion leverages the full dimensionality of gene coexpression in single-cell transcriptomics*, Communications Biology **7**, 400 (2024).
- [4578] A.Y. Abul-Magd, *Distribution of local density of states in superstatistical random matrix theory*, Phys. Lett. A **366**, 351-356 (2007).
- [4579] A.C. Bertuola, O. Bohigas and M.P. Pato, *Family of generalized random matrix ensembles*, Phys. Rev. E **70**, 065102 (2004).
- [4580] O. Bohigas, J.X. de Carvalho and M.P. Pato, *Disordered ensembles of random matrices*, Phys. Rev. E **77**, 011122 (2008) (6 pages).
- [4581] O. Bohigas and M.P. Pato, *Hyperbolic disordered ensembles of random matrices*, Phys. Rev. E **84**, 031121 (2011) (9 pages).
- [4582] A.C. Bertuola and M.P. Pato, *Random matrix ensembles and the extensivity of the S_q entropy*, 1110.2948 [cond-mat.stat-mech].
- [4583] M. P. Pato, *Disordered random matrices*, J. Phys.: Conference Series **604**, 012015 (2015) (10 pages), doi:10.1088/1742-6596/604/1/012015
- [4584] R. Xie, S. Deng, W. Deng and M.P. Pato, *Generalized Poisson ensemble*, Physica A **585**, 126427 (2021).
- [4585] R. Xie, S. Deng, W. Deng and M.P. Pato, *Disordered beta thinned ensemble with applications*, Phys. Rev. E **104**, 054144 (2021).
- [4586] A.Y. Abul-Magd, *Non-extensive random matrix theory - A bridge connecting chaotic and regular dynamics*, Phys. Lett. A **333**, 16 (2004).
- [4587] A. Abd-El-Hady and A.Y. Abul-Magd, *Random matrix theory for mixed regular-chaotic dynamics in the super-extensive regime*, in Proc. Fifth Saudi Physical Society Conference (SPS5), ed. A. AlHajry, AIP Conference Proceedings **1370**, DOE 10.1063/1.3638098 (2011).
- [4588] A.Y. Abul-Magd and M. Abdel-Mageed, *Kappa-deformed random-matrix theory based on Kaniadakis statistics*, Modern Phys. Lett. B **26** (10), 1250059 (2012) (20 pages).
- [4589] O. Pfaffel, *Eigenvalues of Large Random Matrices with Dependent Entries and Strong Solutions of SDEs*, Doctor Thesis (Technische Universitat Munchen, Lehrstuhl fur Mathematische Statistik, 2013).
- [4590] V. Latora, M. Baranger, A. Rapisarda and C. Tsallis, *The rate of entropy increase at the edge of chaos*, Phys. Lett. A **273**, 97 (2000).
- [4591] Y. Liu, M.A. Nowak and I. Zahed, *Entanglement entropy and flow in two dimensional QCD: parton and string duality*, preprint (2022), 2202.02612 [hep-ph].
- [4592] M. Mihelich, B. Dubrulle, D. Paillard and C. Herbert, *Maximum entropy production vs. Kolmogorov-Sinai entropy in a constrained ASEP model*, Entropy **16**, 1037-1046 (2104), doi:10.3390/e16021037
- [4593] F. Falcowski, *On the connections of generalized entropies with Shannon and Kolmogorov-Sinai entropies*, Entropy **16**, 3732-3753 (2014), doi: 10.3390/e16073732
- [4594] F. Falcowski, *Generalized conditional entropy - Determinicity of a process and Rokhlin's formula*, Open Systems & Information Dynamics **22** (4), 1550025 (2015) (22 pages), doi: 10.1142/S1230161215500250
- [4595] P. Grassberger, *Temporal scaling at Feigenbaum points and nonextensive thermodynamics*, Phys. Rev. Lett. **95**, 140601 (2005) (4 pages).
- [4596] A. Robledo, *Comment on "Temporal scaling at Feigenbaum points and nonextensive thermodynamics" by P. Grassberger*, preprint (2005) [cond-mat/0510293].
- [4597] C. Tsallis, *Comment on "Temporal scaling at Feigenbaum points and nonextensive thermodynamics" by P. Grassberger*, preprint (2005) [cond-mat/0511213].
- [4598] A. Robledo, *Incidence of nonextensive thermodynamics in temporal scaling at Feigenbaum points*, Physica A **370**, 449-460 (2006).
- [4599] A. Robledo, *q-deformed statistical-mechanical structure in the dynamics of the Feigenbaum attractor*, preprint (2007), 0710.1047 [cond-mat.stat-mech].
- [4600] M.A. Fuentes, Y. Sato and C. Tsallis, *Sensitivity to initial conditions, entropy production, and escape rate at the onset of chaos*, Phys. Lett. A **375**, 2988-2991 (2011).
- [4601] A. Robledo and L.G. Moyano, *q-deformed statistical-mechanical property in the dynamics of trajectories en route to the Feigenbaum attractor*, Phys. Rev. E **77**, 036213 (2008) (14 pages).

- [4602] L.G. Moyano, D. Silva and A. Robledo, *Labyrinthine pathways towards supercycle attractors in unimodal maps*, Central Eur. J. Phys. **7**, 591-600 (2009).
- [4603] A. Robledo and L.G. Moyano, *Dynamics towards the Feigenbaum attractor*, Braz. J. Phys. (2009), in press.
- [4604] U. Tirnakli, G.F.J. Ananos and C. Tsallis, *Generalization of the Kolmogorov-Sinai entropy: Logistic-like and generalized cosine maps at the chaos threshold*, Phys. Lett. A **289**, 51 (2001).
- [4605] U. Tirnakli, *Two-dimensional maps at the edge of chaos: Numerical results for the Henon map*, Phys. Rev. E **66**, 066212 (2002).
- [4606] E.P. Borges and U. Tirnakli, *Mixing and relaxation dynamics of the Henon map at the edge of chaos*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 148 (2004).
- [4607] D. Gupta and V.V.M.S. Chandramouli, *Dynamics of deformed Hénon-like map*, Chaos, Solitons and Fractals **155**, 111760 (2022).
- [4608] D. Gupta and V.V.M.S. Chandramouli, *Stochastically stable chaos for q-deformed unimodal maps*, Internat. J. Dynamics and Control **11**, 112-121 (2023), doi: 10.1007/s40435-022-00968-8
- [4609] E.P. Borges and U. Tirnakli, *Two-dimensional dissipative maps at chaos threshold: Sensitivity to initial conditions and relaxation dynamics*, Physica A **340**, 227 (2004).
- [4610] E.P. Borges, C. Tsallis, G.F.J. Ananos and P.M.C. Oliveira, *Nonequilibrium probabilistic dynamics at the logistic map edge of chaos*, Phys. Rev. Lett. **89**, 254103 (2002).
- [4611] M. Coraddu, F. Meloni, G. Mezzorani and R. Tonelli, *Weak insensitivity to initial conditions at the edge of chaos in the logistic map*, Physica A **340**, 234 (2004).
- [4612] R. Tonelli, G. Mezzorani, F. Meloni, M. Lissia and M. Coraddu, *Entropy production and Pesin-like identity at the onset of chaos*, Progr. Theor. Phys. **115**, 23-29 (2006).
- [4613] G. Lukes-Gerakopoulos, N. Voglis and C. Efthymiopoulos, *The production of Tsallis entropy in the limit of weak chaos and a new indicator of chaoticity*, Physica A **387**, 1907-1925 (2008).
- [4614] G. Lukes-Gerakopoulos, N. Voglis and C. Efthymiopoulos, in *Chaos in Astronomy*, eds. G. Contopoulos and P.A. Patsis, Astrophysics and Space Science Proceedings (Springer, Berlin, 2008), 363-368.
- [4615] G. Lukes-Gerakopoulos, N. Voglis and C. Efthymiopoulos, *The average power-law growth of deviation vector and Tsallis entropy*, in *Chaos in Astronomy*, eds. G. Contopoulos and P.A. Patsis, Astrophysics and Space Science Proceedings (Springer, Berlin, 2008), 363-366.
- [4616] A. Celikoglu, *Dusuk-boyutlu yitimli dinamik sistemlerin kaos gesis esiginde entropi uretimi ve ilk kosullara baglilik*, Master Thesis (Ege University, Izmir, Turkey, 2007).
- [4617] A. Celikoglu and U. Tirnakli, *Sensitivity function and entropy increase rates for z-logistic map family at the edge of chaos*, Physica A **372**, 238-242 (2006).
- [4618] R. Tonelli and M. Coraddu, *Numerical study of the oscillatory convergence to the attractor at the edge of chaos*, Eur. Phys. J. B **50**, 355-359 (2005).
- [4619] R. Tonelli, *Convergence to the Critical Attractor at Infinite and Tangent Bifurcation Points*, preprint (2005) [nlin.CD/0509030].
- [4620] M. Lissia, M. Coraddu and R. Tonelli, *What entropy at the edge of chaos?*, in *Complexity, Metastability and Nonextensivity*, Proc. 31st Workshop of the International School of Solid State Physics (20-26 July 2004, Erice-Italy), eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 140 [cond-mat/0501299].
- [4621] M. Coraddu, M. Lissia and R. Tonelli, *Statistical descriptions of nonlinear systems at the onset of chaos*, Physica A **365**, 252-257 (2006).
- [4622] G.F.J. Ananos and C. Tsallis, *Ensemble averages and nonextensivity at the edge of chaos of one-dimensional maps*, Phys. Rev. Lett. **93**, 020601 (2004).
- [4623] G.F. J. Ananos, M.B.S. Casas, J.M.P. Rojas and R.A.H. Enriquez, *Media de ensembles y la no extensividad en el borde del caos: Mapa de Kaplan-Yorke [Ensemble average and the nonextensivity in the edge of chaos: Kaplan-Yorke map]*, Anales Cientificos **78** (2), 124-129 (2017), doi: <http://dx.doi.org/10.21704/ac.v78i2.1048>
- [4624] R. Tonelli, *Convergence to the critical attractor at infinite and tangent bifurcation points*, Int. J. Bifurcation and Chaos **16**, 2369-2375 (2006).
- [4625] S. Skurativskiy, G. Kudra, K. Witkowski and J. Awrejcewicz, *Bifurcation phenomena and statistical regularities in dynamics of forced impacting oscillator*, Nonlinear Dyn. (2019), in press, doi: doi.org/10.1007/s11071-019-05286-x
- [4626] U. Tirnakli and C. Tsallis, *Chaos thresholds of the z-logistic map: Connection between the relaxation and average sensitivity entropic indices*, Phys. Rev. E **73**, 037201 (2006)(4 pages).

- [4627] G.F.J. Ananos, F. Baldovin and C. Tsallis, *Anomalous sensitivity to initial conditions and entropy production in standard maps: Nonextensive approach*, Eur. Phys. J. B **46**, 409-417 (2005).
- [4628] R. Ishizaki and M. Inoue, *Application of Tsallis nonextensive statistics to the anomalous diffusion of the standard map*, Progr. Theor. Phys. **114**, 943-952 (2005).
- [4629] R. Ishizaki and M. Inoue, *Time-series analysis of foreign exchange rates using time-dependent pattern entropy*, Physica A **392**, 3344-3350 (2013).
- [4630] R. Ishizaki and M. Inoue, *Time-series analysis of multiple foreign exchange rates using time-dependent pattern entropy*, Physica A **490**, 967-974 (2018), doi: <http://dx.doi.org/10.1016/j.physa.2017.08.144>
- [4631] S. Kovaci, L. Arapi, E. Vuka and D. Prenga, *An overall view of Albanian currency exchange rates during crisis of 1997 using q-analysis*, Internat. J. Innovative Science, Engineering and Technology **3** (4) (2016).
- [4632] M. Ibl, O. Svoboda and M. Siegert, *Resilience analysis of the 2008 economic crisis using entropic measures*, J. Economics Studies and Research, 422299 (2018) (14 pages), doi: 10.5171/2018.422299
- [4633] S. Datta, A. Sharma and R. Ramaswamy, *Thermodynamics of critical strange nonchaotic attractors*, Phys. Rev. E **68**, 036104 (2003).
- [4634] A. Prestes, *Thermodynamic nonextensivity and elastoplasticity: Determining the Tsallis entropic index q for a SOC system by the multifractal function $f(\alpha)$* , preprint (1999).
- [4635] T. Kobayashi, *Improvements of dark experience replay and reservoir sampling towards better balance between consolidation and plasticity*, preprint (2025), 2504.20932 [cs.LG].
- [4636] S.T.R. Pinho and R.F.S. Andrade, *Power law sensitivity to initial conditions for abelian directed self-organized critical models*, Physica A **344**, 601 (2004).
- [4637] R. Jaganathan and S. Sinha, *A q-deformed nonlinear map*, communicated at "Perspectives in Nonlinear Dynamics", Chennai (July 2004); Phys. Lett. A **338**, 277 (2005).
- [4638] R. Jaganathan and S. Sinha, *q-Deformed nonlinear maps*, Pramana - J. Phys. **64**, 411 (2005).
- [4639] R. Jaganathan and S. Sinha, *A q-deformed nonlinear map*, Phys. Lett. A **338**, 277 (2005).
- [4640] D. Gupta and V.V.M.S. Chandramouli, *Topological entropy of one-dimensional deformed maps*, AIP Conference Proceedings **2435**, 020019 (2022).
- [4641] J. Yang and P. Grigolini, *On the time evolution of the entropic index*, Phys. Lett. A **263**, 323 (1999).
- [4642] R. Rai and R.S. Johal, *Generalized bit cumulants for chaotic systems: Numerical results*, preprint (1999) [cond-mat/9909288].
- [4643] R. Rai and R.S. Johal, *Generalized bit cumulants in nonextensive thermodynamics*, Physica A **294**, 155 (2001).
- [4644] S. Montangero, L. Fronzoni and P. Grigolini, *The non-extensive version of the Kolmogorov-Sinai entropy at work*, preprint (1999) [cond-mat/9911412].
- [4645] P.M. Gleiser, F.A. Tamarit and S.A. Cannas, *Self-organized criticality in a model of biological evolution with long-range interactions*, Physica A **275**, 272 (2000).
- [4646] D. Vitali and P. Grigolini, *Chaos, thermodynamics and quantum mechanics: An application to celestial mechanics*, Phys. Lett. A **249**, 248 (1998).
- [4647] M. Ignaccolo and P. Grigolini, *A non-extensive approach to the time evolution of Lyapunov coefficients*, preprint (2000) [cond-mat/0004155].
- [4648] F.A.B.F. de Moura, U. Tirnakli and M.L. Lyra, *Convergence to the critical attractor of dissipative maps: Log-periodic oscillations, fractality and nonextensivity*, Phys. Rev. E **62**, 6361 (2000).
- [4649] U. Tirnakli, F.A.B.F. de Moura and M.L. Lyra, *Log-periodic oscillations in dissipative maps*, communication.
- [4650] M.L. Lyra, *Nonextensive entropies and sensitivity to initial conditions of complex systems*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [4651] S. Behnia and M. Yahyavi, *Characterization of intermittency in hierarchy of chaotic maps with invariant measure*, J. Phys. Soc. Japan **81**, 124008 (2012) (8 pages).
- [4652] O. Sotolongo-Costa, A.H. Rodriguez and G.J. Rodgers, *Tsallis entropy and the transition to scaling in fragmentation*, Entropy **2**, 172 (2000).
- [4653] O. Sotolongo-Costa, L.M. Gaggero-Sager and M.E. Mora-Ramos, *A nonextensive statistical model for multiple particle breakage*, preprint (2014), 1412.1122 [cond-mat.stat-mech].
- [4654] A. Posadas and O. Sotolongo-Costa, *Non-extensive entropy and fragment-asperity interaction model for earthquakes*, Communications in Nonlinear Science and Numerical Simulation **117**, 106906 (2023).
- [4655] A. Posadas and O. Sotolongo-Costa, *Non-extensive entropy and fragment-asperity interaction model for earthquakes*, Communications in Nonlinear Science and Numerical Simulation (2022), in press.

- [4656] E. Sanchez, *Aplicacion de un modelo no-extensivo generalizado a la distribucion de frecuencias de magnitudes pre y post terremoto de Coquimbo 2015*, XXIII Simposio Chileno de Fisica (Chile, 22-24 November 2022).
- [4657] O. Sotolongo-Costa, L. M. Gaggero-Sager, M. E. Mora-Ramos, *A non-extensive statistical model for time-dependent multiple breakage particle-size distribution*, Physica A **438**, 74-80 (2015).
- [4658] O. Sotolongo-Costa, A.H. Rodriguez and G.J. Rodgers, *Dimensional crossover in fragmentation*, Physica A **286**, 638 (2000).
- [4659] F. Brouers, O. Sotolongo, F. Marquez and J.P. Pirard, *Microporous and heterogeneous surface adsorption isotherms arising from Levy distributions*, Physica A **349**, 271 (2005).
- [4660] M.D. Correia, A.M. Souza, J.P. Sinnecker, R.S. Sarthour, B.C.C. Santos, W. Trevizan and I.S. Oliveira, *Superstatistics model for T2 distribution in NMR experiments on porous media*, J. Magnetic Resonance **244**, 12-17 (2014), doi: <http://dx.doi.org/10.1016/j.jmr.2014.04.013>
- [4661] M.D. Correia, *NMR relaxation on porous media: A superstatistical approach with application to petrophysics*, Doctor Thesis (Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro, 2015).
- [4662] Y. Zhang, Z. Dong, S. Wang, G. Ji and J. Yang, *Preclinical diagnosis of magnetic resonance (MR) brain images via discrete wavelet packet transform with Tsallis entropy and generalized eigenvalue proximal support vector machine (GEPSSVM)*, Entropy **17**, 1795-1813 (2015), doi:10.3390/e17041795
- [4663] Y. Zhang, Z. Dong, S. Wang, G. Ji and J. Yang, *Preclinical diagnosis of MR brain images via discrete wavelet packet transform with Tsallis entropy and GEPSSVM*, preprint (2020).
- [4664] S. Luo, Z. Luo, Z. Zhan and G. Liang, *Optimum thresholding for brain medical images based on Tsallis entropy and Bayesian estimation*, IEEE 35th International Symposium on Computer-Based Medical Systems (2022).
- [4665] M.A. Almuqrin, *Bayesian and non-Bayesian inference for the compound Poisson log-normal model with application in finance*, Alexandria Engineering Journal **90**, 24-43 (2024).
- [4666] M. Akilli, N. Yilmaz and K.G. Akdeniz, *Study of the q-Gaussian distribution with the scale index and calculating entropy by normalized inner scalogram*, Phys. Lett. A **383** (11), 1099-1104 (2019), doi: 10.1016/j.physleta.2019.01.018
- [4667] M. Akilli, N. Yilmaz and K.G. Akdeniz, *The 'wavelet' entropic index q of non-extensive statistical mechanics and superstatistics*, Chaos, Solitons and Fractals **150**, 111094 (2021).
- [4668] W. Zang, Z. Wang, D. Jiang, X. Liu and Z. Jiang, *Classification of MRI brain images using DNA genetic algorithms optimized Tsallis entropy and support vector machine*, Entropy **20**, 964 (2018), doi: 10.3390/e20120964
- [4669] N.H. Rajini, *A two-dimensional image segmentation method based on hybrid genetic algorithm with particle swarm optimization and entropy*, Internat. J. Applied Engineering Research **14** (9), 2270-2274 (2019).
- [4670] W. He, Y. He, B. Li and C. Zhang, *Analog circuit fault diagnosis via joint cross-wavelet singular entropy and parametric t-SNE*, Entropy **20**, 604 (2018), doi: 10.3390/e20080604 (2018).
- [4671] A.G. Bashkurov and A.V. Vityazev, *Statistical mechanics of fragmentation processes of ice and rock bodies*, Planet. Space Sci. **44**, 909 (1996).
- [4672] A.I. Olemskoi, *Gauge theory of self-similar system*, Physica A **295**, 409 (2001).
- [4673] A.I. Olemskoi and D.O. Kharchenko, *Evolution of the system with multiplicative noise*, Physica A **293**, 178 (2001).
- [4674] D.O. Kharchenko and V.O. Kharchenko, *Evolution of a stochastic system within the framework of Tsallis statistics*, Physica A **354**, 262 (2005).
- [4675] D.O. Kharchenko, V.O. Kharchenko and S.V. Kokhan, *Universality and self-similar behaviour of non-equilibrium systems with non-Fickian diffusion*, Condensed Matter Physics **17** (3), 33004 (2014) (10 pages), doi: 10.5488/CMP.17.33004 <http://www.icmp.lviv.ua/journal>
- [4676] M. Baranger, V. Latora and A. Rapisarda, *Time evolution of thermodynamic entropy for conservative and dissipative chaotic maps*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13** (3), 471-478 (Pergamon-Elsevier, Amsterdam, 2002).
- [4677] V. Latora and A. Rapisarda, *Dynamical quasi-stationary states in a system with long-range forces*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13**, Number 3, 471 (Pergamon-Elsevier, Amsterdam, 2002).
- [4678] Marcio P. de Albuquerque, Marcio P. de Albuquerque, N. Alves, D.P. Ribeiro, L.G. Moyano, C. Tsallis, F. Baldovin and G. Giupponi, *Dinamica molecular em ambiente de grade computacional*, preprint (2005).
- [4679] M.P. de Albuquerque, A.M. de Almeida, L.H.P. Lessa, M.P. de Albuquerque, N. Alves, L.G. Moyano and C. Tsallis, *NextComp - Molecular dynamics application for long-range interacting systems on a computational*

- grid environment*, communication at *IV Workshop on Computational Grids and Applications* (Curitiba, June 2006).
- [4680] V. Latora, A. Rapisarda and C. Tsallis, *Non-Gaussian equilibrium in a long-range Hamiltonian system*, Phys. Rev. E **64**, 056134 (2001).
- [4681] D.H. Zanette and M.A. Montemurro, *Dynamics and nonequilibrium states in the Hamiltonian mean-field model: A closer look*, Phys. Rev. E **67**, 031105 (2003).
- [4682] D. Moroni, *Dinamica e termodinamica di un modello XY con lunghezza di interazione variabile*, Tesi di Laurea (In Italian) (Universita degli Studi di Roma La Sapienza, 1999).
- [4683] A. Rapisarda and V. Latora, *Negative specific heat in out-of-equilibrium nonextensive systems*, preprint (2002) [nucl-th/0202075].
- [4684] V. Latora, A. Rapisarda and C. Tsallis, *Fingerprints of nonextensive thermodynamics in a long-range hamiltonian system*, in *Non Extensive Statistical Mechanics and Physical Applications*, eds. G. Kaniadakis, M. Lissia and A. Rapisarda, Physica A **305**, 129 (2002).
- [4685] A. Pluchino, V. Latora and A. Rapisarda, *Dynamics and thermodynamics of a model with long-range interactions*, in *Nonadditive entropy and nonextensive statistical mechanics*, ed. M. Sugiyama, Continuum Mechanics and Thermodynamics **16**, 245 (Springer-Verlag, Heidelberg, 2004).
- [4686] A. Pluchino, V. Latora and A. Rapisarda, *Dynamical anomalies and the role of initial conditions in the HMF model*, Physica A **338**, 60 (2004).
- [4687] A. Pluchino, *Metastability, Nonextensivity and Glassy Dynamics in a Class of Long-range Hamiltonian Models*, Doctor Thesis (University of Catania, 2004).
- [4688] A. Pluchino and A. Rapisarda, *Glassy dynamics and nonextensive effects in the HMF model: the importance of initial conditions*, in *Complexity and Nonextensivity: New Trends in Statistical Mechanics*, eds. M. Sakagami, N. Suzuki and S. Abe, Prog. Theor. Phys. Suppl. **162**, 18-28 (2006).
- [4689] L.G. Moyano and C. Anteneodo, *Diffusive anomalies in a long-range Hamiltonian system*, Phys. Rev. E **74**, 021118 (2006).
- [4690] C. Tsallis, B.J.C. Cabral, A. Rapisarda and V. Latora, *Comment on "Negative heat capacity for a cluster of 147 Sodium atoms"*, preprint (2001) [cond-mat/0112266].
- [4691] A. Campa, A. Giansanti and D. Moroni, *Metastable states in a class of long-range Hamiltonian systems*, in *Non Extensive Statistical Mechanics and Physical Applications*, eds. G. Kaniadakis, M. Lissia and A. Rapisarda, Physica A **305**, 137 (2002).
- [4692] A. Campa, A. Giansanti and G. Morelli, *Long-time behavior of quasistationary states of the Hamiltonian mean-field model*, Phys. Rev. E **76**, 041117 (2007) (11 pages).
- [4693] A. Campa, P.-H. Chavanis, A. Giansanti, G. Morelli, *Dynamical phase transitions in Hamiltonian long-range systems and Tsallis distributions with time dependent index*, Phys. Rev. E **78**, 040102R (2008) (4 pages).
- [4694] B.J.C. Cabral and C. Tsallis, *Metastability and weak mixing in classical long-range many-rotator system*, Phys. Rev. E **66**, 065101(R) (2002).
- [4695] M.A. Montemurro, F. Tamarit and C. Anteneodo, *Aging in an infinite-range Hamiltonian system of coupled rotators*, Phys. Rev. E **67**, 031106 (2003).
- [4696] F.A. Tamarit and C. Anteneodo, *Relaxation and aging in long-range interacting systems*, Europhysics News **36**, 194 (2005) [Europhysics News Special Issue *Nonextensive Statistical Mechanics: New Trends, new perspectives*, eds. J.P. Boon and C. Tsallis (November/December 2005)].
- [4697] C.B. Tauro, G. Maglione and F.A. Tamarit, *Relaxation dynamics and topology in the Hamiltonian Mean Field model*, Eur. Phys. J. - Special Topics **143**, 9-12 (2007).
- [4698] U. Tirnakli and S. Abe, *Aging in coherent noise models and natural time*, Phys. Rev. E **70**, 056120 (2004).
- [4699] U. Tirnakli, *Aging in earthquake models*, in *Complexity, Metastability and Nonextensivity*, Proc. 31st Workshop of the International School of Solid State Physics (20-26 July 2004, Erice-Italy), eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 350.
- [4700] F. Caruso, A. Pluchino, V. Latora, S. Vinciguerra and A. Rapisarda, *Analysis of self-organized criticality in the Olami-Feder-Christensen model and in real earthquakes*, Phys. Rev. E **75**, 055101(R)(2007) (4 pages).
- [4701] F. Caruso, A. Pluchino, V. Latora, A. Rapisarda and S. Vinciguerra, *Self-organized criticality and earthquakes*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 281-284 (New York, 2007).
- [4702] B. Bakar and U. Tirnakli, *Analysis of self-organized criticality in Ehrenfest's dog-flea model*, Phys. Rev. E **79**, 040103(R) (2009).
- [4703] B. Bakar and U. Tirnakli, *Return distributions in dog-flea model revisited*, Physica A **389**, 3382-3386 (2010).

- [4704] G.A. Casas, F.D. Nobre and E.M.F. Curado, *Nonlinear Ehrenfest's urn model*, Phys. Rev. E **91**, 042139 (2015) (8 pages).
- [4705] M.J. Domenech, *Analisis de las distribuciones de retornos y efectos de tamaño finito para un modelo de urnas*, Master Thesis (Universidad Nacional de Cordoba, Facultad de Matematica, Astronomia, Fisica y Computacion, 2024).
- [4706] A. Celikoglu, U. Tirnakli and S.M.D. Queiros, *Analysis of return distributions in the coherent noise model*, Phys. Rev. E **82**, 021124 (2010) (6 pages).
- [4707] J.J. Wei, X.F. Wu, Z.G. Dai, F.Y. Wang, P. Wang, D. Li and B. Zhang, *Similar scale-invariant behaviors between soft gamma-ray repeaters and an extreme epoch from FRB 121102*, The Astrophysical Journal **920**, 153 (2021).
- [4708] W.L. Zhang, S.X. Yi, Y.C. Zou, F.Y. Wang, C.K. Li and S.L. Xie, *Self-organized critical characteristics of teraelectronvolt photons from GRB 221009A*, Astronomy and Astrophysics **693**, A290 (2025).
- [4709] C. Tsallis and E.P. Borges, *Online Comment on "A lanthanide-rich kilonova in the aftermath of a long gamma-ray burst"*, Nature (16 April 2024), doi: 10.1038/s41586-023-06979-5
- [4710] X.J. Li and Y.P. Yang, *Signatures of the self-organized criticality phenomenon in precursors of gamma-ray bursts*, Astrophysical Journal Letters **955**, L34 (2023).
- [4711] S.L. Xie, Y.W. Yu, S.L. Xiong, L. Lin, P. Wang, Y. Zhao, Y. Wang and W.L. Zhang, *Finding the particularity of the active episode of SGR J1935+2154 during which FRB 20200428 occurred: Implication from a statistics of Fermi/GBM X-ray bursts*, preprint (2024), 2404.11877 [astro-ph.HE].
- [4712] X.J. Li, J.M. Liu, M. Cheng, Y.N. Wang and W.L. Zhang, *Scale-invariant features of X-ray bursts from SGR J1935+2154 detected by Insight-HXMT*, Astronomical Society of the Pacific **136**, 084204 (2024).
- [4713] A. Celikoglu and U. Tirnakli, *Earthquakes, model systems and connections to q-statistics*, Acta Geophysica **60**, 535-546 (2012).
- [4714] S.-R.G. Christopoulos and N.V. Sarlis, *An Application of the coherent noise model for the prediction of aftershock magnitude time series*, Complexity, 6853892 (2017) (27 pages), doi: 10.1155/2017/6853892
- [4715] A. Chmel, V. Smirnov and I. Shcherbakov, *Hierarchy of non-extensive mechanical processes in fracturing sea ice*, Acta Geophys. **60**, 719-739 (2012).
- [4716] F. Vallianatos and G. Michas, *Complexity of fracturing in terms of non-extensive statistical physics: From earthquake faults to Arctic sea ice fracturing*, Entropy **22**, 1194 (2020), doi: 10.3390/e22111194
- [4717] E. Wang, *A study on Arctic sea ice dynamics using the continuous spin Ising model*, J. Appl. Phys. **135**, 194901 (2024).
- [4718] J. Chen, M. Niknam and D. Cory, *Efficiently characterizing the quantum information flow, loss, and recovery in the central spin system*, Entropy **26**, 1077 (2024).
- [4719] M.C. Hell and C. Horvat, *Directional surface wave spectra and sea ice structure from ICESat-2 altimetry*, preprint (2022), doi: 10.5194/egusphere-2022-842
- [4720] S.V. Mykulyak, V.O. Polyakovskiy and S.I. Skurativskiy, *Experimental study of shear deformation of the medium formed by the massif of ribbed grains*, Ukraina J. (2021), doi: 10.24028/gzh.v43i2.230197
- [4721] F. Vallianatos, G. Michas, V. Sakkas and E.I. Partheniou, *First evidence of the non extensive character of pre- and post-seismic deformation of Samos (2020) Mw7.0 earthquake*, Acta Geophysica (2021), in press.
- [4722] F. Vallianatos and K. Pavlou, *Scaling properties of the Mw7.0 Samos (Greece), 2020 aftershock sequence*, EGU General Assembly 2021, online, 19-30 Apr 2021, EGU21-10967 (2021), doi: 10.5194/egusphere-egu21-10967
- [4723] E.A. Anyfadi, S.E. Avgerinou, G. Michas and F. Vallianatos, *Universal non-extensive statistical physics temporal pattern of major subduction zone aftershock sequences*, Entropy **24**, 1850 (2022).
- [4724] S.E. Avgerinou, E.A. Anyfadi, G. Michas and F. Vallianatos, *A non-extensive statistical physics view of the temporal properties of the recent aftershock sequences of strong earthquakes in Greece*, Applied Sciences **13**, 1995 (2023).
- [4725] E. Sardeli, G. Michas, K. Pavlou, F. Vallianatos, A. Karakonstantis and G. Chatzopoulos, *Complexity of recent earthquake swarms in Greece in terms of non-extensive statistical physics*, Entropy **25**, 667 (2023).
- [4726] E. Sardeli, G. Michas, K. Pavlou, F. Vallianatos, *Spatiotemporal variations of the frequency-magnitude distribution in the 2019 M_W 7.1 Ridgecrest, California, earthquake sequence*, Entropy **25**, 1612 (2023).
- [4727] E. Sardeli, G. Michas, K. Pavlou, D. Zaccagnino and F. Vallianatos, *Spatiotemporal properties of the 2020-2021 Petrinja (Croatia) earthquake sequence*, J. Seismol. (2024).
- [4728] F. Vallianatos, G. Michas, G. Papadakis and P. Sammonds, *A non-extensive statistical physics view to the spatiotemporal properties of the June 1995, Aigion earthquake ($M6.2$) aftershock sequence (West Corinth Rift, Greece)*, Acta Geophys. **60**, 758-768 (2012).

- [4729] G. Michas, F. Vallianatos and P. Sammonds, *Statistical mechanics and scaling of fault populations with increasing strain in the Corinth Rift*, Earth and Planetary Science Letters **431**, 150-163 (2015).
- [4730] F. Vallianatos, G. Michas and G. Hloupis, *Multiresolution wavelets and natural time analysis before the January-February 2014 Cephalonia (Mw 6.1 and 6.0) sequence of strong earthquake events*, Phys. Chem. Earth (2015), in press, doi: www.elsevier.com/locate/pce
- [4731] G. Michas and F. Vallianatos, *Modelling earthquake diffusion as a continuous-time random walk with fractional kinetics: The case of the 2001 Agios Ioannis earthquake swarm (Corinth Rift)*, Geophysical J. International, ggy282 (2018), in press, doi: [10.1093/gji/ggy282](https://doi.org/10.1093/gji/ggy282)
- [4732] G. Michas and F. Vallianatos, *Scaling properties and anomalous diffusion of the Florina micro-seismic activity: Fluid driven?*, Geomechanics for Energy and the Environment (2019), in press.
- [4733] K. Chochlaki, F. Vallianatos and G. Michas, *Global regionalized seismicity in view of non-extensive statistical physics*, Physica A **493**, 276-285 (2018).
- [4734] P. Vega-Jorquera, E. de la Barra and S.L.E.F. da Silva, *Antropogenic seismicity and the breakdown of the self-similarity described by nonextensive models*, Physica A **617**, 128690 (2023).
- [4735] G. Michas and F. Vallianatos, *Stochastic modeling of nonstationary earthquake time series with long-term clustering effects*, Phys. Rev. E **98**, 042107 (2018).
- [4736] S. Motaghed, M. Khazaei, N. Eftekhari and M. Mohammadi, *A non-extensive approach to probabilistic seismic hazard analysis*, Nat. Hazards Earth Syst. Sci. **23**, 1117-1124 (2023).
- [4737] R. Rotondi, O. Nicolis, E. Varini and F. Ruggeri, *Variations in probability distributions as indicators of seismic phases: A case study from Chile*, Seismological Research Letters (2025).
- [4738] G. Chatzopoulos, *Accelerating deformation seismicity patterns before the March 3, 2021 Thessaly strong earthquake. First results*, Bulletin of the Geological Society of Greece **58**, 87 (2021).
- [4739] G. Michas, K. Pavlou, S.E. Avgerinou, E.A. Anyfadi and F. Vallianatos, *Aftershock patterns of the 2021 Mw 6.3 Northern Thessaly (Greece) earthquake*, J. Seismol. (2022), doi: [10.1007/s10950-021-10070-9](https://doi.org/10.1007/s10950-021-10070-9)
- [4740] E.A. Anyfadi, S.A. Avgerinou, G. Michas and F. Vallianatos, *Frequency magnitude distribution of aftershock sequences related to major subduction zone worldwide earthquakes in terms of Tsallis entropy*, communicated at the 16th International Congress of the Geological Society of Greece, (17-19 October, 2022, Patras), Greece Bulletin of the Geological Society of Greece, Sp. Publ. 10 (2022).
- [4741] A. Iliopoulos, D. Chorozoglou, C. Kourouklas, O. Mangira and E. Papadimitriou, *Superstatistics, complexity and earthquakes: a brief review and application on Hellenic seismicity*, Bollettino di Geofisica Teorica ed Applicata . **60** (4), 531-548 (2019).
- [4742] T. Chelidze, (2017) *Complexity of seismic process: A mini-review*, Phys. Astron. Int. J. **1** (6), 00035 (2017), doi: [10.15406/paij.2017.01.00035](https://doi.org/10.15406/paij.2017.01.00035)
- [4743] I.P. de Lima, S.L.E.F. da Silva, G. Corso and J.M. de Araujo, *Tsallis entropy, likelihood, and the robust seismic inversion*, Entropy **22**, 464 (2020), doi: [10.3390/e22040464](https://doi.org/10.3390/e22040464)
- [4744] R. Rotondi, G. Bressan and E. Varini, *Analysis of temporal variations of seismicity through nonextensive statistical physics*, preprint (2022).
- [4745] E. Varini and R. Rotondi, *Connection between variations of the probability distribution of the recurrence time and phases of the seismic activity*, Entropy **25**, 1441 (2023).
- [4746] S.L.E.F. da Silva, J.L. Lopez, J.M. de Araujo and G. Corso, *Multi-scale q-FWI applied to circular shot OBN acquisition for accurate pre-salt velocity estimates*, First International Meeting for Applied Geoscience and Energy, 712 (2021), doi: [10.1190/segam2021-3581021.1](https://doi.org/10.1190/segam2021-3581021.1)
- [4747] G. Papadakis, F. Vallianatos and P. Sammonds, *A nonextensive statistical physics analysis of the 1995 Kobe, Japan earthquake*, Pure Appl. Geophys. **172**, 1923-1931 (2015), doi: [10.1007/s00024-014-0876-x](https://doi.org/10.1007/s00024-014-0876-x)
- [4748] G. Papadakis, F. Vallianatos and P. Sammonds, *Non-extensive statistical physics applied to heat flow and the earthquake frequency-magnitude distribution in Greece*, Physica A **456**, 135-144 (2016), doi: <http://dx.doi.org/10.1016/j.physa.2016.03.022>
- [4749] G. Papadakis, *A non-extensive statistical physics analysis of seismic sequences: Application to the geodynamic system of the Hellenic subduction zone*, Doctor Thesis (Institute for Risk and Disaster Reduction, University College London, 2016).
- [4750] F. Vallianatos, G. Michas and G. Papadakis, *Non-extensive statistical seismology: An overview*, in *Complexity of Seismic Time Series: Measurement and Application*, eds. F. Vallianatos, L. Telesca and T. Chelidze (Elsevier, 2019), ISBN: 978-0-12-813138-1
- [4751] L. Di G. Sigalotti, A. Ramirez-Rojas and C.A. Vargas, *Tsallis q-statistics in seismology*, Entropy **25**, 408 (2023).

- [4752] E.L. Flores-Marquez, A. Ramirez-Rojas and L. Di G. Sigalotti, *Non-extensive statistical analysis of seismicity in the West Coastline of Mexico*, *Fractal and Fractional* **8** (6) (2024).
- [4753] D. Zaccagnino, L. Telesca and C. Doglioni, *Scaling properties of seismicity and faulting*, *Earth and Planetary Science Letters* **584**, 117511 (2022).
- [4754] D. Zaccagnino, F. Vallianatos, G. Michas, L. Telesca and C. Doglioni, *Are foreshocks fore-shocks?*, *Journal of Geophysical Research: Solid Earth* **129**, e2023JB027337 (2024).
- [4755] D. Zaccagnino, F. Vallianatos, G. Michas, L. Telesca and C. Doglioni, *Supplementary information for the manuscript 'Are foreshocks fore-shocks?'*, preprint (2024).
- [4756] V. Saltas, F. Vallianatos, D. Triantis and I. Stavrakas, *Complexity in laboratory seismology: From electrical and acoustic emissions to fracture*, in *Complexity of Seismic Time Series: Measurement and Application*, 239-273 (2018).
- [4757] V. Saltas, F. Vallianatos, D. Triantis, T. Koumoudeli and I. Stavrakas, *Non-extensive statistical analysis of acoustic emissions series recorded during the uniaxial compression of brittle rocks*, *Physica A* **528**, 121498 (2019).
- [4758] V. Saltas, D. Peraki and F. Vallianatos, *The use of acoustic emissions technique in the monitoring of fracturing in concrete using soundless chemical demolition agent*, *Frattura ed Integrita Strutturale* **50**, 505-516 (2019), doi:10.3221/IGF-ESIS.50.42
- [4759] S.K. Kourkoulis, E.D. Pasiou, I. Stavrakas and D. Triantis, *Assessing structural integrity of non-homogeneous systems by means of acoustic emissions and non-extensive statistical mechanics*, *Frattura ed Integrita Strutturale* **68**, 440-457 (2024).
- [4760] G. Michas, *Generalized statistical mechanics description of fault and earthquake populations in Corinth rift (Greece)*, Doctor Thesis (University College London, 2016).
- [4761] M. Gallucci, S. Guillas and F. Vallianatos, *Emulation of simulated earthquake catalogues*, *Acta Geophysica* **60** (3), 699-718 (2012).
- [4762] F. Vallianatos and P. Sammonds, *Evidence of non-extensive statistical physics of the lithospheric instability approaching the 2004 Sumatran-Andaman and 2011 Honshu mega-earthquakes*, *Tectonophysics* **590**, 52-58 (2013).
- [4763] S.M. Valverde-Esparza, A. Ramirez-Rojas, E.L. Flores-Marquez and L. Telesca, *Non-extensivity analysis of seismicity within four subduction regions in Mexico*, *Acta Geophys.* **60**, 833-845 (2012).
- [4764] G. Papadakis, F. Vallianatos and P. Sammonds, *Evidence of non extensive statistical physics behaviour of the Hellenic subduction zone seismicity*, *Tectonophysics* **608**, 1037-1048 (2013), doi: 10.1016/j.tecto.2013.07.009
- [4765] D. Li, E. Wang, Z. Li, Y. Ju, D. Wang and X. Wang, *Experimental investigations of pressure stimulated currents from stressed sandstone used as precursors to rock fracture*, *Internat. J. Rock Mechanics and Mining Sciences* **145**, 104841 (2021).
- [4766] T. Shan, Z. Li, X. Zhang, X. Wang, H. Jia, E. Wang, Q. Zhang, Y. Niu and D. Wang, *Superstatistical approach of electric potential and acoustic emission for investigating damage evolution and precursor of water-bearing sandstone under uniaxial compression*, *International Journal of Rock Mechanics and Mining Sciences* **189**, 106063 (2025).
- [4767] G. Papadakis, Z. Chalabi and J.E. Thornes, *Ambulance service resource planning for extreme temperatures: Analysis of ambulance 999 calls during episodes of extreme temperature in London, UK*, *Atmosphere* **9**, 182 (2018), doi: 10.3390/atmos9050182
- [4768] F. Vallianatos, A. Nardi, R. Carluccio and M. Chiappini, *Experimental evidence of a non-extensive statistical physics behavior of electromagnetic signals emitted from rocks under stress up to fracture. Preliminary results*, *Acta Geophys.* **60**, 894-909 (2012).
- [4769] A. Davalos-Trevino, *On the statistical properties of multiscale permutation entropy and its refinements, with applications on surface electromyographic signals*, Doctor Thesis (Universite d' Orleans, 2020).
- [4770] Z. Zhu, J. Dou and H. Wang, *An entropic model for the rock water absorption process*, *Stochastic Environmental Research and Risk Assessment* (2020), doi: 10.1007/s00477-020-01864-3
- [4771] F.V. Ignacio, *Aplicacao da teoria do caos no estudo da queda de blocos rochosos no Morro do Cantagalo, Rio de Janeiro - RJ*, Master Thesis (2019, Universidade do Estado do Rio de Janeiro)
- [4772] L.M. Alves and R.F.R.M. Lobo, *The possibility to predict crack patterns on dynamic fracture*, *Int. J. Fract.* **206**, 11-33 (2017), doi: 10.1007/s10704-017-0196-0
- [4773] I.P. Shcherbakov, V.S. Kuksenko and A.E. Chmel, *Micro and nanostructural cooperative effects in dynamic fracture of solids*, *Physical Mesomechanics* **16** (1), 51-58 (2013).

- [4774] D. Li, K.S.C. Kuang and C.G. Koh, *Rail crack monitoring based on Tsallis synchrosqueezed wavelet entropy of acoustic emission signals: A field study*, Structural Health Monitoring (2017) (15 pages), doi: 10.1177/1475921717742339
- [4775] G.Q. Zhang, U. Tirnakli, L. Wang and T.L. Chen, *Self organized criticality in a modified Olami-Feder-Christensen model*, Eur. Phys. J. B **82**, 83-89 (2011).
- [4776] M.J. Aschwanden, *Theoretical models of self-organized criticality (SOC) systems*, preprint (2012), 1204.5119 [astro-ph.SR].
- [4777] S. Abe and N. Suzuki, *Complex earthquake networks: Hierarchical organization and assortative mixing*, Phys. Rev. E **74**, 026113 (2006) (5 pages).
- [4778] A. Pluchino, V. Latora and A. Rapisarda, *Metastable states, anomalous distributions and correlations in the HMF model*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 315 (2004).
- [4779] A. Pluchino, G. Andronico and A. Rapisarda, *A Monte Carlo investigation of the Hamiltonian Mean Field Model*, Physica A **349**, 143 (2005).
- [4780] A. Pluchino, V. Latora and A. Rapisarda, *Spin-glass phase in the Hamiltonian Mean Field model*, preprint (2003) [cond-mat/0306374].
- [4781] A. Pluchino, V. Latora and A. Rapisarda, *Dynamical anomalies and the role of initial conditions in the HMF model*, preprint (2004) [cond-mat/0401582].
- [4782] A. Pluchino, A. Rapisarda and V. Latora, *Metastability and anomalous behavior in the HMF model: Connections to nonextensive thermodynamics and glassy dynamics*, in *Complexity, Metastability and Nonextensivity*, Proc. 31st Workshop of the International School of Solid State Physics (20-26 July 2004, Erice-Italy), eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 102 [cond-mat/0507005].
- [4783] A. Rapisarda and A. Pluchino, *Nonextensive thermodynamics and glassy behaviour in Hamiltonian systems*, Europhysics News **36**, 202-206(2005) [Erratum: **37**, 25 (2006)].
- [4784] A. Antoniazzi, D. Fanelli and S. Ruffo, *The Hamiltonian Mean Field model: anomalous or normal diffusion?*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 122-128 (New York, 2007).
- [4785] A. Pluchino and A. Rapisarda, *Anomalous diffusion and quasistationarity in the HMF model*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 129-136 (New York, 2007).
- [4786] G. Kneller, *Anomalous diffusion in biomolecular systems from the perspective of non-equilibrium statistical physics*, Acta Physica Polonica B **46** (6), 1167-1199 (2015).
- [4787] P.H. Chavanis and A. Campa, *Inhomogeneous Tsallis distributions in the HMF model*, Eur. Phys. J. B **76**, 581-611 (2010).
- [4788] D.H. Zanette and M.A. Montemurro, *Thermal measurements of stationary nonequilibrium systems: A test for generalized thermostatistics*, Phys. Lett. A **316**, 184 (2003).
- [4789] R. Toral, *On the nonextensivity of the long range $X - Y$ model*, J. Stat. Phys. **114**, 1393 (2004).
- [4790] C. Anteneodo, *Nonextensive scaling in a long-range Hamiltonian system*, Physica A **342**, 112 (2004).
- [4791] E.P. Borges, C. Tsallis, A. Giansanti and D. Moroni, *Dinamica de um sistema nao extensivo de rotores classicos anisotropicos acoplados*, in *Tendencias da Fisica Estatistica no Brasil*, ed. T. Tome, volume honoring S.R.A. Salinas (Editora Livraria da Fisica, Sao Paulo, 2003), page 84.
- [4792] E.P. Borges and C. Tsallis, *Negative specific heat in a Lennard-Jones-like gas with long-range interactions*, in *Non Extensive Statistical Mechanics and Physical Applications*, eds. G. Kaniadakis, M. Lissia and A. Rapisarda, Physica A **305**, 148 (2002).
- [4793] M.N. Kadijani, H. Abbasi and S. Nezamipour, *Molecular dynamics simulation of gas models of Lennard-Jones type of interactions: Extensivity associated with interaction range and external noise*, Physica A **475**, 35-45 (2017), doi: 10.1016/j.physa.2017.02.011
- [4794] G. Aquino, P. Grigolini and N. Scafetta, *Sporadic randomness, Maxwell's Demon and the Poincare' recurrence times*, Chaos, Solitons and Fractals **12**, 2023 (2001).
- [4795] M. Ignaccolo, P. Grigolini and A. Rosa, *Sporadic randomness: The transition from the stationary to the nonstationary condition*, Phys. Rev. E **64**, 026210 (2001).
- [4796] A.I. Olemskoi, A.V. Khomenko and D.O. Kharchenko, *Self-organized criticality within fractional Lorenz scheme*, Physica A **323**, 263 (2003).
- [4797] K.K. Gudima, A.S. Parvan, M. Ploszajczak and V.D. Toneev, *Nuclear multifragmentation in nonextensive statistics: Canonical formulation*, Phys. Rev. Lett. **85**, 4691 (2000).

- [4798] K.K. Gudima, M. Ploszajczak and V.D. Toneev, *Fragile signs of criticality in the nuclear multifragmentation*, preprint (2001) [nucl-th/0106018].
- [4799] S. Montangero, L. Fronzoni and P. Grigolini, *The complexity of the logistic map at the chaos threshold*, Phys. Lett. A **285**, 81 (2001).
- [4800] R. Piasecki, M.T. Martin and A. Plastino, *Inhomogeneity and complexity measures for spatial patterns*, Physica A **307**, 157 (2002).
- [4801] R. Piasecki and A. Plastino, *Duality and spatial inhomogeneity*, Physica A **305**, 113 (2002).
- [4802] R. Piasecki, *Statistical mechanics characterization of spatio-compositional inhomogeneity*, Physica A **388**, 4229-4240 (2009).
- [4803] R. Piasecki and A. Plastino, *Entropic descriptor of a complex behaviour*, Physica A **389**, 397-407 (2010).
- [4804] R. Piasecki, *Microstructure reconstruction using entropic descriptors*, Proc. Royal Soc. A - Math. Phys. and Engineering Sciences **467** (2127), 806-820 (2011).
- [4805] F. Baldovin, C. Tsallis and B. Schulze, *Nonstandard entropy production in the standard map*, Physica A **320**, 184 (2003).
- [4806] F. Baldovin, *Numerical analysis of conservative maps: A possible foundation of nonextensive phenomena*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [4807] F. Baldovin, C. Tsallis and B. Schulze, *Nonstandard entropy production in the standard map*, preprint (2002) [cond-mat/0203595].
- [4808] F. Baldovin, *Mixing and approach to equilibrium in the standard map*, in *Non Extensive Statistical Mechanics and Physical Applications*, eds. G. Kaniadakis, M. Lissia and A. Rapisarda, Physica A **305**, 124 (2002).
- [4809] F. Baldovin, *Efeitos dinamicos anormais e conexoes com a mecanica estatistica nao extensiva*, in *Tendencias da Fisica Estatistica no Brasil*, ed. T. Tome, volume honoring S.R.A. Salinas (Editora Livraria da Fisica, Sao Paulo, 2003), page 88.
- [4810] L.C. Malacarne, R.S. Mendes and E.K. Lenzi, *q-Exponential distribution in urban agglomeration*, Phys. Rev. E **65**, 017106 (2002).
- [4811] K. Gangopadhyay and B. Basu, *City size distributions for India and China*, Physica A **388**, 2682-2688 (2009).
- [4812] J.M. Sarabia and F. Prieto, *The Pareto-positive stable distribution: A new descriptive model for city size data*, Physica A **388**, 4179-4191 (2009).
- [4813] C. Tsallis, *On mixing and metaequilibrium in nonextensive systems*, Physica A **302**, 187 (2001).
- [4814] A. Robledo, *The renormalization group and optimization of non-extensive entropy: Criticality in non-linear one-dimensional maps*, Physica A **314**, 437 (2002).
- [4815] A.L. Tukmakov, *On the diagnostics of regular and chaotic motion regimes in a dynamic system using the number of states function*, Tech. Phys. Lett. **28**, 224 (2002).
- [4816] T. Galka, *A comparison of two symptom selection methods in vibration-based turbomachinery diagnostics*, J. Vibroengineering **17** (7), 3505-3514 (2015).
- [4817] M. Mohiuddin and R. Kannan, *A new generalization of Rama distribution with application to machinery data*, International Journal of Emerging Technologies in Engineering Research **9** (9), (2021).
- [4818] M. Mohiuddin, H. Al Bayatti and R. Kannan, *A new generalization of Garima distribution with application to real life data*, Appl. Math. Inf. Sci. **15** (5), 577-592 (2021).
- [4819] M. Mohiuddin, R. Kannan, A.A. Alrashed and M. Fasil, *A new generalization of Pranav distribution with application to model real life data*, J. Stat. Appl. Pro. **11** (3), 991-1011 (2022).
- [4820] F. Baldovin and A. Robledo, *Sensitivity to initial conditions at bifurcations in one-dimensional nonlinear maps: Rigorous nonextensive solutions*, Europhys. Lett. **60**, 518 (2002).
- [4821] F. Baldovin and A. Robledo, *Universal renormalization-group dynamics at the onset of chaos in logistic maps and nonextensive statistical mechanics*, Phys. Rev. E **66**, R045104 (2002).
- [4822] F. Baldovin and A. Robledo, *Nonextensive Pesin identity. Exact renormalization group analytical results for the dynamics at the edge of chaos of the logistic map*, Phys. Rev. E **69**, 045202(R) (2004).
- [4823] A. Robledo, *Self-organization and a constrained thermal system analogue of the onset of chaos*, EPL **123**, 40003 (2018), doi: 10.1209/0295-5075/123/40003
- [4824] O. Bui, *Auto-organisation dynamique de systemes a grand nombre de degres de liberte : croissance, complexite et regularite*, Doctor Thesis (Aix-Marseille Universite, 2020).o.
- [4825] L.M. Gaggero-Sager, E.R. Pujals and O. Sotolongo-Costa, *Infinite ergodic theory and non-extensive entropies*, Braz. J. Phys. **41** (4-6), 297-303 (2011).

- [4826] A. Robledo, *Crossover from critical to chaotic attractor dynamics in logistic and circle maps*, in *Complexity and Nonextensivity: New Trends in Statistical Mechanics*, eds. M. Sakagami, N. Suzuki and S. Abe, Prog. Theor. Phys. Suppl. **162**, 10-17 (2006).
- [4827] G. Casati, C. Tsallis and F. Baldovin, *Linear instability and statistical laws of physics*, Europhys. Lett. **72**, 355-361 (2005).
- [4828] S.M.D. Queiros, *On numerical evincement of central limit theorem atypical behavior in the Casati-Prosen triangle map*, preprint (2008), 0802.0406 [cond-mat.stat-mech].
- [4829] S.M.D. Queiros, *The role of ergodicity and mixing in the central limit theorem for Casati-Prosen triangle map variables*, Phys. Lett. A **373**, 1514-1518 (2009).
- [4830] O. Sotolongo-Costa and J. Weberszpil, *Explicit time-dependent entropy production expressions: Fractional and fractal Pesin relations*, Brazilian J. Phys. (2021) (9 pages), doi: 10.1007/s13538-021-00889-5
- [4831] J. Weberszpil, *An extended model of fractional-dimensional space for anisotropic solids with deformed derivatives*, preprint (2025), 2506.18127 [cond-mat.stat-mech].
- [4832] O. Sotolongo-Costa and I.R. Vargas, *Entropy variation in a fractal phase space*, preprint (2021).
- [4833] G. Ruiz-Lopez and C. Tsallis, *q-entropy production in a nontrivial area-preserving length-nonpreserving two-dimensional map*, communication at XV Conference on Nonequilibrium Statistical Mechanics and Nonlinear Physics (4-8 December 2006, Mar del Plata, Argentina).
- [4834] G. Ruiz and C. Tsallis, *Roundoff-induced attractors and reversibility in conservative two-dimensional maps*, Physica A **386**, 720-728 (2007).
- [4835] G. Ruiz and C. Tsallis, *Nonextensivity at the edge of chaos of a new universality class of one-dimensional unimodal dissipative maps*, Eur. Phys. J. B **67**, 577-584 (2009).
- [4836] E. Mayoral and A. Robledo, *Multifractality and nonextensivity at the edge of chaos of unimodal maps*, Physica A **340**, 219 (2004).
- [4837] A. Robledo, *Criticality in nonlinear one-dimensional maps: RG universal map and nonextensive entropy*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 153 (2004).
- [4838] A. Robledo, *Intermittency at critical transitions and aging dynamics at edge of chaos*, Proceedings of Statphys-Bangalore (2004), Pramana-Journal of Physics **64**, 947 (2005).
- [4839] A. Robledo, *Critical attractors and q-statistics*, Europhysics News **36**, 214 (2005) [Europhysics News Special Issue *Nonextensive Statistical Mechanics: New Trends, new perspectives*, eds. J.P. Boon and C. Tsallis (November/December 2005)].
- [4840] A. Robledo, *Critical attractors and q-statistics*, Lecture Course at the CBPF School on Nonextensive Statistical Mechanics (Rio de Janeiro, 2-6 April 2007).
- [4841] E. Mayoral and A. Robledo, *Tsallis' q index and Mori's q phase transitions at edge of chaos*, Phys. Rev. E **72**, 026209 (2005).
- [4842] E. Mayoral and A. Robledo, *A recent appreciation of the singular dynamics at the edge of chaos*, in *Verhulst 200 on Chaos - Understanding Complex Systems*, eds. M. Ausloos and M. Dirickx (Springer-Verlag, Berlin, 2006), pp. 339-354.
- [4843] A. Robledo, F. Baldovin and E. Mayoral, *Two stories outside Boltzmann-Gibbs statistics: Mori's q-phase transitions and glassy dynamics at the onset of chaos*, in *Complexity, Metastability and Nonextensivity*, Proc. 31st Workshop of the International School of Solid State Physics (20-26 July 2004, Erice-Italy), eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 43 [cond-mat/0502458].
- [4844] B. Luque, L. Lacasa and A. Robledo, *Feigenbaum graphs at the onset of chaos*, Phys. Lett. A **376** (47-48), 3625-3629 (2012).
- [4845] A. Robledo and L.J. Camacho-Vidales, *A zodiac of studies on complex systems*, Suplemento de la Revista Mexicana de Fisica **1** (4), 32-53 (2020).
- [4846] A. Diaz-Ruelas and A. Robledo, *Emergent statistical-mechanical structure in the dynamics along the period-doubling route to chaos*, EPL **105**, 40004 (2014) (6 pages), doi: 10.1209/0295-5075/105/40004
- [4847] A. Diaz-Ruelas and A. Robledo, *Sums of variables at the onset of chaos, replenished*, European Physical Journal Special Topics: Temporal and Spatio-Temporal Dynamic Instabilities: Novel Computational and Experimental Approaches (2016), in press, 1608.02891 [nlin.CD].
- [4848] F. Baldovin and A. Robledo, *The noise-perturbed onset of chaos in logistic maps and the dynamics of glass formation*, Phys. Rev. E **72**, 066213 (2005).
- [4849] R.M. Pickup, R. Cywinski, C. Pappas, B. Farago and P. Fouquet, *Generalized spin glass relaxation*, Phys. Rev. Lett. **102**, 097202 (2009).

- [4850] T. Naka, J. Valenta, T. Nakane, S. Ishii, M. Nakayama, H. Mamiya, K. Takehana, N. Tsujii, Y. Imanaka, Y. Matsushita, H. Abe, T. Uchikoshi and H. Yusa, *Phase transitions and slow spin dynamics of slightly inverted A-site spinel $CoAl_{2-x}Ga_xO_4$* , J. Phys.: Condens. Matter **36**, 125801 (2014).
- [4851] J.N. Wagner, W. Haubler, O. Holderer, A. Bauer, S.M. Shapiro and P. Boni, *Influence of concentration fluctuations on relaxation processes in spin glasses*, preprint (2018).
- [4852] T. Naka, T. Nakane, S. Ishii, M. Nakayama, A. Ohmura, F. Ishikawa, A. de Visser, H. Abe, and T. Uchikoshi, *Cluster glass transition and relaxation in random spinel $CoGa_2O_4$* , preprint (2020), arxiv 2010.13291.
- [4853] A. Hart, *Tsallis statistics, anomalous diffusion and neutron time of flight*, preprint (2015).
- [4854] K.J. Ellis, *Neutron and muon studies of spin dynamics in magnetic systems*, Doctor Thesis (University of Huddersfield, June 2013).
- [4855] F. Baldovin, *Routes to chaos, universality and glass formation*, Physica A **372**, 224-237 (2006).
- [4856] F. Baldovin and A. Robledo, *Parallels between the dynamics at the noise-perturbed onset of chaos in logistic maps and the dynamics of glass formation*, Phys. Rev. E **72**, 066213 (2005) (7 pages).
- [4857] A. Robledo, *Unorthodox properties of critical clusters*, Molecular Physics **103**, 3025-3030 (2005).
- [4858] A. Robledo, *q-statistical properties of large critical clusters*, Int. J. Mod. Phys. B **21**, 3947-3953, (2007).
- [4859] H. Hernandez-Saldana and A. Robledo, *Fluctuating dynamics at the quasiperiodic onset of chaos, Tsallis q-statistics and Mori's q-phase thermodynamics*, Physica A **370**, 286-300 (2006).
- [4860] A. Robledo, *Generalized statistical mechanics at the onset of chaos*, Entropy **15**, 5178-5222 (2013), doi:10.3390/e15125178
- [4861] A. Robledo, *Critical fluctuations, intermittent dynamics and Tsallis statistics*, Physica A **344**, 631 (2004).
- [4862] A. Robledo, *Aging at the edge of chaos: Glassy dynamics and nonextensive statistics*, Physica A **342**, 104 (2004).
- [4863] A. Robledo, *Unifying laws in multi-disciplinary power-law phenomena: Fixed-point universality and non-extensive entropy*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [4864] M.D. Shrimali and S. Banerjee, *q-deformed logistic map with delay feedback*, preprint (2012), 1203.3137 [nlin.CD].
- [4865] M.D. Shrimali and S. Banerjee, *Delayed q-deformed logistic map*, Commun. Nonlinear Sci. Numer. Simulat. **18**, 3126-3133 (2013).
- [4866] N.R. Sabe, S.S. Pakhare and P.M. Gade, *Synchronization transitions in coupled q-deformed logistic maps*, Chaos, Solitons and Fractals **181**, 114703 (2024).
- [4867] J. Canovas and M. Munoz-Guillermo, *On the dynamics of the q-deformed logistic map*, Phys. Lett. A (2019), in press, doi: 10.1016/j.physleta.2019.03.003
- [4868] M. Munoz-Guillermo, *Image encryption using q-deformed logistic map*, Information Sciences **552**, 352-364 (2021).
- [4869] J. Canovas and M. Munoz-Guillermo, *On the dynamics of the q-deformed Gaussian map*, Internat. J. Bifurcation and Chaos **30** (8), 2030021 (2020), doi: 10.1142/S0218127420300219
- [4870] M. Munoz-Guillermo, *On the dynamics of the q-deformed Pua's model with cubic investment map*, Chaos, Solitons and Fractals **157**, 111971 (2022).
- [4871] J.S. Canovas, *On q-deformed logistic maps*, Discrete and Continuous Dynamical Systems Series B (2021), doi: 10.3934/dcdsb.2021162
- [4872] B. Ghosh and S. Banerjee, *Amplitude modulation of ion-acoustic waves in magnetized electron-positron-ion plasma with q-nonextensive electrons and positrons*, Journal Tubitak (Turkey, 2015).
- [4873] P. Chatterjee, U.N. Ghosh, S. Nasipuri and M.R. Amin, *Nonextensive effect on the lump soliton structures in dusty plasma*, preprint (2023), 2310.03329 [physics.plasm-ph].
- [4874] M. Mehdipoor and T. Mohsenpour, *Some aspects of the double layer structure in magnetized electronegative plasmas with q-nonextensive electrons*, Phys. Plasmas **22**, 112110 (2015) (8 pages).
- [4875] M. Mehdipoor and M. Asri, *On the characteristics of solitary waves and shocks in nonextensive plasmas: Collisionality and kinematic viscosity effects*, IEEE Transactions on Plasma Science (2019), in press.
- [4876] S. Shabani, T. Mohsenpour and A. Ghadi, *A kinetic theory approach to second harmonic generation by high power laser in magnetized plasma with nonextensive distribution*, Waves in Random and Complex Media (2023), doi: 10.1080/17455030.2023.2268754
- [4877] Z. Rezaeiinia, T. Mohsenpour and S. Mirzanejad, *Effects of axial magnetic field and nonextensivity on small amplitude dust acoustic solitary waves in dusty plasma*, Contrib. Plasma Phys. 1-13 (2018), doi: 10.1002/ctpp.201800089

- [4878] M. Taherimoghadam, I. Motie, A. Bakhshayeshi and T. Mirzayed, *Relativistic effects on dust grain charging in non-equilibrium dusty plasma with relativistic Tsallis distribution*, Phys. Plasmas **26**, 113704 (2019).
- [4879] R.W.S. Pessoa, *Análise de uma deformação do mapa logístico através do q-produto no limiar do caos*, Master Thesis (Salvador, Universidade Federal da Bahia, 2013).
- [4880] N. Lemke and R.M.C. de Almeida, *Evolução temporal da entropia generalizada de Tsallis na difusão sobre o hipercubo*, communicated at the XXV Encontro Nacional de Física da Matéria Condensada (Caxambu, 2002); *Tsallis entropy production for diffusion on the diluted hypercube*, Physica A (2003), in press.
- [4881] N. Lemke and R.M.C. de Almeida, *Tsallis entropy production for diffusion on the diluted hypercube*, Physica A **325**, 396-408 (2003).
- [4882] N. Lemke and R.M.C. de Almeida, *Diffusion on fractal phase spaces and entropy production*, Physica A **340**, 309-315 (2004).
- [4883] Y.S. Weinstein, S. Lloyd and C. Tsallis, *Border between regular and chaotic quantum dynamics*, Phys. Rev. Lett. **89**, 214101 (2002).
- [4884] Y.S. Weinstein, C. Tsallis and S. Lloyd, *On the emergence of nonextensivity at the edge of quantum chaos*, in *Decoherence and Entropy in Complex Systems*, ed. H.-T. Elze, *Lecture Notes in Physics* **633** (Springer-Verlag, Berlin, 2004), page 385.
- [4885] I.S. Gomez and E.P. Borges, *Unified time scales for quantum chaos regimes*, J. Stat. Mech. 063105 (2018).
- [4886] S.M.D. Queiros and C. Tsallis, *Edge of chaos of the classical kicked top map: Sensitivity to initial conditions*, in *Complexity, Metastability and Nonextensivity*, Proc. 31st Workshop of the International School of Solid State Physics (20-26 July 2004, Erice-Italy), eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 135 [cond-mat/0501230].
- [4887] T. Herrmann, M.F.I. Kieler, F. Fritzsche and A. Backer, *Entanglement in coupled kicked tops with chaotic dynamics*, Phys. Rev. E **101**, 022221 (2020).
- [4888] T. Prosen, *Introduction: From efficient quantum computation to nonextensive statistical mechanics*, in *Decoherence and Entropy in Complex Systems*, ed. H.-T. Elze, *Lecture Notes in Physics* **633** (Springer-Verlag, Berlin, 2004), page 321.
- [4889] R.H. Moretti, M.F. Borges, J.M. Machado and C. Brandao, *Entropy effect in quantum computing and information: An open-source environment simulation*, Internat. J. Pure Appl. Mathematics **97** (4), 377-393 (2014), doi: <http://dx.doi.org/10.12732/ijpam.v97i4.1>
- [4890] R.H. Moretti, *Análise do efeito de entropia em computação quântica: Simulações em ambiente paralelo*, Master Thesis (UNESP, São José do Rio Preto, 2015).
- [4891] Q. Wang, J. Guan, J. Liu, Z. Zhang and M. Ying, *New quantum algorithms for computing quantum entropies and distances*, IEEE Transactions on Information Theory **70** (8) (2024).
- [4892] F.D. Nobre and A.M.C. Souza, *Statistics of the eigenvalues of Tsallis matrices*, Physica A **339**, 354 (2004).
- [4893] F.M. Ramos, C.A. Wuensche, A.L.B. Ribeiro and R.R. Rosa, *Multiscaling and nonextensivity of large-scale structures in the universe*, Physica D **168-169**, 404 (2002).
- [4894] R.V. Ramos, *Solving integer and fractional polynomials with the $R_{q,Q}$ Function*, preprint (2024).
- [4895] T.J.P. Penna, J.C. Sartorelli, R.D. Pinto and W.M. Gonçalves, *Dripping faucet as a nonextensive system*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [4896] F. Sattin, *On the computation of the entropy for dissipative maps at the edge of chaos using non-extensive statistical mechanics*, preprint (2002) [cond-mat/0212173].
- [4897] F. Brouers and O. Sotolongo-Costa, *Universal relaxation in nonextensive systems*, Europhys. Lett. **62**, 808 (2003).
- [4898] F. Brouers and O. Sotolongo-Costa, *Relaxation in heterogeneous systems: A rare events dominated phenomenon*, Physica A **356**, 359-374 (2005).
- [4899] F. Brouers, *Sorption isotherms and probability theory of complex systems*, preprint (2013), 1309.5340 [cond-mat.dis-nn].
- [4900] F. Brouers and T.J. Al-Musawi, *Brouers-Sotolongo fractal kinetics versus fractional derivative kinetics: a new strategy to analyze the pollutants sorption kinetics in porous materials*, J. Hazardous Materials (2018), doi: 10.1016/j.jhazmat.2018.02.015
- [4901] F. Brouers, *Statistical foundation of empirical isotherms*, Open Journal of Statistics **4**, 687-701 (2014).
- [4902] M. Mohiuddin, R. Kannan, H.S. Migdadi and M. Khder, *On the alpha power transformed quasi Aradhana distribution: Properties and applications*, Appl. Math. Inf. Sci. **16** (2), 197-211 (2022).
- [4903] M. Mohiuddin and R. Kannan, *On alpha power transformed Shanker distribution: Properties and its applications*, Internat. J. Statistics and Reliability Engineering **8** (3), 350-358 (2021).

- [4904] M. Mohiuddin and R. Kannan, *Characterization and estimation of alpha power Sujatha distribution with applications to engineering data*, International Research Journal of Engineering and Technology **09** (03), (2022).
- [4905] G.A. Tsekouras, A. Provata and C. Tsallis, *Nonextensivity of the cyclic lattice Lotka Volterra model*, Phys. Rev. E **69**, 016120 (2004).
- [4906] D. Bazeia, M. Bongestab and B.F. de Oliveira, *Chaotic behavior in Lotka-Volterra and May-Leonard models of biodiversity*, preprint (2024), 2405.00817 [cond-mat.stat-mech].
- [4907] C. Anteneodo, *Entropy production in the cyclic lattice Lotka-Volterra model*, Eur. Phys. J. B **42**, 271 (2004).
- [4908] Q.A. Wang, *Measuring the information growth in fractal phase space*, preprint (2003) [cond-mat/0305540].
- [4909] Q.A. Wang and A. Le Mehaute, *Measuring information growth in fractal phase space*, Chaos, Solitons and Fractals **21**, 893 (2004).
- [4910] Q.A. Wang, L. Nivanen, A. Le Mehaute and M. Pezeril, *Fractal geometry, information growth and nonextensive thermodynamics*, Physica A **340**, 117 (2004).
- [4911] A. Robledo, *Universal glassy dynamics at noise-perturbed onset of chaos: A route to ergodicity breakdown*, Phys. Lett. A **328**, 467 (2004).
- [4912] J.F. Douglas, Q.L. Yuan, J. Zhang, H. Zhang and W.S. Xu, *A dynamical system approach to relaxation in glass-forming liquids*, Soft Matter (2024).
- [4913] G. Bel and E. Barkai, *Ergodicity breaking in a deterministic dynamical system*, preprint (2005) [nlin.CD/0507036].
- [4914] A. Prestes de Menezes Filho, *Nao-extensividade termodinamica, invariancia discreta de escala e elastoplasticidade: Estudo numerico de um modelo geomecanico auto-organizado criticamente*, Doctor Thesis (Civil Engineering, Pontificia Universidade Catolica do Rio de Janeiro, 2003) [In Portuguese].
- [4915] G. Benedek, H.V. Tafreshi and P. Milani, *Fractal growth of carbon schwrazites*, Proc. 31st Workshop of the International School of Solid State Physics (20-26 July 2004, Erice-Italy), eds. C. Beck, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 146.
- [4916] T. Rohlf and C. Tsallis, *Dynamics and nonextensivity of elementary 1D cellular automata with long range memory*, communicated at the School and Conference on Complex Systems and Nonextensive Statistical Mechanics (Trieste, 2006).
- [4917] T. Rohlf and C. Tsallis, *Long-range memory elementary 1D cellular automata: Dynamics and nonextensivity*, Physica A **379**, 465-470 (2007).
- [4918] M.A. Pires, G. Di Molfetta and S.M.D. Queiros, *Multiple transitions between normal and hyperballistic diffusion in quantum walks with time-dependent jumps*, Scientific Reports **9**, 19292 (2019).
- [4919] V. Garcia-Morales, *Diagrammatic approach to cellular automata and the emergence of form with inner structure*, Communications in Nonlinear Science and Numerical Simulation **63**, 117-134 (2018).
- [4920] T. Toyozumi and K. Aihara, *Generalization of the mean-field method for power-law distributions*, Int. J. Bifurcation and chaos **16**, 129-135 (2006).
- [4921] Y. Chen and K. Aihara, *Some convex functions based measures of independence and their application to strange attractor reconstruction*, Entropy **13**, 820-840 (2011).
- [4922] A.I. Olemskoi, V.O. Kharchenko and V.N. Borisjuk, *Multifractal spectrum of phase space related to generalized thermostatics*, Physica A **387**, 1895-1906 (2008).
- [4923] V. Novikov, S. Kruchinin, N.N. Bogolubov and S. Adamenko, *Self-organization and nonequilibrium structures in the phase space*, Int. J. Mod. Phys. B **22**, 2025-2045 (2008).
- [4924] S. Adamenko, V. Bolotov, V. Novikov and V. Yatsyshin, *Control of multiscale systems with constraints 4. Control of the evolution of nuclear systems on the basis of the principle of dynamical harmonization*, Interdisciplinary Studies of Complex Systems **3**, 35-95 (2013).
- [4925] B.R. Gadjiev, *Disorder and critical phenomena*, preprint (2008), 0809.5036 [cond-mat.stat-mech].
- [4926] B.R. Gadjiev, *Phase transition in generalized inhomogeneous 'cubic' systems*, J. Phys. - Conf. Series **284**, 012026 (2011) (10 pages).
- [4927] T. Martins, *Estatistica de Tsallis/Superestatistica: Aplicacao a um modelo cinetico de Ising*, Thesis (Universidade do Porto-Portugal, 2004).
- [4928] A.I. Olemskoi, V.I. Ostrik and S.V. Kokhan, *Complexity of hierarchical ensembles*, Physica A **388**, 609-620 (2009).
- [4929] A.I. Olemskoi, A.S. Vaylenko and I.A. Shuda, *Self-similarity degree of deformed statistical ensembles*, Physica A **388**, 1929-1938 (2009).
- [4930] A. Olemskoi and I. Shuda, *Statistical theory of self-similarly distributed fields*, Phys. Lett. A **373**, 4012-4016 (2009).

- [4931] K. Yamasaki and K.Z. Nanjo, *A new mathematical tool for analyzing the fracturing process in rock: Partial symmetry of microfracturing*, Physics of the Earth and Planetary Interiors **173**, 297-305 (2009).
- [4932] S.P. Mahulikar and Herwig, *Exact thermodynamic principles for dynamic order existence and evolution in chaos*, Chaos, Solitons and Fractals **41**, 1939-1948 (2009).
- [4933] T.D. Frank, *Chaos from nonlinear Markov processes: Why the whole is different from the sum of its parts*, Physica A **388**, 4241-4247 (2009).
- [4934] D.A. Tayurskii and Yu.V. Lysogorskii, *Nonextensive entropy of quantum liquid in fractal dimension space*, J. Low Temp. Phys. **158**, 237-243 (2010).
- [4935] A. Olemskoi, I. Shuda and V. Borisyuk, *Generalization of multifractal theory within quantum calculus*, Europhys. Lett. **89** (5), 50007 (2010) (6 pages).
- [4936] A.I. Olemskoi, O.V. Yushchenko and A.Yu. Badalyan, *Statistical field theory of a nonadditive system*, Theor. Math. Phys. **174** (3), 386-405 (2013).
- [4937] A. Yu. Badalyan, *Formation and modes of motion of ensembles of nanoparticles in the framework of statistical theory*, Doctor Thesis (Sumy State University, Sumy, 2018).
- [4938] O. Obregon, *Superstatistics and gravitation*, Entropy **12**, 2067-2076 (2010).
- [4939] O. Obregon, *Generalized information and entanglement entropy, gravitation and holography*, Internat. J. Mod. Phys. A **30** (16), 1530039 (2015) (17 pages), doi: 10.1142/S0217751X15300392
- [4940] O. Obregon, J.L. Lopez and M. Ortega-Cruz, *On quantum superstatistics and the critical behavior of nonextensive ideal Bose gases*, Entropy **20**, 773 (2018), doi: 10.3390/e20100773
- [4941] F. Adli, H. Mohammadzadeh, M.N. Najafi and Z. Ebadi, *Condensation of nonextensive ideal Bose gas and critical exponents*, Physica A **521**, 773-780 (2019).
- [4942] A. Martinez-Merino and O. Obregon, *Modified entropies, their corresponding Newtonian forces, potentials, and temperatures*, Phys. Rev. D **95**, 124031 (2017).
- [4943] A. Martinez-Merino and M. Sabido, *On superstatistics and black hole quasinormal modes*, preprint (2021), 2106.15751 [gr-qc].
- [4944] C. Wick, J. Um and H. Hinrichsen, *Entanglement formation under random interactions*, J. Phys. A: Math. Theor. **49**, 025303 (2016) (21 pages), doi:10.1088/1751-8113/49/2/025303
- [4945] X. Yang, Y.H. Yang, L.M. Zhao and M.X. Luo, *A new entanglement measure based dual entropy*, preprint (2022), 2204.07407 [quant-ph].
- [4946] B.R. Gadjiev, *Superstatistics for fractional systems*, preprint (2013), 1305.0933 [cond-mat.stat-mech].
- [4947] K. Kiyono and H. Konno, *Log-amplitude statistics for Beck-Cohen superstatistics*, Phys. Rev. E **87**, 052104 (2013) (10 pages).
- [4948] K. Kiyono, *Log-amplitude cumulants and parameter estimation for Beck-Cohen superstatistics*, IEEE International Conference on Noise and Fluctuations (2013) (4 pages).
- [4949] H.H. Jung, *Gamma function to Beck-Cohen superstatistics*, Physica A **392**, 4288-4298 (2013).
- [4950] A.S. Sharma, M.J. Aschwanden, N.B. Crosby, A.J. Klimas, A.V. Milovanov, L. Morales, R. Sanchez and V. Uritsky, *25 years of self-organized criticality: Space and laboratory plasmas*, Space Sci. Rev. **198**, 167-216 (2016), doi: 10.1007/s11214-015-0225-0
- [4951] H.H. Hasegawa, T. Nakamura and D.J. Driebe, *Generalized second law for a simple chaotic system*, Chaos **27**, 104606 (2017) (10 pages).
- [4952] I.A.R. Martins and A.C.P. Rosa Junior, *Fractalidade em transicao de fase de 1a ordem: um estudo com a ebulicao da agua*, Pesquisare **1** (1), 53 (2017).
- [4953] I.B. Israfil, *Control of the dynamics of a complex system [in Russian]*, (2019), doi: 10.31618/ESU.2413-9335.2019.5.69.498
- [4954] V. Pavanelli Vianna, *Generalized mutual information metrics for affine brain image registration: proposal and evaluation*, Doctor Thesis (2021, Universidade de Sao Paulo, Faculdade de Filosofia, Ciencias e Letras, Programa de Pos-Graduacao em Fisica Aplicada a Medicina e Biologia, Ribeirao Preto).
- [4955] Z.W. Wei, M.X. Luo and S.M. Fei, *Estimating parameterized entanglement measure*, Quantum Information Processing **21**, 210 (2022).
- [4956] A. Rodriguez, A. Pluchino, U. Tirnakli, A. Rapisarda and C. Tsallis, *Nonextensive footprints in dissipative and conservative dynamical systems*, Symmetry **15**, 444 (2023).
- [4957] R. Alfano and P. Smith, *Inverse antipodal maps and nonlocal nonlinear dynamics*, Nonlinearity (2023), in press.
- [4958] S. Motaghed, M. Mohammadi, N. Eftekhari and M. Khazaei, *SCP parameters estimation for catalogs with uncertain seismic magnitude values*, Acta Geophysica (2024).

- [4959] K.S. Ferreira, *Aplicacao da teoria do caos a diferentes geometrias de taludes mistos*, Master Thesis (Universidade do Estado do Rio de Janeiro, 2024).
- [4960] M. Cmil, D. Strzalka, F. Grabowski and P. Kuras, *New approaches to generalized logistic equation with bifurcation graph generation tool*, *Advances in Science and Technology Research Journal* **18** (6), 1-12 (2024).
- [4961] E. de la Barra, P. Vega-Jorquera and S.L.E.F. da Silva, *Multimodal non-extensive frequency-magnitude distributions and their relationship to multi-source seismicity*, *Entropy* **26**, 1040 (2024).
- [4962] S.B. Carvalho, *Indices fractais alternativos a dimensao box-counting: Dimensao da informacao e lacunaridade*, Thesis (Departamento de Ciencias Exatas e da Terra - Campus II, Programa de Pos-Graduacao em Modelagem e Simulacao de Biosistemas, Universidade do Estado da Bahia, 2024).
- [4963] V.H. Hamity and D.E. Barraco, *Generalized nonextensive thermodynamics applied to the cosmic background radiation in a Robertson-Walker universe*, *Phys. Rev. Lett.* **76**, 4664 (1996).
- [4964] G.G. Luciano and M. Blasone, *q-generalized Tsallis thermostatics in Unruh effect for mixed fields*, *Phys. Rev. D* **104**, 045004 (2021).
- [4965] S.S. Bayin, *Is the universe flat?*, preprint (2013), 1309.5815 [gr-qc].
- [4966] G.G. Luciano and M. Blasone, *Nonextensive Tsallis statistics in Unruh effect for Dirac neutrinos*, *Eur. Phys. J. C* **81**, 995 (2021).
- [4967] G.G. Luciano, *Tsallis statistics and generalized uncertainty principle*, *Eur. Phys. J. C* **81**, 672 (2021).
- [4968] G.G. Luciano, *Primordial big bang nucleosynthesis and generalized uncertainty principle*, *Eur. Phys. J. C* **81**, 1086 (2021).
- [4969] G.G. Luciano and J. Gine, *Baryogenesis in non-extensive Tsallis cosmology*, *Phys. Lett. B* **833**, 137352 (2022).
- [4970] S. Mondal and A. Choudhuri, *Dynamics of cosmological phase crossover during Bose-Einstein condensation of dark matter in Tsallis cosmology*, *Eur. Phys. J. C* **84**, 1174 (2024).
- [4971] S. Rani, A. Jawad, M. Heydari-Fard and U. Zafar, *Thermodynamic and shadow analysis of Dehnen type dark matter halo corrected Schwarzschild black hole surrounded by thin disk*, preprint (2025).
- [4972] F. Mushtaq, A. Jawad, T. Xia, M.M. Alam and S. Shaymatov, *Thermodynamic study of specific black hole inspired by generalized entropy*, *Physics Letters A* **548**, 130552 (2025).
- [4973] J. Choi, D. Jang, Y. Kwon, G. Seong, M.H. Mun, Y.M. Kim, K. Kwak and M.K. Cheoun, *Effects of pair freeze-out on photon distributions in BBN epoch*, preprint (2024), 2402.13186 [astro-ph.CO].
- [4974] K.K. Chokyi and S. Chattopadhyay, *Cosmology of Tsallis and Kaniadakis holographic dark energy in Saez-Ballester theory and consideration of viscous van der Waals fluid*, *Annals of Physics* (2024), in press.
- [4975] K.V.S. Sireesha and P.E. Satyanarayana, *Renyi Holographic dark energy models in Saez-Ballester theory of gravitation*, preprint (2024).
- [4976] S. Basilakos, A. Lymperis, M. Petronikolou and E.N. Saridakis, *Alleviating both H_0 and σ_8 tensions in Tsallis cosmology*, *European Physical Journal C* **84** (3) (2024).
- [4977] M. Petronikolou, S. Basilakos, A. Lymperis and E.N. Saridakis, *Alleviating both H_0 and σ_8 tensions through Tsallis entropy*, *PoS (CORFU 2023)174* (2023).
- [4978] M. Blasone, G. Lambiase, G.G. Luciano and L. Petrucciello, *Unruh effect for mixed neutrinos and the KMS condition*, *Universe* **8**, 306 (2022), doi: 10.3390/universe8060306
- [4979] P. Jizba, G. Lambiase, G.G. Luciano and L. Petrucciello, *Decoherence limit of quantum systems obeying generalized uncertainty principle: new paradigm for Tsallis thermostatics*, *Phys. Rev. D* **105**, L121501 (2022).
- [4980] P. Jizba and G. Lambiase, *Tsallis cosmology and its applications in dark matter physics with focus on IceCube high-energy neutrino data*, *Eur. Phys. J. C* **82**, 1123 (2022).
- [4981] E. Cervantes and A. Hryczuk, *Freezing-in cannibal dark sectors*, preprint (2024), 2407.12104 [hep-ph].
- [4982] M.L. Mendoza-Martinez, A. Cervantes-Contreras, J.J. Trejo-Alonso and A. Hernandez-Almada, *Constraints on Tsallis cosmology using recent low and high redshift measurements*, *Eur. Phys. J. C* **84**, 717 (2024).
- [4983] T. Denkiewicz, V. Salzano and M.P. Dabrowski, *Barrow nearly-extensive Gibbs-like entropy favored by dynamical and geometrical data sets in cosmology*, *Phys. Rev. D* **108**, 103533 (2023).
- [4984] P. Jizba and G. Lambiase, *Constraints on Tsallis cosmology from Big Bang nucleosynthesis and the relic abundance of cold dark matter particles*, *Entropy* **25**, 1495 (2023).
- [4985] P. Jizba, G. Lambiase, G.G. Luciano and L. Mastrototaro, *Imprints of Barrow-Tsallis cosmology in primordial gravitational waves*, *Eur. Phys. J. C* **84**, 1076 (2024).
- [4986] P. Jizba, G. Lambiase, G.G. Luciano and L. Petrucciello, *Coherent states for generalized uncertainty relations as Tsallis probability amplitudes: new route to non-extensive thermostatics*, preprint (2023), 2308.12368v1 [gr-qc].

- [4987] M. Blasone, G. Lambiase and G.G. Luciano, *Kaniadakis entropy-based characterization of IceCube PeV neutrino signals*, Physics of the Dark Universe **42**, 101342 (2023).
- [4988] E. Ebrahimi and A. Sheykhi, *Ghost dark energy in Tsallis and Barrow cosmology*, Physics of the Dark Universe **45**, 101518 (2024).
- [4989] H.R.M. Zarandi, Y. Toda and E. Ebrahimi, *Investigating cosmology models through usual and dual Kaniadakis entropies: theoretical and observational tensions and features*, Eur. Phys. J. C **85**, 589 (2025).
- [4990] Y. Gu, J. Tang, L. Wu and B. Zhu, *Probing light DM via the Migdal effect with spherical proportional counter*, Chinese Physics C **47** (12), 125105 (2023).
- [4991] D. Bose and S. Sarkar, *Impact of galactic distributions in celestial capture of dark matter*, Phys. Rev. D **107**, 063010 (2023).
- [4992] J. Li, L. Su, L. Wu and B. Zhu, *Spin-dependent sub-GeV inelastic dark matter-electron scattering and Migdal effect: (I). Velocity independent operator*, preprint (2022), 2210.15474 [hep-ph].
- [4993] V.H. Hamity and D.E. Barraco, *Relativistic nonextensive kinetic theory*, Physica A **282**, 203 (2000).
- [4994] L.P. Chimento, *Form invariance of differential equations in general relativity*, J. Math. Phys. **38**, 2565 (1997).
- [4995] D.F. Torres, H. Vucetich and A. Plastino, *Early universe test of nonextensive statistics*, Phys. Rev. Lett. **79**, 1588 (1997) [Erratum: **80**, 3889 (1998)].
- [4996] U. Tirnakli and D.F. Torres, *Quantal distribution functions in non-extensive statistics and an early universe test revisited*, Physica A **268**, 225 (1999).
- [4997] M. Dehpour, *Thermal leptogenesis in nonextensive cosmology*, Eur. Phys. J. C **84**, 340 (2024).
- [4998] S.Y. Kuzu, *Understanding of early universe with the measurements of $K^*(892)^0$ and $\Phi(1020)$ resonances*, Academic Studies in Science and Mathematics Sciences, Eds. S.I. Ucuncu and T.V. Soldatovic, (2020).
- [4999] L.P. Chimento, F. Pennini and A. Plastino, *Cosmological applications of the Frieden-Soffer nonextensive information transfer game*, Physica A **256**, 197 (1998).
- [5000] M. Harper, *Escort evolutionary game theory*, Physica D **240**, 1411-1415 (2011).
- [5001] M. Harper and D. Fryer, *Incentive processes in finite populations*, preprint (2013), 1306.2389 [math.DS].
- [5002] M. Harper and D. Fryer, *Stationary stability for evolutionary dynamics in finite populations*, Entropy **18** (9) (2016), doi: 10.3390/e18090316
- [5003] L.P. Chimento, F. Pennini and A. Plastino, *The Frieden-Soffer extreme physical information principle in a non-extensive setting*, Phys. Lett. A **257**, 275 (1999).
- [5004] D.F. Torres and H. Vucetich, *Cosmology in a non-standard statistical background*, Physica A **259**, 397 (1998).
- [5005] D.F. Torres, *Precision cosmology as a test for statistics*, Physica A **261**, 512 (1998).
- [5006] H.P. de Oliveira, S.L. Sautu, I.D. Soares and E.V. Tonini, *Chaos and universality in the dynamics of inflationary cosmologies*, Phys. Rev. D **60**, 121301 (1999).
- [5007] R.F. Aranha and H.P. de Oliveira, *Similarity in the Arnowitt-Deser-Misner mass from Brill and Teukolsky initial data sets beyond the linear approximation*, Phys. Rev. D **110**, 124058 (2024).
- [5008] M.R. Setare, D. Momeni, V. Kamali and R. Myrzakulov, *Inflation driven by q-de Sitter in light of Planck 2013 and BICEP2 results*, preprint (2014), 1409.3200 [physics.gen-ph].
- [5009] M.R. Setare, D. Momeni, V. Kamali and R. Myrzakulov, *Inflation driven by q-de Sitter*, Int. J. Theor. Phys. **55**, 1003-1018 (2016), doi: 10.1007/s10773-015-2743-7
- [5010] R. Nakarachinda, E. Hirunsirisawat, L. Tannukij and P. Wongjun, *Effective thermodynamical system of Schwarzschild-de Sitter black holes from Renyi statistics*, preprint (2021), 2106.02838 [gr-qc].
- [5011] P. Chunaksorn, E. Hirunsirisawat, R. Nakarachinda, L. Tannukij and P. Wongjun, *Thermodynamics of asymptotically de Sitter black hole in dRGT massive gravity from Renyi entropy*, Eur. Phys. J. C **82**, 1174 (2022).
- [5012] L. Tannukij, P. Wongjun, E. Hirunsirisawat, T. Deesuwat and C. Promsiri, *Thermodynamics and phase transition of spherically symmetric black hole in de Sitter space from Renyi statistics*, Eur. Phys. J. Plus (2020), doi: 10.1140/epjp/s13360-020-00517-2
- [5013] C. Promsiri, E. Hirunsirisawat and W. Liewrian, *Solid/liquid phase transition and heat engine in asymptotically flat Schwarzschild black hole via the Renyi extended phase space approach*, Phys. Rev. D **104**, 064004 (2021).
- [5014] C. Promsiri, E. Hirunsirisawat and R. Nakarachinda, *Emergent phase, thermodynamic geometry, and criticality of charged black holes from Renyi statistics*, Phys. Rev. D **105**, 124049 (2022).
- [5015] R. Nakarachinda, E. Hirunsirisawat, L. Tannukij and P. Wongjun, *Effective thermodynamical system of Schwarzschild-de Sitter black holes from Renyi statistics*, Phys. Rev. D **104**, 064003 (2021).
- [5016] H.P. de Oliveira, I.D. Soares and E.V. Tonini, *Chaos and universality in the dynamics of inflationary cosmologies. II. The role of nonextensive statistics*, Phys. Rev. D **67**, 063506 (2003).

- [5017] H.P. de Oliveira, I.D. Soares and E.V. Tonini, *Universality in the chaotic dynamics associated with saddle-centers critical points*, Physica A **295**, 348 (2001).
- [5018] H.P. de Oliveira, I. D. Soares and E.V. Tonini, *Role of the nonextensive statistics in a three-degrees of freedom gravitational system*, Phys. Rev. D **70**, 084012 (2004).
- [5019] H.P. Oliveira and I.D. Soares, *Dynamics of black hole formation: Evidence for nonextensivity*, Phys. Rev. D **71**, 124034 (2005).
- [5020] H.P. Oliveira and I.D. Soares, *Black hole nonextensive entropy: Formation processes signalized by gravitational wave emission*, Int. J. Mod. Phys. D **17**, 541-544 (2008).
- [5021] R.F. Aranha, H.P. de Oliveira, I.D. Soares and E.V. Tonini, *The efficiency of gravitational bremsstrahlung production in the collision of two Schwarzschild black holes*, Int. J. Mod. Phys. D **17**, 2049-2064 (2008).
- [5022] R.F. Aranha, I.D. Soares, H.P. Oliveira and E.V. Tonini, *Energy and momentum loss by gravitational radiation emission in the collision of two Schwarzschild black holes*, Int. J. Mod. Phys. A **24**, 1583-1587 (2009).
- [5023] H.P. de Oliveira, I.D. Soares and E.V. Tonini, *Black-hole bremsstrahlung and the efficiency of mass-energy radiative transfer*, Phys. Rev. D **78**, 044016 (2008) (12 pages).
- [5024] H.P. de Oliveira and I.D. Soares, *Gravitational Wave Emission from a Bounded Source: the Nonlinear Regime*, preprint (2022).
- [5025] J.B. You, X. Xiong, P. Bai, Z.K. Zhou, W.L. Yang, C.E. Png and L. Wu, *Increase coherent time in plasmonic system by spectral hole burning effect*, preprint (2020), 2003.10103 [quant-ph].
- [5026] R.F. Aranha and I.D. Soares and E.V. Tonini, *Mass-energy radiative transfer and momentum extraction by gravitational wave emission in the collision of two black holes*, Phys. Rev. D **81**, 104005 (2010) (14 pages).
- [5027] T.S. Biro, *Non-extensive black hole thermodynamics estimate for power-law particle spectra*, preprint (2010), 1011.3442 [hep-ph].
- [5028] T.S. Biro and E. Molnar, *Fluid dynamical equations and transport coefficients of relativistic gases with non-extensive statistics*, Phys. Rev. C **85** (2), 024905 (2012).
- [5029] H.P. de Oliveira and E.L. Rodrigues, *Numerical evolution of radiative Robinson-Trautman spacetimes*, Class. Quantum Grav. **25**, 205020 (2008) (21 pages).
- [5030] H.P. de Oliveira, E.L. Rodrigues and J.E.F. Skea, *Gravitational collapse of scalar fields via spectral methods*, Phys. Rev. D **82**, 104023 (2010) (10 pages).
- [5031] K. Nozari and S.H. Mehdipour, *Failure of standard thermodynamics in Planck scale black hole system*, Chaos, Solitons and Fractals **39**, 956-970 (2009).
- [5032] P.H. Chavanis, *Relativistic stars with a linear equation of state: analogy with classical isothermal spheres and black holes*, Astronomy and Astrophysics **483**, 673-698 (2008).
- [5033] P.H. Chavanis, *Dynamical and thermodynamical stability of two-dimensional flows: variational principles and relaxation equations*, Eur. Phys. J. B **70**, 73-105 (2009).
- [5034] I.T. Pedron and C.H. Coimbra-Araujo, *Brownian motion of black holes in stellar systems with non-Maxwellian distribution for the stars field*, Communicated at XXVI Int. Astronomical Union General Assembly, Symp. 238 (Prague, Czech Republic, Aug 21-25 2006) [astro-ph/0703368].
- [5035] J. Dolbeault and J. Fernandez, *Localized minimizers of flat rotating gravitational systems*, Ann. I. H. Poincaré AN **25**, 1043-1071 (2008).
- [5036] H. Yu and J. Du, *The nonextensive parameter for the rotating astrophysical systems with power-law distributions*, EPL **116**, 60005 (2016) (7 pages), doi: www.epljournal.org doi: 10.1209/0295-5075/116/60005
- [5037] C.J. Saxton and K. Wu, *Radial structure, inflow and central mass of stationary radiative galaxy clusters*, Mon. Not. R. Astron. Soc. **391**, 1403-1436 (2008).
- [5038] C.J. Saxton, Z. Younsi and K. Wu, *Dark matter concentrations in galactic nuclei according to polytropic models*, MNRAS **461**, 4295-4316 (2016).
- [5039] J. Sanchez Almeida, I. Trujillo and A.R. Plastino, *The principle of maximum entropy explains the cores observed in the mass distribution of dwarf galaxies*, Astronomy and Astrophysics **642**, L14 (2020).
- [5040] J. Sanchez Almeida and I. Trujillo, *Numerical simulations of dark matter haloes produce polytropic central cores when reaching thermodynamic equilibrium*, MNRAS **504**, 2832-2840 (2021), doi: 10.1093/mnras/stab1103
- [5041] J. Sanchez Almeida and I. Trujillo, *Numerical simulations of dark matter haloes produce polytropic central cores when reaching thermodynamic equilibrium*, preprint (2021), 2104.08055 [astro-ph.GA].
- [5042] R. Anantua, J. Duran, N. Ngata, L. Oramas, J. Roder, R. Emami, A. Ricarte, B. Curd, A.E. Broderick, J. Wayland, G.N. Wong, S. Ressler, N. Nigam and E. Durodola, *Emission modeling in the EHT?ngEHT age*, Galaxies **11**, 4 (2023).

- [5043] A. Balaguera-Antolinez, A.G. Sanchez, H. Bohringer, C. Collins, L. Guzzo and S. Phleps, *The REFLEX II galaxy cluster survey: power spectrum analysis*, Mon. Not. R. Astron. Soc. **413**, 386-400 (2011).
- [5044] E. Salvador-Sole, A. Manrique and I. Botella, *An Accurate Comprehensive Approach to Substructure: II. Stripped Subhaloes*, preprint (2021), 2109.06490 [astro-ph.CO].
- [5045] M.B. Cantcheff and J.A.C. Nogales, *Non-Boltzmann statistics as an alternative to holography*, Int. J. Mod. Phys. A **21**, 3127-3131 (2006).
- [5046] N.W. Evans and J.H. An, *Distribution function of dark matter*, Phys. Rev. D **73**, 023524 (2006).
- [5047] M.P. Leubner, *Nonextensive statistics in astro-particle physics: Status and impact for dark matter/dark energy theory*, in *Dark Matter in Astrophysics and Particle Physics*, eds. H.V. Klapdor-Kleingrothaus and I.V. Krivosheina, Proceedings of the 7th International Heidelberg Conference on Dark 2009 (Christchurch, New Zealand, 18-24 January 2009), pages 194-205 (World Scientific, Singapore, 2010).
- [5048] K. Ourabah and T. Yamano, *Nonlinear Schrodinger equations involved in dark matter halos: modulational instability*, Eur. Phys. J. Plus **135**, 634 (2020), doi: 10.1140/epjp/s13360-020-00648-6
- [5049] A. Radick, A.M. Taki and T.T. Yu, *Dependence of dark matter - Electron scattering on the galactic dark matter velocity distribution*, preprint (2020).
- [5050] A.R. Radick, *Leptons as a window to dark matter*, Doctor Thesis (university of Oregon, 2024).
- [5051] F.S. Ling, *Is the dark disc contribution to dark matter signals important?*, Phys. Rev. D **82**, 023534 (2010) (10 pages).
- [5052] J. Calvo, E. Florido, O. Sanchez, E. Battaner, J. Soler and B. Ruiz-Granados, *On an unified theory of cold matter dark halos based on collisionless Boltzmann-Poisson polytropes*, Physica A **388**, 2321-2330 (2009).
- [5053] N. Bozorgnia, F. Calore, M. Schaller, M. Lovell, G. Bertone, C.S. Frenk, R.A. Crain, J.F. Navarro, J. Schaye and T. Theuns, *Simulated Milky Way analogues: implications for dark matter direct searches*, J. Cosmology and Astroparticle Physics **05**, 024 (2016).
- [5054] N. Bozorgnia and G. Bertone, *Implications of hydrodynamical simulations for the interpretation of direct dark matter searches*, Internat. J. Mod. Phys. A **32** (21) (2017), doi: 10.1142/S0217751X17300162
- [5055] M.K. Verma, R. Stepanov and A. Delache, *Contrasting thermodynamic and hydrodynamic entropy*, preprint (2024), 2411.03135 [cond-mat.stat-mech].
- [5056] T. Piff, Z. Penoyre and J. Binney, *Bringing the Galaxy's dark halo to life*, MNRAS **451**, 639-650 (2015), doi:10.1093/mnras/stv938
- [5057] H.S. Gimenes, G.M. Viswanathan and R. Silva, *Λ CDM model with dissipative nonextensive viscous dark matter*, Physica A **494**, 331-339 (2018).
- [5058] J.D. Vergados, S.H. Hansen and O. Host, *Impact of going beyond the Maxwell distribution in direct dark matter detection rates*, Phys. Rev. D **77**, 023509 (2008) (10 pages).
- [5059] J.A.S. Lima and M.H. Benetti, *Non-Gaussian velocity distributions Maxwell would understand*, Revista Brasileira de Ensino de Fisica, vol. xx, xx, xxxx (2025), 2502.21061 [cond-mat.stat-mech].
- [5060] D. Nunez, R.A. Sussman, J. Zavala, L.G. Cabral-Rosetti and T. Matos, *Empirical testing of Tsallis' thermodynamics as a model for dark matter halos*, AIP Conference Proceedings, **857** A, 316-320 (2006) [astro-ph/0604126].
- [5061] F.S. Ling, E. Nezri, E. Athanassoula and R. Teyssier, *Dark matter direct detection signals inferred from a cosmological N-body simulation with baryons*, J. Cosmology and Astroparticle Phys. **2**, 012 (2010) (37 pages).
- [5062] A. Guha, J. Selvaganapathy and P.K. Das, *q-deformed statistics and the role of light fermionic dark matter in SN1987A cooling*, Phys. Rev. D **95**, 015001 (2017) (12 pages).
- [5063] A. Guha and P.K. Das, *Constraints on light dark matter fermions from relic density consideration and Tsallis statistics*, J. High Energy Physics **6**, 1-18 (2018).
- [5064] A. Guha, P.S. Bhupal Dev and P.K. Das, *Model-independent astrophysical constraints on leptophilic dark matter in the framework of Tsallis statistics*, Journal of Cosmology and Astroparticle Physics JCAP02, 032 (2019).
- [5065] J. Bharali and K. Das, *Modified Tsallis holographic dark energy*, Astrophysics **66** (3) (2023).
- [5066] A. Guha, *Constraining light DM fermions from relic density, SN1987A cooling and the role of Tsallis statistics*, communicated at DAE-HEP 2018 - IITM
- [5067] J. Zavala, D. Nunez, R.A. Sussman, L.G. Cabral-Rosetti and T. Matos, *Stellar polytropes and Navarro-Frenk-White halo models: comparison with observations*, J. Cosmology and Astroparticle Physics **6**, No. 008 (June 2006).
- [5068] M.M. de Souza, *Discrete fields, general relativity, other possible implications and experimental evidences*, preprint (2001) [hep-th/0103218].
- [5069] M.M. de Souza, *Discrete scalar field and general relativity*, preprint (2002) [gr-qc/0112070].

- [5070] A.P. Santos, R. Silva J.S. Alcaniz and J.A.S. Lima, *Nonextensive kinetic theory and H-Theorem in general relativity*, preprint (2017), 1709.03027 [gr-qc].
- [5071] M.E. Pessah, D.F. Torres and H. Vucetich *Statistical mechanics and the description of the early universe I: Foundations for a slightly non-extensive cosmology*, Physica A **297**, 164 (2001).
- [5072] M.E. Pessah and D.F. Torres *Statistical mechanics and the description of the early universe II: Principle of detailed balance and primordial ^4He formation*, Physica A **297**, 201 (2001).
- [5073] J.Y. Zhang and L. Cheng, *Strong interaction effect on jet energy loss with detailed balance*, Chin.Phys. Lett. **34** (10),101201 (2017).
- [5074] C. Hanyu and A. Habe, *The differential energy distribution of the universal density profile of dark halos*, Astrophys. J. **554**, 1268 (2001).
- [5075] E.V. Tonini, *Caos e universalidade em modelos cosmológicos com pontos críticos centro-sela*, Doctor Thesis (Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro, March 2002)
- [5076] C. Castro, *A note on fractal strings and $\mathcal{E}^{(\infty)}$ spacetime*, Chaos, Solitons and Fractals **15**, 797 (2003).
- [5077] C. Beck, *Nonextensive scalar field theories and dark energy models*, Physica A **340**, 459 (2004).
- [5078] L. Marassi, *Formation of dark matter haloes in a homogeneous dark energy universe*, Internat. J. Mod. Phys. D **19** (8-10), 1397-1403 (2010).
- [5079] E.M. Barboza, R. da C. Nunes, E.M.C. Abreu and J. Ananias Neto, *Dark energy models through nonextensive Tsallis' statistics*, Physica A **436**, 301-310 (2015).
- [5080] R.C. Nunes, E.M. Barboza, E.M.C. Abreu and J. Ananias Neto, *Entropic cosmology through non-gaussian statistics*, preprint (2015), 1509.05059 [gr-qc].
- [5081] R.C. Nunes, E.M. Barboza, E.M.C. Abreu and J. Ananias Neto, *Probing the cosmological viability of non-gaussian statistics*, J. Cosmology and Astroparticle Physics, (August 2016), doi: <http://dx.doi.org/10.1088/1475-7516/2016/08/051>
- [5082] E.M.C. Abreu, J. Ananias Neto, E.M. Barboza Jr., A.C.R. Mendes and B.B. Soares, *On the equipartition theorem and black holes nongaussian entropies*, preprint (2020), 2002.02435 [gr-qc].
- [5083] E.M.C. Abreu and J. Ananias Neto, *Barrow fractal entropy and the black hole quasinormal modes*, Physics Letters B **807**, 135602 (2020).
- [5084] E.M.C. Abreu and J. Ananias Neto, *Statistical approaches and the Bekenstein bound conjecture in Schwarzschild black holes*, Phys. Lett. B **835**, 137565 (2022).
- [5085] P. Garg, A. Pradhan and V.K. Bhardwaj, *Generalized Barrow entropic holographic dark energy with Grand- Oliver cut-off*, International Journal of Geometric Methods in Modern Physics, 2350082 (2023).
- [5086] P. Garg, V.K. Bhardwaj and A. Pradhan, *Barrow entropic quintessence and dilation dark energy models with generalized HDE cut-off*, International Journal of Modern Physics A, 2250217 (2022).
- [5087] B. Chakraborty, T. Mukhopadhyay, A. Kotal and U. Debnath, *Reconstructions of Einstein-aether gravity from Barrow agegraphic and new Barrow agegraphic dark energy models: Examinations and observational limits*, Eur. Phys. J. C **85**, 647 (2025).
- [5088] A. Kotal, S. Maity, U. Debnath and A. Pradhan, *Parameter constraints and cosmographic analysis of Barrow agegraphic and new Barrow agegraphic dark energy models*, Eur. Phys. J. C **85**, 565 (2025).
- [5089] K. Ourabah, E.M. Barboza, E.M.C. Abreu and J. Ananias Neto, *Superstatistics: Consequences on gravitation and cosmology*, Phys. Rev. D **100**, 103516 (2019).
- [5090] K. Ourabah, *Generalized statistical mechanics of stellar systems*, Phys. Rev. E **105**, 064108 (2022).
- [5091] H.P. de Oliveira and I.D. Soares, *Gravitational wave emission from a bounded source: The nonlinear regime*, preprint (2004) [gr-qc/0403091].
- [5092] H.P. de Oliveira and I.D. Soares, *Gravitational wave emission from a bounded source: A treatment in the full nonlinear regime*, preprint (2004).
- [5093] A.R. Plastino, A. Plastino, H.G. Miller and H. Uys, *Foundations of nonextensive statistical mechanics and its cosmological applications*, Proc. XIth United Nations / European Space Agency Workshop on Basic Space Science (9-13 September 2002, Cordoba, Argentina), eds. H. Haubold and M. Rabolli, Astrophysics and Space Science **290**, 275 (Kluwer, 2004).
- [5094] T. Matos, D. Nunez and R.A. Sussman, *A general relativistic approach to the Navarro-Frenk-White galactic halos*, Class. Quantum Grav. **21**, 5275 (2004).
- [5095] L. Beraldo e Silva, G.A. Mamon, M. Duarte, R. Wojtak, S. Peirani and G. Boue, *Anisotropic q-Gaussian 3D velocity distributions in Λ CDM haloes*, MNRAS **452**, 944-955 (2015), doi:10.1093/mnras/stv1321
- [5096] M.B. Cantcheff and J.A.C. Nogales, *Non-Boltzmann statistics as an alternative to holography*, preprint (2005) [gr/qc/0504004].

- [5097] N.E. Mavromatos and S. Sarkar, *Nonextensive statistics in stringy space-time foam models and entangled meson states*, Phys. Rev. E **79**, 104015 (2009) (20 pages).
- [5098] R. Silva and J.A.S. Lima, *Relativity, nonextensivity and extended power law distributions*, Phys. Rev. E **72**, 057101 (2005) (4 pages).
- [5099] A. Vergou, *Non-extensive statistics and its effects on cosmology*, J. Physics: Conference Series, Discrete '08, *Symposium on Prospects in the Physics of Discrete Symmetries* (Valencia, December 2008) in press, 0905.2571 [hep-th].
- [5100] T. Ruggeri and C. Rogers, *Q-Gaussian integrable Hamiltonian reductions in anisentropic gasdynamics*, Discrete and Continuous Dynamical Systems Series B **19** (7), 2297-2312 (2014), doi:10.3934/dcdsb.2014.19.2297
- [5101] N.E. Mavromatos, V.A. Mitsou, S. Sarkar and A. Vergou, *Implications of a stochastic microscopic Finsler cosmology*, Eur. Phys. J. C **72**, 1956 (2012) (38 pages).
- [5102] A. Bravetti, *Geometrothermodynamics, from ordinary systems to black holes*, Doctor Thesis (Sapienza University of Rome, Rome, January 2014).
- [5103] J.J. He, S.Q. Hou, A. Parikh, D. Kahl, C.A. Bertulani, and other collaborators, *Non-extensive statistics, new solution to the cosmological lithium problem*, preprint (2014), 1412.6956 [astro-ph.CO].
- [5104] C.A. Bertulani, A.M. Mukhamedzhanov and Shubhchintak, *The cosmological Lithium problem revisited*, Latin American Symposium on Nuclear Physics and Applications, 1753 10.1063/1.4955357 AIP Conference Proceedings (2016), 1603.03864 [astro-ph.CO].
- [5105] S.Q. Hou, J.J. He, A. Parikh, D. Kahl, C.A. Bertulani, T. Kajino, G.J. Mathews and G. Zhao, *Non-extensive statistics solution to the cosmological Lithium problem*, Astrophys. J. **834**, 165 (2017) (5 pages).
- [5106] S.Q. Hou, J. J. He, A. Parikh, D. Kahl, C.A. Bertulani, T. Kajino, G.J. Mathews and G. Zhao, *Non-extensive Solution to Cosmological Lithium Problem*, Nuclei in the Cosmos XV, 39-43 (2019).
- [5107] CosmoVerse Network, *The CosmoVerse White Paper: Addressing observational tensions in cosmology with systematics and fundamental physics*, preprint (2025), 2504.01669 [astro-ph.CO].
- [5108] C.A. Bertulani, F.W. Hall and B.I. Santoyo, *Big Bang nucleosynthesis as a probe of new physics*, preprint (2022), arxiv 2210.04071.
- [5109] S. Kohler, *Fixing the Big Bang theory's Lithium problem*, NOVA - Research Highlights from the Journals of the American Astronomical Society (15 February 2017 Features), doi: aasnova.org/2017/02/15/fixing-the-big-bang-theorys-lithium-problem/
- [5110] C.A. Bertulani, *Big bang nucleosynthesis and the Lithium problem*, J. Phys.: Conf. Series **1291**, 012002 (2019), doi:10.1088/1742-6596/1291/1/012002
- [5111] C.A. Bertulani and Shubhchintak, *Primordial nucleosynthesis with non-extensive statistics*, preprint (2024), 2404.15832 [nucl-th].
- [5112] C.A. Bertulani, Shubhchintak and A.M. Mukhamedzhanov, *Cosmological Lithium problems*, EPJ Web of Conferences **184**, 01002 (2018), doi: 10.1051/epjconf/201818401002
- [5113] C.A. Bertulani and T. Kajino, *Frontiers in nuclear astrophysics*, Progress Particle Nuclear. Phys. **89**, 56-100 (2016), doi: 10.1016/j.pnpnp.2016.04.001
- [5114] M. Kusakabe, T. Kajino, G.J. Mathews and Y. Luo, *On the relative velocity distribution for general statistics and an application to big-bang nucleosynthesis under Tsallis statistics*, Phys. Rev. D **99**, 043505 (2019).
- [5115] G.J. Mathews, A. Kedia, N. Sasankan, M. Kusakabe, Y. Luo, T. Kajino, D. Yamazaki, T. Makki and M. El Eid, *Cosmological solutions to the Lithium problem*, Memorie Societa Astronomica Italiana **91**, 29 (2020).
- [5116] G.G. Luciano, *Primordial big bang nucleosynthesis and generalized uncertainty principle*, preprint (2021), 2111.06000 [astro-ph.CO].
- [5117] A. Kedia, N. Sasankan, G.J. Mathews and M. Kusakabe, *Simulations of multi-component relativistic thermalization*, preprint (2020), 2004.13186 [cond-mat.stat-mech].
- [5118] M. Kusakabe, A. Kedia, G.J. Mathews and N. Sasankan, *Distribution function of nuclei from e^\pm scattering in the presence of a strong primordial magnetic field*, preprint (2021), 2111.02704 [astro-ph.CO].
- [5119] C.A. Bertulani, *Fixing the Big Bang cosmological problem*, AIP Conference Proceedings 2076, 030003 (2019), doi 10.1063/1.5091629
- [5120] D. Jang, Y. Kwon, K. Kwak and M.K. Cheoun, *Big bang nucleosynthesis in a weakly non-ideal plasma*, Astronomy Astrophysics **650**, A121 (2021).
- [5121] H. Moradpour, S.A. Moosavi, I.P. Lobo, J.P.M. Graca, A. Jawad and I.G. Salako, *Thermodynamic approach to holographic dark energy and the Renyi entropy*, Eur. Phys. J. C **78** (10), 829 (2018).
- [5122] J. Sadeghi, S.N. Gashti and T. Azizi, *Tsallis holographic dark energy under complex form of quintessence model*, Commun. Theor. Phys. **75**, 025402 (2022).

- [5123] M.A. Nisha, Pankaj, U.K. Sharma, P.S. Kumar, A.K. Mishra, *New Tsallis holographic dark energy with future event horizon as IR-cutoff in non-flat Universe*, Modern Physics Letters A **37** (28), 2250189 (2022).
- [5124] A.A. Mamon, U.K. Sharma, M. Kumar and A.K. Mishra, *Cosmic consequences of Barrow holographic dark energy with Granda-Oliveros cut-off in fractal cosmology*, General Relativity and Gravitation **55**, 74 (2023).
- [5125] E. Di Valentino, O. Mena, S. Pan, L. Visinelli, W. Yang, A. Melchiorri, D.F. Mota, A.G. Riess and J. Silk, *In the realm of the Hubble tension: A review of solutions*, Classical and Quantum Gravity (2021), in press.
- [5126] S. Ghaffari, A.H. Ziaie, V.B. Bezerra and H. Moradpour, *Inflation in the Renyi cosmology*, Mod. Phys. Lett. A **34**, 1950341 (2019) (8 pages).
- [5127] M.A. Zadeh, A. Sheykhi, H. Moradpour and K. Bamba, *Tsallis holographic dark energy*, Phys. Lett. B **781**, 195-200 (2018).
- [5128] M.A. Zadeh, A. Sheykhi, H. Moradpour and K. Bamba, *Effects of anisotropy on the sign-changeable Interacting Tsallis holographic dark energy*, preprint, 1901.05298 [physics.gen-ph].
- [5129] M.A. Zadeh, A. Sheykhi and H. Moradpour, *Thermal stability of Tsallis holographic dark energy in nonflat universe*, General Relativity and Gravitation **51**, 12 (2019), doi: 10.1007/s10714-018-2497-7
- [5130] A. Sheykhi, *New explanation for the accelerated expansion and flat galactic rotation curves*, Eur. Phys. J. C **80**, 25 (2020).
- [5131] M.A. Zadeh, *New Tsallis agegraphic dark energy in fractal cosmology*, preprint (2019), 1912.04959 [gr-qc].
- [5132] Y. D. Xu, *The cosmological behavior and geometrical diagnostic for new Tsallis agegraphic dark energy with sign-changeable interaction*, International J. Modern Physics A, 2250170 (2022).
- [5133] A.A. Mamon, *Study of Tsallis holographic dark energy model in the framework of fractal cosmology*, Mod. Phys. Lett. A **35** (30), 2050251 (2020).
- [5134] P.S. Ens and A.F. Santos, *f(R) gravity and Tsallis holographic dark energy*, EPL **131**, 40007 (2020).
- [5135] P.S. Ens and A.F. Santos, *An attempt to add Barrow entropy in f(R) gravity*, Physics Letters B **835**, 137562 (2022).
- [5136] P.S. Ens and A.F. Santos, *Barrow holographic dark energy: a path to reconstructing f(R,T) gravity*, Eur. Phys. J. C **84**, 1338 (2024).
- [5137] J. Xia and Y.C. Ong, *Upper bound of Barrow entropy index from black hole fragmentation*, Universe **10**, 1 (2024).
- [5138] S. Ghaffari, A.H. Ziaie, H. Moradpour, F. Asghariyan, F. Feleppa and M. Tavayef, *Black hole thermodynamics in Sharma-Mittal generalized entropy formalism*, General Relativity and Gravitation **51**, 93 (2019), doi: 10.1007/s10714-019-2578-2
- [5139] S. Ghaffari, E. Sadri and A.H. Ziaie, *Tsallis holographic dark energy in fractal universe*, preprint (2019), 1908.10602v1 [gr-qc].
- [5140] A. Dixit, U.K. Sharma and A. Pradhan, *Tsallis holographic dark energy in FRW universe with time varying deceleration parameter*, New Astronomy **73**, 101281 (2019), doi: 10.1016/j.newast.2019.101281
- [5141] A. Pradhan and A. Dixit, *Tsallis holographic dark energy model with observational constraints in the higher derivative theory of gravity*, New Astronomy **89**, 101636 (2021), doi: 10.1016/j.newast.2021.101636
- [5142] A. Dixit, V.K. Bhardwaj and A. Pradhan, *RHDE models in FRW Universe with two IR cut-offs with redshift parametrization*, Eur. Phys. J. Plus **135**, 831 (2020), doi: 10.1140/epjp/s13360-020-00850-6
- [5143] S.H. Shekh and A. Dixit, *($\omega_T - \omega'_T$)-phase space analysis of interacting Tsallis holographic dark energy in f(Q) gravity*, New Astronomy **108**, 102157 (2024).
- [5144] A. Pradhan, A. Dixit, S. Gupta and S. Krishnannair, *Reconstruction of the F(T, TG) Tsallis holographic dark energy model based on observational constraints*, Gravitation and Cosmology **31** (2), 221-236 (2025).
- [5145] M. Dheepika, V.T. Hassan Basari and T.K. Mathew, *Emergence of cosmic space in Tsallis modified gravity from equilibrium and non-equilibrium thermodynamic perspective*, Phys. Scr. **99**, 015014 (2024).
- [5146] A. Pradhan, G. Varshney and U.K. Sharma *The scalar field models of Tsallis holographic dark energy with Granda-Oliveros cut-off in modified gravity*, Canadian J. Physics (2021), in press.
- [5147] V.C. Dubey, U.K. Sharma and A. Beesham, *Tsallis holographic model of dark energy: Cosmic behaviour, statefinder analysis and $\omega_D - \omega'_D$ pair in the non-flat universe*, preprint (2019), arxiv 1905.02449
- [5148] V.C. Dubey and U.K. Sharma, *Comparing the holographic principle inspired dark energy models*, New Astronomy **86**, 101586 (2021).
- [5149] E.N. Saridakis, K. Bamba, R. Myrzakulov and F.K. Anagnostopoulos, *Holographic dark energy through Tsallis entropy*, JCAP **12** (2018) 012.
- [5150] M. Shad, *Cosmic implications of Tsallis holographic dark energy*, preprint (2022).
- [5151] S. Nojiri, S.D. Odintsov and E.N. Saridakis, *Modified cosmology from extended entropy with varying exponent*, Eur. Phys. J. C **79**, 242 (2019), doi: 10.1140/epjc/s10052-019-6740-5

- [5152] S. Nojiri, S.D. Odintsov and T. Paul, *Modified cosmology from the thermodynamics of apparent horizon*, Phys. Lett. B **835**, 137553 (2022).
- [5153] S. Ghaffari, H. Moradpour, I.P. Lobo, J.P.M. Graca and V.B. Bezerra, *Tsallis holographic dark energy in the Brans-Dicke cosmology*, Eur. Phys. J. C **78**, 706 (2018).
- [5154] J. Sadeghi, S.N. Gashti and T. Azizi, *Tsallis and Kaniadakis holographic dark energy with complex quintessence theory in Brans-Dicke cosmology*, preprint (2022), 2203.04375 [gr-qc].
- [5155] A.K. Yadav, *Note on Tsallis holographic dark energy in Brans-Dicke cosmology*, preprint (2020), 2011.05764 [physics.gen-ph].
- [5156] A.K. Yadav, *Reexamining RHDE models in FRW universe with two IR cut-off with redshift parametrization*, preprint (2020), 2012.08971 [gr-qc].
- [5157] Y. Liu, *Non-extensive statistical mechanics and the thermodynamic stability of FRW universe*, EPL (2021), in press, doi: 10.1209/0295-5075/ac3f52
- [5158] S. Ghaffari, H. Moradpour, J.P.M. Graca, V.B. Bezerra and I.P. Lobo, *Tsallis holographic dark energy in the brane cosmology*, Physics of the Dark Universe **23**, 100246 (2019).
- [5159] A. Jawad, K. Bamba, M. Younas, S. Qummer and S. Rani, *Tsallis, Renyi and Sharma-Mittal holographic dark energy models in loop quantum cosmology*, Symmetry **10**, 635 (2018), doi: 10.3390/sym10110635
- [5160] A. Iqbal and A. Jawad, *Tsallis, Renyi and Sharma-Mittal holographic dark energy models in DGP brane-world*, Physics of the Dark Universe (2019), in press, doi: doi.org/10.1016/j.dark.2019.100349
- [5161] M.U. Shahzad, A. Iqbal and A. Jawad, *Dynamical properties of dark energy models in fractal universe*, Symmetry **11**, 1174 (2019), doi: 10.3390/sym11091174
- [5162] M. Younas, A. Jawad, S. Qummer, H. Moradpour and S. Rani, *Cosmological implications of the generalized entropy based holographic dark energy models in dynamical Chern-Simons modified gravity*, Advances in High Energy Physics, 1287932 (2019) (9 pages), doi: 10.1155/2019/1287932
- [5163] S. Ali, S. Khan, S. Sattar and A. Abebe, *The Renyi holographic dark energy model in Chern-Simons gravity: Some cosmological implications*, Internat. J. Geometric Methods in Modern Physics, 2250001 (2021).
- [5164] S. Ali, M.H. Waheed, M.I. Asjad, K.A. Khan, T. Sitthiwirattam and C. Promsakon, *The Sharma-Mittal model's implications on FRW universe in Chern-Simons gravity*, Universe **7**, 428 (2021).
- [5165] R. D'Agostino, *Holographic dark energy from nonadditive entropy: Cosmological perturbations and observational constraints*, Phys. Rev. D **99**, 103524 (2019).
- [5166] W.J.C. da Silva and R. Silva, *Extended Λ CDM model and viscous dark energy: a Bayesian analysis*, JCAP **05**, 036 (2019).
- [5167] A.A. Aly, *Study of $F(T)$ gravity in the framework of the Tsallis holographic dark energy model*, Eur. Phys. J. Plus **134**, 335 (2019), doi: 10.1140/epjp/i2019-12698-6
- [5168] S. Maity and U. Debnath, *Tsallis, Renyi and Sharma-Mittal holographic and new agegraphic dark energy models in D-dimensional fractal universe*, Eur. Phys. J. Plus **134**, 514 (2019), doi: 10.1140/epjp/i2019-12884-6
- [5169] S. Maity and P. Rudra, *Inflation driven by Barrow holographic dark energy*, J. Holography Applications in Physics **2** (1), (2022), doi: 10.22128/jhap.2022.464.1012
- [5170] Y.D. Xu, *Tsallis agegraphic dark energy model with the sign-changeable interaction*, Commun. Theor. Phys. **72**, 015402 (2020) (6 pages), doi: doi.org/10.1088/1572-9494/ab544e
- [5171] S. Hussain, *Cosmological consequences of some new versions of dark energy models*, Master Thesis (2019, COMSATS University Islamabad).
- [5172] T. Bandyopadhyay and U. Debnath, *Accretions of Tsallis, Renyi and Sharma Mittal dark energies onto higher-dimensional Schwarzschild black hole and Morris Thorne wormhole*, Modern Physics Letters A, 2150081 (2021) (21 pages), doi: 10.1142/S0217732321500814
- [5173] S. Chaudhary, S.K. Maurya, J. Kumar, A. Errehymy, N. Alessa, A.H. Abdel-Aty, *A study on the geometric configuration and stability of wormholes in symmetric teleparallel gravity influenced by dark energy and rotational velocity profiles*, Eur. Phys. J. C **85**, 478 (2025).
- [5174] U.K. Sharma, V.C. Dubey, A.H. Ziaie and H. Moradpour, *Kaniadakis holographic dark energy in non-flat universe*, preprint (2021), 2106.08139 [physics.gen-ph].
- [5175] A. Lymperis, S. Basilakos and E.N. Saridakis, *Modified cosmology through Kaniadakis horizon entropy*, Eur. Phys. J. C **81**, 1037 (2021).
- [5176] S. Upadhyay and V.C. Dubey, *Reconstructing scalar field models of the Sharma-Mittal holographic dark energy*, Modern Physics Letters A (2022), doi: 10.1142/S0217732322500043
- [5177] A.V. Astashenok and A.S. Tepliakov, *Dynamical analysis of the Tsallis holographic dark energy models with event horizon as cut-off and interaction with matter*, preprint (2023), 2305.10573 [gr-qc].

- [5178] A.V. Astashenok and A.S. Tepliakov, *General constraints on Tsallis holographic dark energy from observational data*, *Physic of the Dark Universe* **47** (2025).
- [5179] A.V. Astashenok and A.S. Tepliakov, *Evolution of perturbations in the model of Tsallis holographic dark energy*, *Phys. Lett. B* (2024), in press.
- [5180] Z. Teimoori, K. Rezazadeh and A. Rostami, *Inflation based on the Tsallis entropy*, *Eur. Phys. J. C* **84**, 80 (2024).
- [5181] Z. Coker, O. Okcu and E. Aydiner, *Modified Friedmann equations from fractional entropy*, preprint (2023).
- [5182] V.D. Bokey, *Interacting Tsallis holographic dark energy models with constant deceleration parameter*, *International J. Mathematics Trends and Technology* **69** (8), 36-44 (2023).
- [5183] P. Prasanthan, S. Nelleri, N. Poonthottathil and E.K. Sreejith, *Emergence of cosmic space and horizon thermodynamics from Kaniadakis entropy*, preprint (2024), 2405.03592 [gr-qc].
- [5184] R. Saleem, M.H. Rasool, M.I. Aslam and I. Shahid, *Warm inflation triggered by entropies of some recent dark energy models within $f(Q)$ gravity*, *Chinese Physics C* **48** (12), 125102 (2024).
- [5185] E. Elizalde, A.V. Yurov and A.V. Timoshkin, *Holographic bounce cosmological models induced by viscous dark fluid from a generalized non-singular entropy function*, *International Journal of Geometric Methods in Modern Physics* 2450338 (2024).
- [5186] E. Elizalde, S. Nojiri and S.D. Odintsov, *Black holes thermodynamics and generalised non-extensive entropy*, preprint (2025).
- [5187] A. Khodam-Mohammadi, *Non-extensive entropy and power-law inflation: Implications for observations*, *Modern Physics Letters A* **39** (31-32), 2450146 (2024).
- [5188] C. Tsallis, *Nonextensive physics: a possible connection between generalized statistical mechanics and quantum groups*, *Phys. Lett. A* **195**, 329 (1994).
- [5189] A. Erzan, *Finite q -differences and the discrete renormalization group*, *Phys. Lett. A* **225**, 235 (1997).
- [5190] S. Abe, *A note on the q -deformation theoretic aspect of the generalized entropies in nonextensive physics*, *Phys. Lett. A* **224**, 326 (1997).
- [5191] R.A.C. Ferreira and J. Tenreiro Machado, *An Entropy formulation based on the generalized Liouville fractional derivative*, *Entropy* **21**, 638 (2019), doi: 10.3390/e21070638
- [5192] U. Tirnakli, F. Buyukkilic and D. Demirhan, *Nonextensive Tsallis thermostatics and its connection with quantum groups*, *Tr. J. Physics* (1999), in press.
- [5193] M. Arik, J. Kornfilt and A. Yildiz, *Random sets, q -distributions and quantum groups*, *Phys. Lett. A* **235**, 318 (1997).
- [5194] S.F. Ozeren, U. Tirnakli, F. Buyukkilic and D. Demirhan, *Landau diamagnetism within Tsallis thermostatics and quantum groups*, *Eur. Phys. J. B* **2**, 101 (1998).
- [5195] A. Olemskoi and I. Shuda, *Multifractal theory within quantum calculus*, preprint (009), 0907.4127 [cond-mat.stat-mech].
- [5196] A.I. Olemskoi, S.S. Borysov and I.A. Shuda, *Statistical field theories deformed within different calculi*, *Eur. Phys. J. B* **77**, 219-231 (2010).
- [5197] U. Tirnakli, S.F. Ozeren, F. Buyukkilic and D. Demirhan, *The effect of nonextensivity on the time development of quantum systems*, *Z. Physik B* **104**, 341 (1997).
- [5198] S.F. Ozeren, *Genellestirlmis koherent haller ve matematiksel fizikte uygulamalari*, Doctor Thesis (Ege University, Izmir, January 1999).
- [5199] I. Sokmen, F. Buyukkilic and D. Demirhan, *Landau diamagnetism within nonextensive statistical thermodynamics*, *Chaos, Solitons and Fractals* **13**, 1359 (2002).
- [5200] O.F. Dayi and A. Jellal, *Landau magnetism in noncommutative space and the nonextensive thermodynamics of Tsallis*, *Phys. Lett. A* **287**, 349 (2001).
- [5201] S. Abe, *Nonextensive statistical mechanics of q -bosons based on the q -deformed entropy*, *Phys. Lett. A* **244**, 229 (1998).
- [5202] S. Abe, *q -deformed entropies*, Communicated at the 5th International Wigner Symposium (Vienna, 25-29 August 1997).
- [5203] S. Abe, *q -deformed entropies and Fisher metrics*, Proceedings of the 5th International Wigner Symposium (Vienna, 25-29 August 1997), eds. P. Kasperkovitz and D. Grau (World Scientific, Singapore, 1998), page 66.
- [5204] R.S. Johal, *q -Calculus and entropy in nonextensive statistical physics*, *Phys. Rev. E* **58**, 4147 (1998).
- [5205] S.K. Eastmond, *q -Calculus and the symmetrized radioactive decay law*, preprint (2021).
- [5206] R.S. Johal, *Tsallis entropy and q -analog of information*, *Phys. Lett. A* **253**, 47 (1999).
- [5207] R.S. Johal, *Modified exponential function: The connection between nonextensivity and q -deformation*, *Phys. Lett. A* **258**, 15 (1999).

- [5208] R.S. Johal, *Multifractal and q -deformation foundations for the correlation due to nonextensivity*, preprint (1999).
- [5209] W.S. Chung and H. Hassanabadi, *Three-dimensional quantum mechanics in a curved space based on the q -addition*, *Internat. J. Mod. Phys. A* **34** (29), 1950177 (2019) (11 pages).
- [5210] W.S. Chung, L.M. Nieto, S. Zare and H. Hassanabadi, *Two types of q -Gaussian distributions used to study the diffusion in a finite region*, *Mathematical Methods in the Applied Sciences* (2025).
- [5211] M. Sharifi and A. Parvazian, *Stimulated Raman scattering in nonextensive statistics*, *Physica A* **440**, 176-184 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2015.08.010>
- [5212] L. Palatella and P. Grigolini, *The transition from a classical to a quantum world as a passage from extensive to non-extensive thermodynamics*, preprint (1998) [quant-ph/9810083].
- [5213] L.S.F. Olavo, A.F. Bakuzis and R.Q. Amilcar, *Generalized Schroedinger equation using Tsallis entropy*, *Physica A* **271**, 303 (1999).
- [5214] L.S.F. Olavo, *Possible physical meaning of the Tsallis entropy parameter*, *Phys. Rev. E* **64**, 036125 (2001).
- [5215] P.B. Slater, *Exact Bures probabilities that two quantum bits are classically correlated*, *Eur. Phys. J B* **17**, 471 (2000).
- [5216] P.B. Slater, *Noninformative quantum q -priors*, preprint (2005) [quant-ph/0507014].
- [5217] P.B. Slater, *Hilbert-Schmidt separability probabilities and noninformativity of priors*, *J. Phys. A - Math. Gen.* **39**, 913-931 (2006).
- [5218] A. Lavagno and P.N. Swamy, *Thermostatistics of q -deformed boson gas*, *Phys. Rev. E* **61**, 1218 (2000).
- [5219] A. Lavagno and P.N. Swamy, *Non-extensive entropy in q -deformed quantum groups*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, *Chaos, Solitons and Fractals* **13**, Number 3, 437 (Pergamon-Elsevier, Amsterdam, 2002).
- [5220] A. Lavagno and P.N. Swamy, *q -deformed structures and nonextensive statistics: A comparative study*, *Physica A* **305**, 310 (2002).
- [5221] M. Goto, H. Iwamoto, C. Tsallis and D.H. Kobe, *Tunneling of power-law wavepackets*, preprint (2000).
- [5222] S. Abe, S. Martinez, F. Pennini and A. Plastino, *Entropic uncertainty relation for power-law wave packets*, *Phys. Lett. A* **295**, 74 (2002).
- [5223] J. Santos and J.A.S. de Lima, *The q -oscillator: a Lagrangian description for variable damping*, *Phys. Lett. A* **267**, 213 (2000).
- [5224] A. Rigo, A.R. Plastino, F. Garcias, M. Casas and A. Plastino, *Approximate shape-invariant potentials in quantum mechanics*, *J. Phys. A* **33**, 6457 (2000).
- [5225] F. Markus and K. Gambar, *Q -boson system below the critical temperature*, *Physica A* **293**, 533 (2001).
- [5226] S. Gheorghiu-Svirschevski, *Nonlinear quantum evolution with maximal entropy production*, *Phys. Rev. A* **63**, 022105 (2001).
- [5227] D.B. Saakian and E.E. Vogel, *Random energy model in nonextensive statistical mechanics*, *Phys. Rev. E* **64**, 032101 (2001).
- [5228] E. Martinenko and B.K. Shivamoggi, *Thomas-Fermi model: Nonextensive statistical mechanics approach*, *Phys. Rev. A* **69**, 052504 (2004) (5 pages).
- [5229] V.C. Lowry and R.A. Van Gorder, *Asymptotic solutions for a relativistic formulation of the generalized nonextensive Thomas-Fermi model*, *Annals Phys. Annals Physics* **376**, 311-323 (2017), doi: <http://dx.doi.org/10.1016/j.aop.2016.12.009>
- [5230] A.D.B. Manjarres, N.G. Kelkar and M. Nowakowski, *Electric fields at finite temperature*, *Annals of Physics* **386**, 58-75 (2017).
- [5231] S.F. Ozeren, *The effect of nonextensivity on the time evolution of the $SU(1,1)$ coherent states driven by a damped harmonic oscillator*, *Physica A* **337**, 81 (2004).
- [5232] G.A. Weiderpass and A.O. Caldeira, *von Neumann entropy and the entropy production of a damped harmonic oscillator*, *Phys. Rev. E* **102**, 032102 (2020).
- [5233] J.R. Choi, *Quantum dynamics for the generalized Caldirola-Kanai oscillator in coherent states*, *IIOABJ* **5** (1), 1-5 (2014, India).
- [5234] J.R. Choi, *The effects of nonextensivity on quantum dissipation*, *Scientific Reports* **4**, 3911 (2014) (5 pages), doi: [10.1038/srep03911](https://doi.org/10.1038/srep03911)
- [5235] N.M. Oliveira-Neto, E.M.F. Curado, F.D. Nobre and M.A. Rego-Monteiro, *Aging and metastability in the dynamics of quantum-group oscillators*, *Physica A* **344**, 573 (2004).
- [5236] A. Lavagno, *Generalized classical and quantum dynamics within a nonextensive approach*, *Braz. J. Phys.* **35**, 516 (2005).

- [5237] R. Parwani and H.S. Tan, *Exact solutions of a nonpolynomially nonlinear Schrodinger equation*, Phys. Lett. A **363**, 197-201 (2007).
- [5238] J.M. Yang, *Least information principle for quantum mechanics*, preprint (2023), 2302.14619 [quant-ph].
- [5239] J.M. Yang, *Quantum mechanics based on an extended least action principle and information metrics of vacuum fluctuations*, Foundations of Physics **54**, 32 (2024)
- [5240] J. Xu, *Quantifying the imaginarity of quantum states via Tsallis relative entropy*, preprint (2023), 2311.12547 [quant-ph].
- [5241] P. Tian and Y. Sun, *Generalized quantum Jensen-Shannon divergence of imaginarity*, Physics Letters A **544**, 130479 (2025).
- [5242] L.G. Gamero, A. Plastino and M.E. Torres, *Wavelet analysis and nonlinear dynamics in a nonextensive setting*, Physica A **246**, 487 (1997).
- [5243] G. Minadakis, E. Ventouras, S. D Gatzonis, A. Siatouni, H. Tsekou, I. Kalatzis, D.E. Sakas and J. Stonham, *Dynamics of regional brain activity in epilepsy: a cross-disciplinary study on both intracranial and scalp-recorded epileptic seizures*, J. Neural Eng. **11**, 026012 (2014) (16 pages), doi:10.1088/1741-2560/11/2/026012
- [5244] S. Akter, R. Islam, Y. Limura, H. Sugano, K. Fukumori, D. Wang, T. Tanaka and A. Cichocki, *Multiband entropy-based feature-extraction method for automatic identification of epileptic focus based on high-frequency components in interictal iEEG*, preprint (2020).
- [5245] A. Capurro, L. Diambra, D. Lorenzo, O. Macadar, M.T. Martin, A. Plastino, E. Rofman, M.E. Torres and J. Velluti, *Tsallis information measure, multiresolution analysis, and nonlinear dynamics*, Rapport de Recherche No 3184 (June 1997), Institut National de Recherche en Informatique et en Automatique - INRIA (France).
- [5246] A. Capurro, L. Diambra, D. Lorenzo, O. Macadar, M.T. Martin, C. Mostaccio, A. Plastino, E. Rofman, M.E. Torres and J. Velluti, *Tsallis entropy and cortical dynamics: The analysis of EEG signals*, Physica A **257**, 149 (1998).
- [5247] A. Capurro, L. Diambra, D. Lorenzo, O. Macadar, M.T. Martins, C. Mostaccio, A. Plastino, J. Perez, E. Rofman, M.E. Torres and J. Velluti, *Human dynamics: The analysis of EEG signals with Tsallis information measure*, Physica A **265**, 235 (1999).
- [5248] U.R. Acharya, Y. Hagiwara, S.N. Deshpande, S. Suren, J.E.W. Koh, S.L. Oh, N. Arunkumar, E.J. Ciaccio and C.M. Lim, *Characterization of focal EEG signals: A review*, Future Generation Computer Systems **91**, 290-299 (2018), doi: 10.1016/j.future.2018.08.044
- [5249] B.J. Dakhale, M. Sharma, M. Arif, K. Asthana, A.A. Bhurane, A.G. Kothari, U.R. Acharya, *An automatic sleep-scoring system in elderly women with osteoporosis fractures using frequency localized finite orthogonal quadrature Fejer Korovkin kernels*, Medical Engineering and Physics **112**, 103956 (2023).
- [5250] M. Thilagaraj, M.P. Rajasekaran and N.A. Kumar, *Tsallis entropy: as a new single feature with the least computation time for classification of epileptic seizures*, Cluster Computing (2018), 10.1007/s10586-018-2549-5
- [5251] M.E. Torres, H.L. Rufiner, D.H. Milone and A.S. Cherniz, *Multiresolution information measures applied to speech recognition*, Physica A **385**, 319-332 (2007).
- [5252] F.M. Lopes, E.A. de Oliveira and R.M. Cesar Jr., *Analysis of the GRNs inference by using Tsallis entropy and a feature selection approach*, Progress in Pattern Recognition, Image Analysis, Computer Vision, and Applications, Proceedings **5856**, 473-480 (2009).
- [5253] M. Borowska, *Entropy-based algorithms in the analysis of biomedical signals*, Studies in Logic, Grammar and Rhetoric **43** (56), 21-32 (2015), doi: 10.1515/slgr-2015-0039
- [5254] X. Chen and C.L. Wang, *Tsallis distribution-based fractional derivative method for Lamb wave signal recovery*, Research in Nondestructive Evaluation **26** (3), 174-188 (2015), doi: 10.1080/09349847.2015.1023913
- [5255] Y.D. Zhang and L.N. Wu, *Pattern recognition via PCNN and Tsallis entropy*, Sensors **8**, 7518-7529 (2008).
- [5256] C. Demetzos, *The complexity of the liposomal membrane as an obstacle for producing nanosimilars – Biophysical and thermodynamic consideration*, communication at ILS (2017, Athens).
- [5257] C. Demetzos, *Nanoplatforms as information carriers and thermodynamic epitopes, in neurodegenerative and immune diseases*, in P. Vlamos et al eds., *Handbook of Computational Neurodegeneration* (Springer-Nature, 2021).
- [5258] N.D. Cahill, *Normalized Measures of Mutual Information with General Definitions of Entropy for Multimodal Image Registration*, eds. B. Fischer, B. Dawant, and C. Lorenz, WBIR 2010, LNCS 6204, 258-268 (Springer, Berlin, 2010).
- [5259] A.F. Villaverde, J. Ross, F. Moran and J.R. Banga, *MIDER: Network inference with mutual information distance and entropy reduction*, Plos One **9** (5), e96732 (2014) (15 pages).
- [5260] F. Murtagh and J.-L. Starck, *Wavelet and curvelet moments for image classification: Application to aggregate mixture grading*, Pattern Recognition Lett. **29**, 1557-1564 (2008).

- [5261] B. La Rosa, R. Capobianco and D. Nardi, *A self-interpretable module for deep image classification on small data*, Applied Intelligence (2022), doi: 10.1007/s10489-022-03886-6
- [5262] M.T. Martin, A.R. Plastino and A. Plastino, *Tsallis-like information measures and the analysis of complex signals*, Physica A **275**, 262 (2000).
- [5263] D. Grech and G. Pamula, *On the multifractal effects generated by monofractal signals*, preprint (2013), 1307.2014 [physics.data-an].
- [5264] M.E. Torres and L.G. Gamero, *Relative complexity changes in time series using information measures*, Physica A **286**, 457 (2000).
- [5265] M. Hassan, M. Hossny, D. Creighton and S. Nahavandi, *Quantifying heteroskedasticity via Bhattacharyya distance*, preprint (2016), 1609.06145 [math.ST].
- [5266] M.H.A. Hassan *Quantifying heteroskedasticity metrics*, Doctor Thesis (Faculty of Science and Technology, Institute for Intelligent Systems Research and Innovation, Deakin University, Australia, 2016).
- [5267] R.R. Nigmatullin, *Recognition of nonextensive statistical distributions by the eigen-coordinates method*, Physica A **285**, 547 (2000).
- [5268] D.R. Bickel, *Generalized entropy and multifractality of time-series: Relationship between order and intermittency*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13**, Number 3, 491 (Pergamon-Elsevier, Amsterdam, 2002).
- [5269] A.V. Milovanov and L.M. Zelenyi, *Functional background of the Tsallis entropy: "coarse-grained" systems and "kappa" distribution functions*, Nonlinear Proc. Geoph. **7**, 211 (2000).
- [5270] L. Li and J.F. Mustard, *Compositional gradients across mare-highland contacts: Importance and geological implication of lateral transport*, J. Geophys. Res. - Planet **105**, 20431 (2000).
- [5271] J.H.Q. Celedon, *Maxima entropia aplicada a tomografia de tempos de transito*, Master Thesis (Universidade Federal da Bahia - Brazil, 1997).
- [5272] M.E. Torres, *El procesamiento de senales ligadas a problemas no lineales*, PhD Thesis (Universidad Nacional de Rosario, Argentina, 1998).
- [5273] C. Rodrigues Neto, A. Zanandrea, F. M. Ramos and R. R. Rosa, *Non-extensive statistics with multifractal wavelets analysis*, communication at the IUPAP International Conferen (Villasimius) ce on "New Trends in the Fractal Aspects of Complex Systems", Maceio-Brazil, 16-20 October 2000.
- [5274] E.P. Borges, C. Tsallis, J.G.V. Miranda and R.F.S. Andrade, *Mother wavelet functions generalized through q-exponentials*, J. Phys. A **37**, 9125 (2004).
- [5275] S.M. Cai, Z.H. Jiang, T. Zhou, P.L. Zhou, H.J. Yang and B.H. Wang, *Scale invariance of human electroencephalogram signals in sleep*, Phys. Rev. E **76**, 061903 (2007) (5 pages).
- [5276] S. Tong, A. Bezerianos, J. Paul, Y. Zhu and N. Thakor, *Nonextensive entropy measure of EEG following brain injury from cardiac arrest*, Physica A **305**, 619-628 (2002).
- [5277] S. Tong, A. Bezerianos, A. Malhotra, Y. Zhu and N. Thakor, *Parameterized entropy analysis of EEG following hypoxic-ischemic brain injury*, Phys. Lett. A **314**, 354-361 (2003).
- [5278] A. Bezerianos, S. Tong and N. Thakor, *Time-dependent entropy estimation of EEG rhythm changes following brain ischemia*, Ann. Biomed. Eng. **31**, 221-232 (2003).
- [5279] N. Thakor and S. Tong, *Advances in quantitative electroencephalogram analysis methods*, Annual Review of Biomedical Engineering **6**, 453 (2004).
- [5280] R.G. Geocadin, S. Tong, A. Bezerianos, S. Smith, T. Iwamoto, N.V. Thakor and D.F. Hanley, *Approaching brain injury after cardiac arrest: from bench to bedside*, Proceedings of Neuroengineering Workshop, 277-280 (Capri, 2003).
- [5281] L. Cimponeriu, S. Tong, A. Bezerianos and N.V. Thakor, *Synchronization and information processing across the cerebral cortex following cardiac arrest injury*, Proceedings of 24th IEEE/EMBS Conference (26-28 October 2002, San Antonio, Texas).
- [5282] S. Tong, Y. Zhu, A. Bezerianos and N.V. Thakor, *Information flow across the cerebral cortex of schizophrenics*, Proceedings of Biosignal Interpretation (2002).
- [5283] S. Tong, Y. Zhu, R.G. Geocadin, D. Hanley, N.V. Thakor and A. Bezerianos, *Monitoring brain injury with Tsallis entropy*, Proceedings of 23rd IEEE/EMBS Conference (26-28 October 2001, Istanbul).
- [5284] A. Bezerianos, S. Tong and Y. Zhu and N.V. Thakor, *Nonadditive information theory for the analyses of brain rhythms*, Proceedings of 23rd IEEE/EMBS Conference (26-28 October 2001, Istanbul).
- [5285] N.V. Thakor, J. Paul, S. Tong, Y. Zhu and A. Bezerianos, *Entropy of brain rhythms: normal versus injury EEG*, Proceedings of 11th IEEE Signal Processing Workshop, 261-264 (2001).

- [5286] A. Bezerianos, S. Tong, J. Paul, Y. Zhu and N.V. Thakor, *Information measures of brain dynamics*, Proceedings of V-th IEEE - EURASIP Biennial International Workshop on Nonlinear Signal and Image Processing (NSP-01) (3-6 June 2001, Baltimore, MD).
- [5287] Y. Zou, J. Zhang, H. Zhou, S. Sun and P. Xia, *Tsallis entropy thresholding based on multi-scale and multi-direction Gabor transform* [in Chinese], Journal of Electronics and Information Technology **44** (2022), doi: 10.11999/JEIT211306
- [5288] N.V. Thakor, A. Bezerianos, H.F. AL, H. Al-Nashash, J. Paul, D. Sherman and S. Venkatesha, *Monitoring method of brain neurological function, for use in clinical applications involves processing maximum and minimum amplitude values of electroencephalographic (EEG) waveform segment including data points from EEG signal*, Patent Number(s): US7299088-B1.
- [5289] M. Guttmann, *System and method for image classification based on Tsallis entropy*, Patent Number: US9754190-B1 (2017).
- [5290] P. Niu and X. Wang, *Statistical modeling and pixel classification based color image segmentation method*, Patent Number: CN108090914-A (2018).
- [5291] M.A. Elaziz and S. Lu, *Many-objectives multilevel thresholding image segmentation using Knee Evolutionary Algorithm*, Expert Systems With Applications **125**, 305-316 (2019).
- [5292] D. Oliva, M. Abd Elaziz and S. Hinojosa, *Tsallis entropy for image thresholding*, in *Metaheuristic Algorithms for Image Segmentation: Theory and Applications*, Studies in Computational Intelligence **825**, 101-123 (2019, Springer).
- [5293] Z. Li, X. Shi X. Yin et al, *Double Tsallis entropy parameter based abnormal network flow rate detecting method*, Patent Number: CN105306297-A (2016).
- [5294] K.T. Kim and M.S. Kang, *Method for automatically focusing inverse synthetic aperture radar image of target using radar image generator*, Patent Number: KR1738811-B1 (2017).
- [5295] J.K. Jung and B.C. Ku, *Method for analyzing research result*, Patent Number: KR1585106-B1 (2016).
- [5296] Z. Li, X. Shi and X. Yin, *Abnormal flow rate detection method*, Patent Numbers: CN104539488-A; CN104539488-B (2015).
- [5297] M. Dai, J. Zhang, C. Xie, L. Chen and F. Dai, *Cross entropy and sliding time window based flight approach sequencing method, involves establishing flight approach sequencing mathematic model, and performing vehicle route planning and optimization process based on Tsallis cross entropy*, Patent Number: CN110689765-A (2020).
- [5298] F. Wang, F. Sun, D. Zhu, T. Liu, A. Li, K. Feng and X. Wang, *Infrared polarization thermal image threshold segmenting method, involves performing connection detection on three rough segmentation to remove part of domain error divided region, and fusing three segmented images by region growing process*, Patent Number: CN110232694-A (2019).
- [5299] H. Yang, X. Wang and P. Niu, *Local pixel integrated character based color image segmentation method, involves predicting test set model, and determining test set and training set combined label for detecting label vector to obtain image segmentation result*, Patent Number: CN108122233-A (2018).
- [5300] J. Liang, R. He and T. Tan, *A comprehensive survey on test-time adaptation under distribution shifts*, preprint (2023), 2303.15361 [cs.LG].
- [5301] D.D. Zhang, X.F. Jia, H.Y. Ding, D.T. Ye and N.V. Thakor, *Application of Tsallis entropy to EEG: Quantifying the presence of burst suppression after asphyxial cardiac arrest in rats*, IEEE Transactions on Biomedical Engineering **57** (4), 867-874 (2010).
- [5302] K. Fu, J. Qu, Y. Chai and T. Zou, *Hilbert marginal spectrum analysis for automatic seizure detection in EEG signals*, Biomedical Signal Processing and Control **18**, 179-185 (2015).
- [5303] T.T. Erguzel, C. Uyulan, B. Unsalver, A. Evrensel, M. Cebi, C.O. Noyan, B. Metin, G. Eryilmaz, G.H. Sayar and N. Tarhan, *Entropy: A promising EEG biomarker dichotomizing subjects with opioid use disorder and healthy controls*, Clinical EEG and Neuroscience (2020), doi: 10.1177/1550059420905724
- [5304] F.O. Redelico, F. Traversaro, M.C. Garcia, W. Silva, O.A. Rosso and M. Risk, *Classification of normal and pre-ictal EEG signals using permutation entropies and a generalized linear model as a classifier*, Entropy **19**, 72 (2017) (12 pages), doi:10.3390/e19020072
- [5305] Y.A. Pykh, *Energy Lyapunov function for generalized replicator equations*, IEEE CNF, Proceedings of International Conference on Physics and Control **1**, (20-22 August 2003), pages 270-275.
- [5306] Y.A. Pykh, *Pairwise interactions origin of entropy functions*, preprint (2015), 1506.05731
- [5307] J. Gao, W.W. Tung, Y. Cao, J. Hu and Y. Qi, *Power-law sensitivity to initial conditions in a time series with applications to epileptic seizure detection*, Physica A **353**, 613 (2005).

- [5308] H. Huang, H. Xie and Z. Wang, *The analysis of VF and VT with wavelet-based Tsallis information measure*, Phys. Lett. A **336**, 180 (2005).
- [5309] R.R. Nigmatullin, *The statistics of the fractional moments: Is there any chance to “read quantitatively” any randomness?*, Signal Processing **86**, 2529-2547 (2006).
- [5310] S.M. Cai, Z.H. Jiang, T. Zhou, P.L. Zhou, H.J. Yang and B. J. Wang, *Scale-invariance of human EEG signals in sleep*, preprint (2007) [physics/0703129].
- [5311] K. Sagoo, R. Hirsch, P. Johnston, D. McLoskey and G. Hungerford, *Pre-denaturing transitions in human serum albumin probed using time-resolved phosphorescence*, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (2014), in press.
- [5312] R.M. Demirer, M.S. Ozerdem and C. Bayrak, *Classification of imaginary movements in ECoG with a hybrid approach based on multi-dimensional Hilbert-SVM solution*, J. Neuroscience Methods **178**, 214-218 (2009).
- [5313] E.A.F. Ihlen, K.S. van Schooten, S.M. Bruijn, J.H. van Dieen, B. Vereijken, J.L. Helbostad and M. Pijnappels, *Improved prediction of falls in community-dwelling older adults through phase-dependent entropy of daily-life walking*, Front. Aging Neurosci. **10**, 44 (2018), doi: 10.3389/fnagi.2018.00044
- [5314] M.E. Cek, M. Ozgoren and F.A. Savaci, *Continuous time wavelet entropy of auditory evoked potentials*, Computers in Biology and Medicine **40**, 90-96 (2010).
- [5315] S. Kar, M. Bhagat and A. Routray, *EEG signal analysis for the assessment and quantification of driver’s fatigue*, Transportation Research Part F **13**, 297-306 (2010).
- [5316] S. Asgari, H. Moshirvaziri, F. Scalzo and N. Ramezan-Arab, *Quantitative measures of EEG for prediction of outcome in cardiac arrest subjects treated with hypothermia: a literature review*, J. Clinical Monitoring and Computing **32** (6), 977-992 (2018), doi: 10.1007/s10877-018-0118-3
- [5317] V.P. Balam and S. Chinara, *Development of single-channel electroencephalography signal analysis model for real-time drowsiness detection*, Physical and Engineering Sciences in Medicine (2021), doi: 10.1007/s13246-021-01020-3
- [5318] C. Kosun and S. Ozdemir, *Entropy in terms of vehicular distance under driving constraints*, Mathematics and Computers in Science and Industry 183-185 (2014), ISBN: 978-1-61804-247-7
- [5319] C. Kosun and S. Ozdemir, *A superstatistical model of vehicular traffic flow*, Physica A **444**, 466-475 (2016).
- [5320] C. Kosun and S. Ozdemir, *Determining the complexity of multi-component conformal systems: A platoon-based approach*, Physica A **471**, 688-695 (2017), doi: <http://dx.doi.org/10.1016/j.physa.2016.12.027>
- [5321] C. Kosun, C. Kok, O.M. Tanriyapisi and S. Ozdemir, *A qualitative examination of the composition of the cooperative vehicles*, J. Scientific and Engineering Research **4** (4), 137-142 (2017).
- [5322] C. Kosun and S. Ozdemir, *An entropy-based analysis of lane changing behavior: An interactive approach*, Traffic Injury Prevention **18** (4), (2017), doi: <http://dx.doi.org/10.1080/15389588.2016.1204446>
- [5323] A.B. Popov, *Nonextensive Tsallis statistics of contract system of prime contractors and subcontractors in defense industry*, Computer Research and Modeling **14** (5), 1163-1183 (2022).
- [5324] J. Ramirez-Pacheco and D. Torres-Roman, *Cosh window behaviour of wavelet Tsallis q-entropies in 1/f signals*, Electronics Lett. **47** (3), 186 (2011).
- [5325] J. Ramirez-Pacheco, L. Rizo-Dominguez, J.A. Trejo-Sanchez and J. Cortez-Gonzalez, *A nonextensive wavelet (q, q') for $1/f(\alpha)$ signals*, Revista Mexicana de Fisica **62** (3), 229-234 (2016).
- [5326] C.-F. V. Latchoumane and J. Jeong, *Quantification of brain macrostates using dynamical nonstationarity of physiological time series*, IEEE Transactions on Biomed. Engin. **58** (4), 1084-1093 (2011).
- [5327] M.J. Hogan, L. Kilmartin, M. Keane, P. Collins, R.T. Staff, J. Kaiser, R. Lai and N. Upton, *Electrophysiological entropy in younger adults, older controls and older cognitively declined adults*, Brain Research **1445**, 1-10 (2012).
- [5328] Y. Nishizawa, H. Tanaka, A. Tsugawa, S. Shimizu, T. Sato and R. Fukasawa, *Prediction of mild cognitive impairment using P300-Speller BCI - Studies of the EEG with Tsallis entropy and coherence*, **25** (1) (2023).
- [5329] H. Rojas-Pescio, L. Beishon, R. Panerai and M. Chacon, *Statistical complexity analysis of neurovascular coupling with cognitive stimulation in healthy participants*, Journal of Cognitive Neuroscience **36** (9), 1995-2010 (2024).
- [5330] R. Smolikova, M.P. Wachowiak and J.M. Zurada, *An information-theoretic approach to estimating ultrasound backscatter characteristics*, Computers in Biology and Medicine **34**, 355 (2004).
- [5331] A. Dessenin, *Methodes computationnelles en geometrie de l’information et applications temps reel au traitement du signal audio*, Doctor Thesis (Universite Pierre et Marie Curie, 2012).
- [5332] Z. Liang, Y. Wang, X. Sun, D. Li, L.J. Voss, J.W. Sleigh, S. Hagihira and X. Li, *EEG entropy measures in anesthesia*, Frontiers in Computational Neuroscience **9**, 16 (2015) (17 pages), doi: 10.3389/fncom.2015.00016

- [5333] J.C. Ramirez-Pacheco, L. Rizo-Dominguez and J. Cortez-Gonzalez, *Wavelet-Tsallis entropy detection and location of mean level-shifts in long-memory fGn signals*, *Entropy* **17**, 7979-7995 (2015), doi: 10.3390/e17127856
- [5334] C. Su, Z. Liang, X. Li, D. Li, Y. Li and M. Ursino, *A comparison of multiscale permutation entropy measures in on-line depth of anesthesia monitoring*, *Plos One* (October 10, 2016) (22 pages), doi: 10.1371/journal.pone.0164104
- [5335] K.R. Chernyshov, *Information-theoretic technique within condition monitoring problems*, IEEE International Russian Automation Conference (2019), doi: 10.1109/RUSAUTOCON.2019.8867748
- [5336] K. Chernyshov, *Tsallis divergence of order 1/2 in system identification related problems*, in Proceedings of the 16th International Conference on Informatics in Control, Automation and Robotics (ICINCO 2019), 523-533 (2019), doi: 10.5220/0007919105230533
- [5337] H. Li, J. Sun, H. Ma, Z. Tian and Y. Li, *A novel method based upon modified composite spectrum and relative entropy for degradation feature extraction of hydraulic pump*, *Mechanical Systems and Signal Processing* **114**, 399-412 (2018).
- [5338] R.J. Al-Azawi, N.M.G. Al-Saidi, H.A. Jalab, H. Kahtan and R.W. Ibrahim, *Efficient classification of COVID-19 CT scans by using q-transform model for feature extraction*, *PeerJ. Comput. Sci.* **7**, e553 (2021).
- [5339] L. Gao, X. Li, D. Bi and Y. Xie, *A q-Gaussian maximum correntropy adaptive filtering algorithm for robust sparse recovery in impulsive noise*, *IEEE Signal Processing Letters* (2018), in press.
- [5340] S.M. Keller, M. Samarin, A. Meyer, V. Kosak, U. Gschwandtner, P. Fuhr and V. Roth, *Computational EEG in personalized medicine: A study in Parkinson's disease*, preprint (2018), 1812.06594 [q-bio.NC].
- [5341] S.M. Keller, U. Gschwandtner, A. Meyer, M. Chaturvedi, V. Roth and P. Fuhr, *Cognitive decline in Parkinson's disease is associated with reduced complexity of EEG at baseline*, *Brain Communications* (Oxford University Press, 2020), doi: 10.1093/braincomms/fcaa207/6007251
- [5342] S. Jiao, H. Huo, W. Liu, C. Zhao, L. Ma, J. Wang, N. Xu, C. Zhang and D. Li, *Gaitformer: a spatial-temporal attention-enhanced network without softmax for Parkinson's disease early detection*, *Complex and Intelligent Systems* **11**, 236 (2025).
- [5343] M. van Merkerk, *Early prognostication in postanoxic coma patients based on EEG with reduced electrode sets*, Thesis (Medical Sensing and Stimulation, MSc Technical Medicine, Twente University, 2021).
- [5344] G. Rho, A.L. Callara, G. Petri, M. Nardelli, E.P. Scilingo, Alberto Greco and V. De Pascalis, *Linear and nonlinear quantitative EEG analysis during neutral hypnosis following an opened/closed eye paradigm*, *Symmetry* **13**, 1423 (2021), doi: 10.3390/sym13081423
- [5345] N.K. Al-Qazzaz, Z.A.A. Alyasseri, K.H. Abdulkareem, N.S. Ali, M.N. Al-Mhiqani and C. Guger, *EEG feature fusion for motor imagery: A new robust framework towards stroke patients rehabilitation*, *Computers in Biology and Medicine* **137**, 104799 (2021), doi: 10.1016/j.compbimed.2021.104799
- [5346] M. Sharma, M. Arif and K. Asthana, *Automated IoT-based detection of periodic leg movement using optimal wavelet-based entropy features*, Chapter 14 (2023, IOP).
- [5347] U. Pale, *Hyperdimensional computing for biosign!! monitoring: Applications for epilepsy detection*, Doctor Thesis (Faculte des sciences et techniques de l'ingenieur, Genie Electrique, Ecole Polytechnique Federale de Lausanne, 2023).
- [5348] J.M. Angulo and A.E. Madrid, *Wavelet-based multiscale intermittency analysis: The effect of deformation*, *Entropy* **25**, 1080 (2023).
- [5349] D.A. Basterra Garcia, *Estudio de los patrones de activacion local en la actividad neuronal espontanea*, Thesis (Facultad de Medicina, Universidad de Valladolid, 2023).
- [5350] E. Abdellatef, H.M. Emara, M.R. Shoaib, F.E. Ibrahim, M. Elwekeil, W. El-Shafai, T.E. Taha, A.S. El-Fishawy, E.S.M. El-Rabaie, I.M. Eldokany and F.E.A. El-Samie, *Automated diagnosis of EEG abnormalities with different classification techniques*, *Medical and Biological Engineering and Computing* (2023), doi: 10.1007/s11517-023-02843-w
- [5351] D. Carrion-Ojeda, P. Martinez-Arias, R. Fonseca-Delgado, I. Pineda and H. Mejia-Vallejo, *Evaluation of features and channels of electroencephalographic signals for biometric systems*, *EURASIP Journal on Advances in Signal Processing* **58** (2024).
- [5352] P. Patel, S. Balasubramanian and R.N. Annavarapu, *Cross subject emotion identification from multichannel EEG sub-bands using Tsallis entropy feature and KNN classifier*, *Brain Informatics* **11**, 7 (2024).
- [5353] C.G. Altintop, F. Latifoglu, A.K. Akin, A. Bayram and M. Ciftci, *Classification of depth of coma using complexity measures and nonlinear features of electroencephalogram signals*, *Internat. J. Neural Systems* (2022) 2250018 (2022) (17 pages), doi: 10.1142/S0129065722500186
- [5354] A.K. Das, P. Kumar and S. Halder, *Investigation of fatigue and drowsiness of Welders and Goldsmiths based on entropies and complexity parameters of EOGs: A statistical approach*, *J. Inst. Eng. India Ser. B* (2024).

- [5355] J.C. Ramirez Pacheco, J.A. Trejo-Sanchez and L. Rizo-Dominguez, *The shifted wavelet (q, q') -entropy and the classification of stationary fractal signals*, Networks and Heterogeneous Media **20** (1), 89-103 (2025).
- [5356] D. Santos, *Simulating autism spectrum disorder diagnosis using Tsallis entropy*, preprint (2025).
- [5357] P. Patel, Sivarenjani B. and R.N. Annavarapu, *Application of supervised machine learning models in human emotion classification using Tsallis entropy as a feature*, Journal of Big Data **12**, 126 (2025).
- [5358] J. Liu, J. Shi, F. Hao, M. Dai and Z. Zhang, *Arctangent entropy: a new fast threshold segmentation entropy for light colored character image on semiconductor chip surface*, Pattern Analysis and Applications (2022), doi: 10.1007/s10044-022-01079-y
- [5359] A. Laptev and B. Ginsburg, *Fast entropy-based methods of word-level confidence estimation for end-to-end automatic speech recognition*, preprint (2022), 2212.08703 [eess.AS].
- [5360] I. Gitman, V. Lavrukhin, A. Laptev and B. Ginsburg, *Confidence-based ensembles of end-to-end speech recognition models*, INTERSPEECH 2023 (20-24 August 2023, Dublin, Ireland).
- [5361] A. Gimitzoudis, *Emotion analysis using physiological signals*, Thesis (University Ioannena, Greece, 2022).
- [5362] D.M. Abramov, C. Tsallis and H.S. Lima, *Neural complexity – Non-extensive statistical-mechanical approach of human electroencephalograms*, Scientific Reports **13**, 10318 (2023), doi: 10.1038/s41598-023-37219-5
- [5363] D.M. Abramov, H.S. Lima, V. Lazarev, P.R. Galhanone and C. Tsallis, *Identifying Attention-Deficit/Hyperactivity disorder through the electroencephalogram complexity*, Physica A **653**, 130093 (2024).
- [5364] D.M. Abramov, D.F. Quintanilha, H.S. Lima, R.P. Costa, C. Kamil-Leite, V.V. Lazarev and C. Tsallis, *Neurophysiological correlates to the human brain complexity through q -statistical analysis of electroencephalogram*, preprint (2025), 2502.06057 [q-bio.NC].
- [5365] A. Tenev, S. Markovska-Simoska, A. Muller and I. Mishkovski, *Entropy, complexity, and spectral features of EEG signals in autism and typical development: a quantitative approach*, Frontiers in Psychiatry (2025), doi: 10.3389/fpsy.2025.1505297
- [5366] P. Patel and R.N. Annavarapu, *Analysis of EEG Signal using nonextensive statistics*, International Research Journal of Engineering and Technology **10** (05), (2023).
- [5367] D.F. Santos, *The advanced complexity analysis of electroencephalography (EEG) data using Tsallis entropy*, preprint (2024).
- [5368] N.K. Al-Qazzaz, A.A. Aldoori, S.H.B.M. Ali, S.A. Ahmad, A.K. Mohammed and M.I. Mohyee, *EEG signal complexity measurements to enhance BCI-based stroke patients' rehabilitation*, Sensors **23**, 3889 (2023).
- [5369] P. Ziesche, *Information and structure: The concept of correlation entropy in quantum-many-body systems and a general comment*, in *Information: New questions to a multidisciplinary concept*, eds. K. Kornwachs and K. Jacoby (Akademie Verlag, Berlin, 1996), p. 119.
- [5370] P. Ziesche, *Attempts toward a pair density functional theory*, Int. J. Quantum Chem. **30**, 149 (1996).
- [5371] P. Gersdorf, W. John, J.P. Perdew and P. Ziesche, *Correlation entropy of the H_2 molecule*, Int. J. Quantum Chem. **61**, 935 (1997).
- [5372] P. Ziesche, O. Gunnarsson, W. John and H. Beck, *Two-site Hubbard model, the Bardeen-Cooper-Schrieffer model, and the concept of correlation entropy*, Phys. Rev. B **55**, 10270 (1997).
- [5373] P. Ziesche, *On relations between correlation, fluctuation and localization*, J. Mol. Structure (Theochem) **527**, 35 (2000).
- [5374] S.B. Liu, C.Y. Rong, Z.M. Wu and T. Lu, *Renyi entropy, Tsallis entropy and Onicescu information energy in density functional reactivity theory*, Acta Physico-Chimica Sinica **31** (11), 2057-2063 (2015).
- [5375] C.Y. Rong, B. Wang, D. Zhao and S.B. Liu, *Information-theoretic approach in density functional theory and its recent applications to chemical problems*, WIREs Comput. Mol. Sci. e1461 (2019), doi: doi.org/10.1002/wcms.1461
- [5376] X. Cao, C.Y. Rong, A. Zhong, T. Lu and S.B. Liu, *Molecular acidity: An accurate description with information-theoretic approach in density functional reactivity theory*, J. Computational Chemistry **39** (2), 117-129 (2017), doi: 10.1002/jcc.25090
- [5377] X. Xiao, X. Cao, D. Zhao, C.Y. Rong and S.B. Liu, *Quantification of molecular basicity for amines: a combined conceptual density functional theory and information-theoretic approach study*, Acta Phys.-Chim. Sin. **36** (X), 0001 0009 (2010), in press, doi: 10.3866/PKU.WHXB201906034
- [5378] S.B. Liu, *Information-theoretic approach in density functional reactivity theory*, Acta Physico-Chimica Sinica (2015), in press, doi: 10.3866/PKU.WHXB201510302
- [5379] L. Fronzoni, P. Grigolini and S. Montangero, *Non-extensive thermodynamics and stationary processes of localization*, Chaos, Solitons and Fractals **11**, 2361 (2000).
- [5380] P. Grigolini, M.G. Pala, L. Palatella and R. Roncaglia, *Towards the thermodynamics of localization processes*, Phys. Rev. E **62**, 3429 (2000).

- [5381] H.T. do Amaral Silva *Validacao clinica do uso da entropia de Tsallis no co-registro de neuroimagens para a localizacao da zona epileptogenica utilizando o statistical parametric mapping (spm)*, Doctor Thesis (In Portuguese; in progress; Faculdade de Medicina, Ribeirao Preto/USP) (2010).
- [5382] A.K. Rajagopal, *Exclusion statistics: density matrix and its implications*, Physica B **212**, 309 (1995).
- [5383] A.K. Rajagopal, *Von Neumann and Tsallis entropies associated with the Gentile interpolative quantum statistics*, Phys. Lett. A **214**, 127 (1996).
- [5384] G. Kaniadakis, A. Lavagno and P. Quarati, *Generalized fractional statistics*, Mod. Phys. Lett. B **10**, 497 (1996).
- [5385] G. Kaniadakis, A. Lavagno and P. Quarati, *Relationship between fractional exclusion and non-extensive statistics*, in *Common trends in condensed matter and High energy physics*, eds. A.Devoto and A.Barone (Napoli, 1999).
- [5386] G.A. Raggio, *Properties of q-entropies*, J. Math. Phys. **36**, 4785 (1995).
- [5387] K.M.R. Audenaert, *Subadditivity of q-entropies for $q > 1$* , J. Math. Phys. **48**, 083507 (2007) (3 pages).
- [5388] H. Bercovici and D. Van Gucht, *An inequality for mixed $L - P$ -norms*, Mathematical Inequalities & Applications **8**, 743-748 (2005).
- [5389] G.R. Guerberoff and G.A. Raggio, *Standard thermal statistics with q-entropies*, J. Math. Phys. **37**, 1776 (1996).
- [5390] G.R. Guerberoff, P.A. Pury and G.A. Raggio, *Non-standard thermal statistics with q-entropies*, J. Math. Phys. **37**, 1790 (1996).
- [5391] J. Naudts, *Rigorous results in non-extensive thermodynamics*, Rev. Math. Phys. **12**, 1305 (2000).
- [5392] D. Prato, *Generalized statistical mechanics: Extension of the Hilhorst formula and applications to the classical ideal gas*, Phys. Lett. A **203**, 165 (1995).
- [5393] J.W. Shim, *Entropy formula of N-body system*, Scientific Reports **10**, 14029 (2020).
- [5394] S. Curilef and C. Tsallis, *Specific heat of the anisotropic rigid rotator within generalized statistics*, Physica A **215**, 542 (1995).
- [5395] M.R.C. Solis and J.P.H. Esguerra, *On the range of validity of integral transform methods in Tsallis statistical mechanics*, preprint (2003) [cond-mat/0302094].
- [5396] N. Ito and C. Tsallis, *Specific heat of the harmonic oscillator within generalized equilibrium statistics*, N. Cimento D **11**, 907 (1989).
- [5397] A.M. Nassimi and G. Parsafar, *The sensitivity of the population of states to the value of q and the legitimate range of q in Tsallis statistics*, J. Iranian Chemical Society **6**, 341-344 (2009).
- [5398] C. Vignat and P.W. Lambert, *A study of the orthogonal polynomials associated with the quantum harmonic oscillator on constant curvature spaces*, J. Math. Phys. **50**, 103514 (2009) (10 pages).
- [5399] E.P. da Silva, C. Tsallis and E.M.F. Curado, *Specific heat of a free particle in a generalized Boltzmann-Gibbs statistics*, Physica A **199**, 137 (1993); Errata: **203**, 160 (1994).
- [5400] J.A.S. Lima and A. Deppman, *Tsallis meets Boltzmann: q-index for a finite ideal gas and its thermodynamic limit*, Phys. Rev. E **101**, 040102(R) (2020).
- [5401] A. Deppman and J.A.S. Lima, *Thermofractals and the nonextensive finite ideal gas*, preprint (2021), 2109.07993 [cond-mat.stat-mech].
- [5402] E. Megias, A.K. Golmankhaneh and A. Deppman, *Dynamics in fractal spaces*, Phys. Lett. B **848**, 138370 (2024).
- [5403] A. Deppman and E.O. Andrade-II, *Emergency of Tsallis statistics in fractal networks*, Plos One **16** (9), e0257855 (2021).
- [5404] M. Ahmadvand, *The Higgs boson as a self-similar system: A new solution to the hierarchy problem*, preprint (2022), 2204.09916 [hep-ph].
- [5405] G.B. Bagci, R. Sever and C. Tezcan, *Study of rigid and non-rigid rotators in Tsallis statistics*, preprint (2003) [cond-mat/0303523].
- [5406] R. Chakrabarti, R. Chandrashekar and S.S. Naina Mohammed, *Rigid rotators and diatomic molecules via Tsallis statistics*, Physica A **387**, 4589-4598 (2008).
- [5407] C. Edet and A. Ikot, *Superstatistics of diatomic molecules with the shifted Deng-Fan potential model*, Biointerface Research Applied Chemistry **12** (3), 4126-4139 (2022), doi: 10.33263/BRIAC123.41264139
- [5408] R. Chakrabarti, R. Chandrashekar and S.S. Naina Mohammed, *Nonextensive statistics of the classical relativistic ideal gas*, Physica A **389**, 1571-1584 (2010).
- [5409] L.S. Lucena, L.R. da Silva and C. Tsallis, *Departure from Boltzmann-Gibbs statistics makes the hydrogen-atom specific heat a computable quantity*, Phys. Rev. E **51**, 6247 (1995).

- [5410] N.M. Oliveira-Neto, E.M.F. Curado, F.D. Nobre and M.A. Rego-Monteiro, *Approach to equilibrium of the hydrogen atom at low temperature*, Physica A **374**, 251-262 (2007).
- [5411] N.M. Oliveira-Neto, E.M.F. Curado, F.D. Nobre and M.A. Rego-Monteiro, *A simple model to describe the low-temperature behaviour of some atoms and molecules: An application to the hydrogen atom*, J. Phys. B - Atomic, Molecular and Optical Physics **40**, 1975-1989 (2007).
- [5412] A. Plastino, M.C. Rocca and G.L. Ferri, *A possible solution to the Hydrogen atom's partition function paradox*, preprint (2019).
- [5413] N. Flores-Gallegos, I. Guillen-Escamilla and J.C. Mixteco-Sanchez, *Non-extensive entropies on atoms, molecules and chemical processes*, Chapter 9 (2015).
- [5414] N. Flores-Gallegos, *An informational approach about energy and temperature in atoms*, Chem. Phys. Lett. **659**, 203-208 (2016).
- [5415] N. Flores-Gallegos, *Generalized Shannon's entropy as generator of local density functionals*, Chem. Phys. Lett. **676**, 1-5 (2017).
- [5416] N. Flores-Gallegos, *Tsallis' entropy as a possible measure of the electron correlation in atomic systems*, Chem. Phys. Lett. **692**, 61-68 (2018), doi: 10.1016/j.cplett.2017.12.014
- [5417] N. Flores-Gallegos, *Application of fractal entropies in atoms and molecules*, Chem. Phys. Lett. **706**, 448-454 (2018).
- [5418] N. Flores-Gallegos, *q-Renyi's entropy as a possible measure of electron correlation*, Journal of Mathematical Chemistry (2021), doi: 10.1007/s10910-021-01268-w
- [5419] R. Di Sisto, S. Martinez, F. Pennini, A. Plastino and H. Vucetich, *A chemical-physics test for non-extensivity in thermodynamics*, Phys. Lett. A **302**, 59 (2002).
- [5420] M. Barati and N. Moradi, *Inconsistency of the hydrogen-atom with $\beta \rightarrow \beta'$ transformation in Tsallis statistics*, Physica A **387**, 2455-2461 (2008).
- [5421] M. Barati and N. Moradi, *The effect of space dimensions on a generalized hydrogen-atom specific heat in the generalized Boltzmann-Gibbs statistics*, Int. J. Theor. Phys. **47**, 1954-1965 (2008).
- [5422] M. Barati and N. Moradi, *Study of the specific heat of a hydrogenic donor impurity at the center of a spherical quantum dot in contact with a heat reservoir*, J. Comp. and Theor. Nanoscience **6**, 1709-1713 (2009).
- [5423] R. Khordad, M.A. Sadeghzadeh, A. Mohamadian Jahan-abad, *Specific heat of a parabolic cylindrical quantum dot in the presence of magnetic field*, Superlattices and Microstructures (2013), in press.
- [5424] R. Khordad, M.A. Sadeghzadeh and A. Mohamadian Jahan-abad, *Effect of magnetic field on internal energy and entropy of a parabolic cylindrical quantum dot*, Commun. Theor. Phys. **59** (5), 655-660 (2013).
- [5425] R. Khordad, *Thermodynamical properties of triangular quantum wires: entropy, specific heat, and internal energy*, Continuum Mechanics and Thermodynamics **28** (4), 947-956 (2016).
- [5426] R. Khordad and B. Mirhosseini, *Internal energy and entropy of a quantum pseudodot*, Physica B **420**, 10-14 (2013).
- [5427] R. Khordad and B. Mirhosseini, *Comparison of entropy and specific heat in quantum wires with cross sections of parallelograms and triangles using Tsallis statistics*, J. Research on Many-body Systems **7** (4), 111 (2017).
- [5428] R. Khordad and B. Mirhosseini, *Comparison of entropy and specific heat in quantum wires with cross sections of parallelograms and triangles using Tsallis statistics*, J. Research on Many-body Systems **7** (14), 111(2017) [In Persian].
- [5429] R. Khordad, *Study of specific heat of quantum pseudodot under magnetic field*, Int. J. Thermophys. **34**, 1148-1157 (2013), DOI 10.1007/s10765-013-1463-6
- [5430] B. Donfack and A.J. Fotue, *Effects of spin orbit interaction (SOI) on the thermodynamic properties of a quantum pseudodot*, Journal Low Temperature Physics **204**, 206-222 (2021), doi:10.1007/s10909-021-02604-9
- [5431] B. Donfack, J.V. Nguenpang, S.C.N. Nguemassong, L. Temdie, F. Manfouo, V.D. Tchida, L.D. Magouwo, E.F. Kamdem, C.S. Kenfack and A.J. Fotue, *Magnetocaloric effect (MCE) of a quantum pseudodot*, Indian J. Phys. (2023).
- [5432] R. Khordad, M.A. Sadeghzadeh and A. Mohamadian Jahan-Abad, *Specific heat of a parabolic cylindrical quantum dot in the presence of magnetic field*, Superlattices and Microstructures **58**, 11-19 (2013).
- [5433] R. Khordad, R. Bornaei and H.A. Mardani-Fard, *Application of Tsallis formalism to study entropy and specific heat of V-groove quantum wires*, Indian J. Phys. **89** (6), 545-550 (2015), doi: 10.1007/s12648-014-0623-2
- [5434] R. Khordad, H.R. Rastegar Sedehi and H. Bahramiyan, *Effects of impurity and cross-sectional shape on entropy of quantum wires*, J. Computational Electronics **17** (2), 551-561 (2018) (11 pages), doi: 10.1007/s10825-018-1133-9
- [5435] R. Khordad and H.R.R. Sedehi, *Electrocaloric effect in quantum dots using the non-extensive formalism*, Optical and Quantum Electronics **54**, 511 (2022).

- [5436] R. Khordad, H. Bahramiyan and H.R. Rastegar Sedehi, *Effects of strain, magnetic field and temperature on entropy of a two dimensional GaAs quantum dot under spin-orbit interaction*, Optical and Quantum Electronics **50**, 294 (2018) (13 pages), doi: 10.1007/s11082-018-1557-2
- [5437] K.C. Tan and T. Volkoff, *Variational quantum algorithms to estimate rank, quantum entropies, fidelity and Fisher information via purity minimization*, Phys. Rev. Research **3**, 033251 (2021).
- [5438] T. Haug, S. Lee and M.S. Kim, *Efficient quantum algorithms for stabilizer entropies*, Phys. Rev. Lett. **132**, 240602 (2024).
- [5439] G. Livadiotis, *Approach on Tsallis statistical interpretation of hydrogen-atom by adopting the generalized radial distribution function*, J. Math. Chem. **45**, 930-939 (2009).
- [5440] R Gonzalez-Ferez, J.S. Dehesa, S.H. Patil and K.D. Sen, *Scaling properties of composite information measures and shape complexity for hydrogenic atoms in parallel magnetic and electric fields*, Physica A **388**, 4919-4925 (2009).
- [5441] J. Katriel and K.D. Sen, *Relativistic effects on information measures for hydrogen-like atoms*, J. Comput. and Appl. Math. **233**, 1399-1415 (2010).
- [5442] S.A. Oprisan, *The classical gases in the Tsallis statistics using the generalized Riemann zeta functions*, Journal de Physique I **7**, 853 (1997).
- [5443] A. Gulec, *Ozet fraktalların yoğun madde fiziginde uygulamaları*, Doctor Thesis (Ege University, Izmir, Turkey, February 1997).
- [5444] A. Gulec, F. Buyukkilic and D. Demirhan, *Fraktal olcme, Tsallis entropisi ve fizikte uygulamaları*, preprint (1997).
- [5445] R. Silva Jr., A.R. Plastino and J.A.S. Lima, *A Maxwellian path to the q-nonextensive velocity distribution function*, Phys. Lett. A **249**, 401 (1998).
- [5446] B.B. Soares et al, *Generalized distribution function for rotational velocity of the Pleiades*, preprint (2004).
- [5447] D. de Sousa Miranda, *Estimando a inclinacao dos eicos rotacionais das Pleiades*, Master Thesis (Universidade do Estado do Rio Grande do Norte, Mossoro, 2014).
- [5448] B.B. Soares, L.F.R. Sousa and J.R.P. Silva, *Survival function for rotation of solar-type stars*, preprint (2017).
- [5449] C. Frigerio Martins, J.A.S. Lima and P. Chimenti, *Galaxy rotation curves and nonextensive statistics*, MNRAS **449**, 3645-3650 (2015).
- [5450] S. Abe, *Thermodynamic limit of a classical gas in nonextensive statistical mechanics: Negative specific heat and polytropism*, Phys. Lett. A **263**, 424 (1999).
- [5451] S. Abe, *Correlation induced by Tsallis' nonextensivity*, Physica A **269**, 403 (1999).
- [5452] S. Martinez, F. Pennini and A. Plastino, *Van der Waals equation in a nonextensive scenario*, Phys. Lett. A **282**, 263 (2001).
- [5453] L. Zheng and J. Du, *A nonextensive approach for understanding the van der Waals' equation*, Eur. J. Phys. **39**, 065101 (2018) (8 pages).
- [5454] L.C.L. Botelho, *On the statistics of an ideal gas with mass fluctuations and the Boltzmann ergodic theorem: The combined Boltzmann-Tsallis statistics*, Mod. Phys. Lett. B **17**, 733 (2003).
- [5455] X. Calbet and R. Lopez-Ruiz, *Extremum complexity distribution of a monodimensional ideal gas out of equilibrium*, Physica A **382**, 523-530 (2007).
- [5456] Y. Zheng and J. Du, *An application of nonextensive parameter: The nonextensive gas and real gas*, Int. J. Mod. Phys. B **21**, 947-953 (2007).
- [5457] Z. Liu, J. Du and L. Guo, *Nonextensivity and q-distribution of a relativistic gas under an external electromagnetic field*, Chinese Science Bulletin **56** (34), 3689-3692 (2011).
- [5458] L. Liu, Z. Liu and J. Du, *Stability analysis of the classical ideal gas in nonextensive statistics and the negative specific heat*, Physica A (2008), in press, 0804.3733.
- [5459] T. Miyazaki and C.G. Schoen, *A phase diagram based upon the non-extensive entropy and its application to the phase decomposition process*, communicated at CALPHAD XXXVI 2007 Conference, Computer Coupling of the Phase Diagrams and Thermochemistry **32**, 9-31 (2008).
- [5460] C.G. Schon, T. Miyazaki and S.R.A. Salinas, *A generalized thermodynamics formulation of the cluster variation method*, communicated at CALPHAD XXXVI 2007 Conference, Program and Abstracts. State College-PA : CALPHAD, Inc. (2007) p. 138-139.
- [5461] R. Chakrabarti, R. Chandrashekar and S.S. Naina Mohammed, *Nonextensive statistics of relativistic ideal gas*, preprint (2009), 0908.0081 [cond-mat.stat-mech].
- [5462] T.S. Biro, *Ideal gas provides q-entropy*, Physica A **392**, 3132-3139 (2013), <http://dx.doi.org/10.1016/j.physa.2013.03.028>

- [5463] L. Guo and J. Du, *Heat capacity of the generalized two-atom and many-atom gas in nonextensive statistics*, Physica A **388**, 4936-4942 (2009).
- [5464] H. Hasegawa, *Specific heat and entropy of N -body nonextensive systems: The ordinary average and q -average*, preprint (2010), 1002.4052 [cond-mat.stat-mech].
- [5465] H. Hasegawa, *Specific heat and entropy of N -body nonextensive systems*, Phys. Rev. E **82**, 031138 (2010) (13 pages).
- [5466] Y. Zheng, *An insight to the nonextensive parameter in the actual gas*, Physica A **392**, 2487-2491 (2013).
- [5467] Y. Li and Y. Hu, *The eighth statistical distribution of monatomic ideal gas based on incomplete Shannon entropy*, Modern Physics **4**, 81-85 (2014), doi: <http://dx.doi.org/10.12677/mp.2014.45010>
- [5468] O. Witt-Hansen, *The dependence of pressure with altitude*, preprint (2008).
- [5469] F.D. Nobre and C. Tsallis, *Localized-spins ideal paramagnet within non-extensive thermostatistics*, Philosophical Magazine B **73**, 745 (1996).
- [5470] F. Buyukkilic and D. Demirhan, *A fractal approach to the distribution function of a paramagnetic system*, Z. Phys. B **99**, 137 (1995).
- [5471] M. Portesi, A. Plastino and C. Tsallis, *Nonextensive thermostatistics can yield apparent magnetism*, Phys. Rev. E **52**, R3317 (1995).
- [5472] R. Chakrabarti and R. Chandrashekar, *Extended Curie-Weiss law: a nonextensive perspective*, J. Stat. Mech., P09007 (2010) (20 pages).
- [5473] S. Martinez, F. Pennini and A. Plastino, *Dark magnetism revisited*, Physica A **282**, 193 (2000).
- [5474] C. Wolf, *Two-state paramagnetism induced by Tsallis and Renyi statistics*, Int. J. Theor. Phys. **37**, 2433 (1998).
- [5475] F. Pennini and A. Plastino, *Disequilibrium, complexity, the Schottky effect, and q -entropies, in paramagnetism*, Physica A **488**, 85-95 (2017), doi: <http://dx.doi.org/10.1016/j.physa.2017.07.005>
- [5476] A.A.A. Marinho, *Diamagnetismo de Landau q -deformado imerso em D dimensoes*, Master Thesis (Universidade Federal de Campina Grande, Centro de Ciencias e Tecnologia, Unidade Academica de Fisica, Campina Grande, 2010).
- [5477] C. Tsallis, F.C. Sa Barreto and E.D. Loh, *Generalization of the Planck radiation law and application to the microwave background radiation*, Phys. Rev. E **52**, 1447 (1995).
- [5478] M. Consoli and A. Pluchino, *Cosmic Microwave Background and the issue of a fundamental preferred frame*, Eur. Phys. J. Plus **133**, 295 (2018), doi: 10.1140/epjp/i2018-12136-5
- [5479] G. Livadiotis and D.J. McComas, *Black-body radiation in space plasmas*, EPL **135**, 49001 (2021).
- [5480] G. Livadiotis and D.J. McComas, *Thermodynamic definitions of temperature and kappa and introduction of the entropy defect*, Entropy **23**, 1683 (2021).
- [5481] G. Livadiotis and D.J. McComas, *Entropy defect in thermodynamics*, Sci. Reports **13**, 9033 (2023).
- [5482] G. Livadiotis and D.J. McComas, *Extensive entropy: The case of zero entropy defect*, Physica Scripta **98** (10), (2023).
- [5483] S.L. Choudhury and R.K. Paul, *Investigation of microwave radiation from a compressed beam of ions using generalized Planck's radiation law*, preprint (2017).
- [5484] S.L. Choudhury and R.K. Paul, *A new approach to the generalization of Planck's law of black-body radiation*, Annals Physics **395**, 317-325 (2018), doi: 10.1016/j.aop.2018.06.004
- [5485] S. Dhal and R.K. Paul, *A study of cosmic microwave background using non-extensive statistics*, Experimental Astronomy **57**, 25 (2024).
- [5486] M. Uzun, H. Sirin, A.E. Calik and K.G. Atman, *Graybody radiation phenomena in a fractional manner*, X-Ray Spectrom. **47**, 405-409 (2018).
- [5487] Y.S. Luo, Q.J. Zeng and J. Ge, *Thermal radiation laws of a q -deformed boson system*, Chinese J. Phys. **52** (3), 970-981 (2014).
- [5488] M. Biyajima and T. Mizoguchi, *Analysis of residual spectra and the monopole spectrum for 3 K blackbody radiation by means of non-extensive thermostatistics*, Phys. Lett. A (2012), in press, 1210.5900 [cond-mat.stat-mech].
- [5489] M. Biyajima, T. Mizoguchi and N. Suzuki, *A new blackbody radiation law based on fractional calculus and its application to NASA COBE data*, Physica A **440**, 129-138 (2015).
- [5490] I.V. Toranzo and J.S. Dehesa, *Entropy and complexity properties of the d -dimensional blackbody radiation*, Eur. Phys. J. D **68**, 316 (2014) (8 pages), doi: 10.1140/epjd/e2014-50488-4
- [5491] E.M.C. Abreu, J. Ananias Neto, A.C.R. Mendes and W. Oliveira, *Nonextensive Friedmann equations and new bounds for Tsallis parameter through noncommutative entropic gravity*, preprint (2012), 1204.2005 [hep-th].

- [5492] E.M.C. Abreu and J. Ananias Neto, *Considerations on gravity as an entropic force and entangled states*, Phys. Lett. B **727**, 524-526 (2013).
- [5493] E.M.C. Abreu and J. Ananias Neto, *Tsallis' thermostatitics, MOND theory and holographic considerations on a Machian Universe*, preprint (2014), 1403.2688 [physics.gen-ph].
- [5494] E.M.C. Abreu, J. Ananias Neto, A.C.R. Mendes and D.O. Souza, *Emergence of cosmic space, Gauss-Bonnet gravity, MOND theory and nonextensive considerations*, preprint (2015), 1511.02108 [physics.gen-ph].
- [5495] M. Senay, *The role of MOND theory in cosmological paradigms under q-statistics*, International Journal of Theoretical Physics **63**, 263 (2024).
- [5496] E.M.C. Abreu and J. Ananias Neto, *Holographic considerations on a Machian universe*, Annals of Physics **351**, 290-301 (2014), doi: <http://dx.doi.org/10.1016/j.aop.2014.09.004>
- [5497] E.M.C. Abreu, J. Ananias Neto, E.M. Barboza Jr. and R.C. Nunes, *Holographic considerations on non-gaussian statistics and gravothermal catastrophe*, Physica A **441**, 141-150 (2016).
- [5498] E.M.C. Abreu, J. Ananias Neto, A.C.R. Mendes and W. Oliveira, *New bounds for Tsallis parameter in a noncommutative phase-space entropic gravity and nonextensive Friedmann equations*, Physica A **392**, 5154-5163 (2013).
- [5499] E.M.C. Abreu, J. Ananias Neto, E.M. Barboza Jr. and R.C. Nunes, *Tsallis and Kaniadakis statistics from the viewpoint of entropic gravity formalism*, Internat. J. Mod. Phys. A **32** (5), 1750028 (2017) (10 pages).
- [5500] B.B. Soares, E.M. Barboza Jr., E.M.C. Abreu and J. Ananias Neto, *Non-Gaussian thermostatical considerations upon the Saha equation*, Physica A **532**, 121590 (2019).
- [5501] E.M.C. Abreu, J. Ananias Neto and C.F.L. Godinho, *Nonextensive statistics, entropic gravity and gravitational force in a non-integer dimensional space*, Physica A **411**, 118-127 (2014), doi: <http://dx.doi.org/10.1016/j.physa.2014.06.018>
- [5502] E.M.C. Abreu, J. Ananias Neto, A.C.R. Mendes and D.O. Souza *Notes on microstates, Tsallis statistics and entropic gravity formalism*, preprint (2017), 1708.04596 [hep-th].
- [5503] H. Ertik, D. Demirhan, H. Sirin and F. Buyukkilic, *A fractional mathematical approach to the distribution functions of quantum gases: Cosmic microwave background radiation problem is revisited*, Physica A **388**, 4573-4585 (2009).
- [5504] H. Sirin, F. Buyukkilic, H. Ertik and D. Demirhan, *The influence of fractality on the time evolution of the diffusion process*, Physica A **389**, 2007-2013 (2010).
- [5505] N.N. Sharma, *Radiation model for nanoparticle: Extension of classical Brownian motion concepts*, J. Nanopart. Res. **10**, 333-340 (2008)
- [5506] A.R. Plastino, *Gravitación, mecánica estadística generalizada y principio de equivalencia*, PhD Thesis (Universidad de La Plata-Argentina, 1994).
- [5507] A.R. Plastino, A. Plastino and H. Vucetich, *A quantitative test of Gibbs' statistical mechanics*, Phys. Lett. A **207**, 42 (1995).
- [5508] S. Martinez, F. Pennini, A. Plastino and H. Vucetich, *Thermodynamical test of nonextensive thermostatitics*, preprint (2001) [cond-mat/0105355].
- [5509] U. Tirnakli, F. Buyukkilic and D. Demirhan, *Generalized distribution functions and an alternative approach to generalized Planck radiation law*, Physica A **240**, 657 (1997).
- [5510] Q.A. Wang and A. Le Mehaute, *On the generalized blackbody distribution*, Phys. Lett. A **237**, 28 (1997).
- [5511] A.B. Pinheiro and I. Roditi, *Nonextensive thermostatitics and deformed structures*, Phys. Lett. A **242**, 296 (1998).
- [5512] E.K. Lenzi and R.S. Mendes, *Blackbody radiation in nonextensive Tsallis statistics: The exact solution*, Phys. Lett. A **250**, 270 (1998).
- [5513] Q.A. Wang and A. Le Mehaute, *Nonextensive black-body distribution function and Einstein's coefficients A and B*, Phys. Lett. A **242**, 301 (1998).
- [5514] Q.A. Wang, L. Nivanen and A. Le Mehaute, *Generalized blackbody distribution within the dilute gas approximation*, Physica A **260**, 490 (1998).
- [5515] S. Martinez, F. Pennini, C. Tessone and A. Plastino, *Blackbody radiation in Tsallis OLM normalized thermostatitics*, communication at the IUPAP International Conference on "New Trends in the Fractal Aspects of Complex Systems", Maceio-Brazil, 16-20 October 2000.
- [5516] S. Martinez, F. Pennini, A. Plastino and C. Tessone, *Blackbody radiation in a nonextensive scenario*, Physica A **295**, 224 (2001) [Proc. IUPAP Workshop on New Trends on Fractal Aspects of Complex Systems (16-20 October 2000, Maceio-AL, Brazil), ed. M.L. Lyra (Elsevier, Amsterdam, 2001)].
- [5517] S. Martinez, F. Pennini, A. Plastino and C.J. Tessone, *q-Thermostatitics and the black-body radiation problem*, Physica A **309**, 85 (2002).

- [5518] F. Buyukkilic, I. Sokmen and D. Demirhan, *Nonextensive thermostistical investigation of the blackbody radiation*, Chaos, Solitons and Fractals **13**, 749 (2002).
- [5519] M. Czachor, *Non-canonical quantum optics*, J. Phys. A **33**, 8081 (2000).
- [5520] L.A. Anchordoqui and D.F. Torres, *Non-extensivity effects and the highest energy cosmic ray affair*, Phys. Lett. A **283**, 319 (2001).
- [5521] L. Velazquez and F. Guzman, *Microcanonical thermostistical investigation of the blackbody radiation*, preprint (2001) [cond-mat/0110064].
- [5522] J. Kawai, A. Alshehabi, H. Iwasaki, K. Yuge and A. Nagy, *Blackbody, synchrotron radiation, bremsstrahlung and plasmon analyzed by Tsallis nonextensive entropy*, preprint (2011).
- [5523] A. Alshehabi, *On the plasmon contribution to X-ray electron emission spectroscopy background:q-statistical analysis*, Solid State Communications (2022), doi: 10.1016/j.ssc.2022.114979
- [5524] M. Sharifian, F. Ghozeisi, L. Gholamzadeh and N.F. Farrashbandi, *The inverse Bremsstrahlung absorption in the presence of Maxwellian and non-Maxwellian electrons*, Chinese Physics B **28**, 105202 (2019).
- [5525] H. Iwasaki and J. Kawai, *Similarity between blackbody and synchrotron radiation*, preprint (2011).
- [5526] H. Iwasaki, J. Kawai, K. Yuge and A. Nagy, *Similarity between blackbody and synchrotron radiation analyzed by Tsallis entropy*, X-Ray Spectrom. **41**, 125-127 (2012).
- [5527] J. Kawai, *Visit report to Prof. Tsallis*, Bulletin of the Society for Discrete Variational $X\alpha$ **24** (1,2) (2011).
- [5528] A. Pandya, Z. Zhang, M. Chandra and C.F. Gammie, *Polarized synchrotron emissivities and absorptivities for relativistic thermal, power-law, and kappa distribution functions*, Astrophys. J. **822**, 34 (2016) (10 pages), doi:10.3847/0004-637X/822/1/34
- [5529] O. Kayacan and N. Can, *Nonextensive thermostistical approach to the thermoluminescence decay*, Physica A **331**, 538 (2004).
- [5530] O. Kayacan and N. Can, *A generalized method for handling first- and second-order thermal desorption and thermoluminescence*, Chem. Phys. **298**, 273 (2004).
- [5531] O. Kayacan, N. Can, Y. Karabulut and O. Afsar, *Application of Tsallis thermostistics to half-width method used in thermoluminescence glow peaks in analysis of thermal desorption spectra*, Physica A **345**, 107 (2005).
- [5532] K.S. Fa, *Tsallis distribution and luminescence decays*, J. Luminescence **130**, 714-716 (2010).
- [5533] O. Afsar and O. Kayacan, *Generalized cluster variation theory for the isotropic-nematic phase transition*, Physica Scripta **73**, 525-530 (2006).
- [5534] H. Chamati, A.Ts. Djankova and N.S. Tonchev, *The black-body radiation in Tsallis statistics*, preprint (2003) [cond-mat/0311234].
- [5535] H. Chamati, A.Ts. Djankova and N.S. Tonchev, *On the application of nonextensive statistical mechanics to the black-body radiation*, Physica A **360**, 297-303 (2006).
- [5536] M.J. Andrade and M.A. Viscarra, *Estudio de la correlacion fotonica en la cavidad radiante utilizando la mecanica estadistica no extensiva*, preprint (2009).
- [5537] Q.J. Zeng, Z. Cheng, J.H. Yuan, *Generalization of the radiation laws of a Kerr nonlinear blackbody*, Eur. Phys. J. D **66**, 50 (2012) (8 pages).
- [5538] Q.J. Zeng, J. Ge, P. Qin and Y.Q. Xu, *A revisit to the generalized radiation laws of a Kerr nonlinear blackbody*, Int. J. Theor. Phys. **52**, 897-911(2013).
- [5539] I.V. Toranzo, S. Lopez-Rosa, R.O. Esquivel and J.S. Dehesa, *Extremum-entropy-based Heisenberg-like uncertainty relations*, J. Phys. A: Math. Theor. **49**, 025301 (2016) (13 pages), doi:10.1088/1751-8113/49/2/025301
- [5540] F.H. de Sa, M.B. Alves and L. Liu, *Measurements of collective effects related to beam coupling impedance at Sirius*, 13th Int. Particle Acc. Conf. IPAC2022, Bangkok, Thailand (2022).
- [5541] M.A. Abeda, A.A. Babaev and L.G. Sukhikh, *Luminosity calibration by means of van-der-Meer scan for Q-Gaussian beams*, preprint (2023), 2305.04023 [physics.acc-ph].
- [5542] R.F.S. Andrade, *Ising chain in the generalized Boltzmann-Gibbs statistics*, Physica A **175**, 285 (1991).
- [5543] R.F.S. Andrade, *Remarks on the behavior of the Ising chain in the generalized statistics*, Physica A **203**, 486 (1994).
- [5544] U. Tirnakli, D. Demirhan and Buyukkilic, *Comparison of the standard statistical thermodynamics (SST) with the generalized statistical thermodynamics (GST) results for the Ising chain*, Acta Physica Pol. A **91**, 1035 (1997).
- [5545] S.A. Cannas and A.C.N. Magalhaes, *One-dimensional Potts model with long-range interactions: A renormalization group approach*, J. Phys. A **30**, 3345 (1997).
- [5546] D.O. Soares-Pinto, I.S. Oliveira and M.S. Reis, *Phase diagram of a 2D Ising model within a nonextensive approach*, Eur. Phys. J. B **62**, 337-340 (2008).

- [5547] S.A. Cannas and C. Tsallis, *Self-dual planar lattice Ising ferromagnet within generalized thermostatistics*, Z. Physik B **100**, 623 (1996).
- [5548] S.A. Cannas and F.A. Tamarit, *Long-range interactions and non-extensivity in ferromagnetic spin systems*, Phys. Rev. B **54**, R12661 (1996).
- [5549] L.C. Sampaio, M.P. de Albuquerque and F.S. de Menezes, *Nonextensivity and Tsallis statistics in magnetic systems*, Phys. Rev. B **55**, 5611 (1997).
- [5550] F.A. Tamarit and C. Anteneodo, *Long-range interacting rotators: Connection with the mean-field approximation*, Phys. Rev. Lett. **84**, 208 (2000).
- [5551] R. Toral, *On the nonextensivity of the long range XY model*, preprint (2003) [cond-mat/0304018].
- [5552] A. Campa, A. Giansanti and D. Moroni, *Canonical solution of a system of long-range interacting rotators on a lattice*, preprint (2000) [cond-mat/0002168].
- [5553] A. Campa, A. Giansanti, D. Moroni and C. Tsallis, *Classical spin systems with long-range interactions: Universal reduction of mixing*, Phys. Lett. A **286**, 251 (2001).
- [5554] M.-C. Firpo and S. Ruffo, *Chaos suppression in the large size limit for long-range systems*, J. Phys. A **34**, L511 (2001).
- [5555] C. Anteneodo and R.O. Vallejos, *On the scaling laws for the largest Lyapunov exponent in long-range systems: A random matrix approach*, Phys. Rev. E **65**, 016210 (2002).
- [5556] R.O. Vallejos and C. Anteneodo, *Theoretical estimates for the largest Lyapunov exponent of many-particle systems*, Phys. Rev. E **66**, 021110 (2002).
- [5557] R.O. Vallejos and C. Anteneodo, *Largest Lyapunov exponent of long-range XY systems*, Physica A **340**, 178 (2004).
- [5558] A. Giansanti, D. Moroni and A. Campa, *Universal behavior in the static and dynamic properties of the $\alpha - XY$ model*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13**, Number 3, 407 (Pergamon-Elsevier, Amsterdam, 2002).
- [5559] F.D. Nobre and C. Tsallis, *Classical infinite-range-interaction Heisenberg ferromagnetic model: Metastability and sensitivity to initial conditions*, Phys. Rev. E **68**, 036115 (2003).
- [5560] F.D. Nobre and C. Tsallis, *Metastable states of the classical inertial infinite-range-interaction Heisenberg ferromagnet: Role of initial conditions*, Physica A **344**, 587 (2004).
- [5561] S. Gupta and D. Mukamel, *Quasistationarity in a long-range interacting model of particles moving on a sphere*, preprint (2013), 1309.0194 [cond-mat.stat-mech].
- [5562] Y. Peng, F. Wang, M. Wong and Y.L. Han, *Self-similarity of phase-space networks of frustrated spin models and lattice gas models*, preprint (2011).
- [5563] J.R. de Sousa, *Study of the mean field renormalization group method with the Tsallis statistics*, Physica A **235**, 534 (1997).
- [5564] F. Buyukkilic, U. Tirnakli and D. Demirhan, *Generalized Tsallis thermostatistics of magnetic systems*, Tr. J. of Physics (Turkey) **21**, 132 (1997).
- [5565] R. Salazar and R. Toral, *Numerical simulations using Tsallis statistics*, communicated at the Conference on Computational Physics (Granada, 2-5 September 1998).
- [5566] R. Salazar and R. Toral, *Scaling functions for Tsallis non-extensive statistics*, Phys. Rev. Lett. **83**, 4233 (1999).
- [5567] B.P. Vollmayr-Lee and E. Luijten, *Comment on "Scaling laws for a system with long-range interactions within Tsallis statistics"*, Phys. Rev. Lett. **85**, 470 (2000).
- [5568] R. Salazar and R. Toral, *Reply to the Comment on "Scaling Laws for a System with Long-Range Interactions within Tsallis Statistics"*, Phys. Rev. Lett. **85**, 471 (2000).
- [5569] R. Salazar and R. Toral, *A Monte Carlo method for the numerical simulation of Tsallis statistics*, Physica A **283**, 59 (2000).
- [5570] R. Salazar and R. Toral, *Thermostatistics of extensive and non-extensive systems using generalized entropies*, Physica A **290**, 159 (2001).
- [5571] R. Salazar, R. Toral and A.R. Plastino, *Numerical determination of the distribution of energies for the XY-model*, Physica A **305**, 144 (2002).
- [5572] Y. Chiba and N. Nakagawa, *Numerical determination of entropy associated with excess heat in steady-state thermodynamics*, Phys. Rev. E **94** (2), 022115 (2016).
- [5573] R. Toral and R. Salazar, *Ensemble equivalence for non-extensive thermostatistics*, Physica A **305**, 52 (2001).
- [5574] A.R. Lima, J.S. Sa Martins and T.J.P. Penna, *Monte Carlo simulations of magnetic systems in the Tsallis statistics*, Physica A **268**, 553 (1999).

- [5575] R. Salazar and R. Toral, *Hybrid simulated annealing using Tsallis statistics*, Computer Physics Communications **121/122**, 40 (1999).
- [5576] R. Botet, M. Ploszajczak and J.A. Gonzalez, *Supernumerous phase transition emergence in extended thermostatics*, preprint (2001).
- [5577] R. Botet, M. Ploszajczak and J.A. Gonzalez, *Phase transitions in nonextensive spin systems*, Phys. Rev. E **65**, 015103 (2002).
- [5578] E. Ruthotto, *Numerische und analytische untersuchung magnetischer systeme im rahmen einer verallgemeinerten statistischen mechanik*, Diploma Thesis (Westfalischen Wilhelms-Universitaet Muenster, 2001) [<http://pauli.uni-muenster.de/~rutherf/thesis.html>].
- [5579] W. Sakikawa and O. Narikiyo, *Multifractal behavior of the two-dimensional Ising model at small spatio-temporal scales*, J. Phys. Soc. Japan **71**, 1200 (2002).
- [5580] D.F. Howarth, J.A. Weil and Z. Zimpel, *Generalization of the lineshape useful in magnetic resonance spectroscopy*, J. Magn. Res. **161**, 215 (2003).
- [5581] A.C. Sparavigna, *q-Gaussian Tsallis functions and Egelstaff-Schofield spectral line shapes*, Internat. J. Sciences **12** (2023), doi: 10.18483/ijSci.2673
- [5582] A.C. Sparavigna, *q-Gaussian Tsallis line shapes and Raman spectral bands*, Internat. J. Sciences **12** (2023), doi: 10.18483/ijSci.2671
- [5583] A.C. Sparavigna, *q-Gaussian Tsallis line shapes for Raman spectroscopy*, SSRN Electronic Journal (2023), doi: 10.2139/ssrn.4445044
- [5584] A.C. Sparavigna, *Tsallis q-Gaussian function as fitting lineshape for Graphite Raman bands*, (2023).
- [5585] A.C. Sparavigna, *Fitting q-Gaussians onto Anatase TiO₂ Raman bands*, preprint (2023).
- [5586] A.C. Sparavigna, *q-Gaussians and the SERS spectral bands of L-Cysteine and Cysteamine*, preprint (2023).
- [5587] A.C. Sparavigna, *q-Gaussians and the SERS spectral bands of L-Cysteine*, preprint (2023).
- [5588] R.F.S. Andrade and S.T.R. Pinho, *Tsallis scaling and the long-range Ising chain: A transfer matrix approach*, Phys. Rev. E **71**, 026126 (2005).
- [5589] E.M. Carvalho Neto and R.F.S. Andrade, *Tsallis scaling in the long-range Ising chain with competitive interactions*, Braz. J. Phys. **39**, 417-422 (2009).
- [5590] A.Y. Klimenko, *Entropy and equilibria in competitive systems*, Entropy **16**, 1-22 (2014), doi:10.3390/e16010001
- [5591] L.A. del Pino, P. Troncoso, S. Curilef, *Thermodynamics from a scaling Hamiltonian*, Phys. Rev. B **76**, 172402 (2007) (4 pages).
- [5592] A.M. Nassimi and G.A. Parsafar, *Making thermodynamic functions of nanosystems intensive*, J. Phys. - Cond. Matter **19**, 156218 (2007).
- [5593] Ch. Binek, S. Polisetty, X. He, T. Mukherjee, R. Rajesh and J. Redepenning, *Nonextensivity in magnetic nanoparticle ensembles*, Phys. Rev. B **74**, 054432 (2006) (7 pages).
- [5594] N. Crokidakis, D.O. Soares-Pinto, M.S. Reis, A.M. Souza, R.S. Sathour and I.S. Oliveira, *Finite size analysis of a 2D Ising model within a nonextensive approach*, preprint (2009).
- [5595] S.M.D. Queiros, N. Crokidakis and D.O. Soares-Pinto, *Effect of platykurtic and leptokurtic distributions in the random-field Ising model: Mean field approach*, Phys. Rev. E **80**, 011143 (2009) (8 pages).
- [5596] B. Tadic, *Dynamical implications of sample shape for avalanches in 2-dimensional random-field Ising model with saw-tooth domain wall*, preprint (2017), 1708.04910 [cond-mat.dis-nn].
- [5597] D. Spasojevic, S. Janicevic, S. Mijatovic and B. Tadic, *Hysteresis-loop criticality in disordered ferromagnets – A comprehensive review of computational techniques*, Computer Modeling in Engineering and Sciences **142** (2), 1021 (2025).
- [5598] F.D. Nobre and C. Tsallis, *Infinite-range Ising ferromagnet: thermodynamic limit within generalized statistical mechanics*, Physica A **213**, 337 (1995); Erratum: **216**, 369 (1995).
- [5599] S.A. Cannas, A.C.N. de Magalhaes and F.A. Tamarit, *Evidence of exactness of the mean field theory in the nonextensive regime of long-range spin models*, Phys. Rev. B **61**, 11521 (2000).
- [5600] P.R. del Santoro, *Aproximacao de campo molecular do modelo de Potts generalizado*, Master Thesis (Universidade de Sao Paulo-Brazil, 1994).
- [5601] F. Buyukkilic, D. Demirhan and U. Tirnakli, *Generalization of the mean-field Ising model within Tsallis thermostatics*, Physica A **238**, 285 (1997).
- [5602] S. Reynal and H.T. Diep, *Reexamination of the long-range Potts model: A multicanonical approach*, Phys. Rev. E **69**, 026109 (2004).
- [5603] H.H.A. Rego, L.S. Lucena, L.R. da Silva and C. Tsallis, *Crossover from extensive to nonextensive behavior driven by long-range $d = 1$ bond percolation*, Physica A **266**, 42 (1999).

- [5604] U.L. Fulco, L.R. da Silva, F.D. Nobre, H.H.A. Rego and L.S. Lucena, *Effects of site dilution on the one-dimensional long-range bond-percolation problem*, Phys. Lett. A **312**, 331 (2003).
- [5605] M.L. de Almeida, E.L. Albuquerque, U.L. Fulco and M. Serva, *A percolation system with extremely long range connections and node dilution*, Physica A (2014), in press, 1402.4656 [cond-mat.dis-nm].
- [5606] I. Koponen, *Thermalization of electron-phonon system in nonequilibrium state characterized by fractal distribution of phonon excitation*, Phys. Rev. E **55**, 7759 (1997).
- [5607] H.N. Nazareno and P.E. de Brito, *Long range interactions and nonextensivity in one-dimensional systems*, Phys. Rev. B **60**, 4629 (1999).
- [5608] L. Borland and J.G. Menchero, *Nonextensive effects in tight-binding systems with long-range hopping*, in *Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 169 (1999).
- [5609] L. Borland, J.G. Menchero and C. Tsallis, *Anomalous diffusion and nonextensive scaling in a one-dimensional quantum model with long-range interactions*, Phys. Rev. B **61**, 1650 (2000).
- [5610] I.S. Oliveira, *Some metallic properties in the framework of Tsallis generalized statistics*, Eur. Phys. J. B **14**, 43 (2000).
- [5611] L.H.C.M. Nunes and E.V.L. de Mello, *BCS model in Tsallis' statistical framework*, Physica A **296**, 106 (2001).
- [5612] L.H.C.M. Nunes and E.V.L. de Mello, *Nonextensive thermodynamics applied to superconductivity*, Physica A **305**, 340 (2002).
- [5613] C. Wolf, *Modification of the Debye theory of specific heat due to non-extensive statistics*, Fizika B **7**, 235 (1998) (Croatian Physical Society).
- [5614] H.Uys, H.G. Miller and F.C. Khanna, *Generalized statistics and high T_c superconductivity*, Phys Lett A **289**, 264 (2001).
- [5615] H.G. Miller, F.C. Khanna, R. Teshima, A.R. Plastino and A. Plastino, *Generalized thermostatistics and Bose-Einstein condensation*, Phys. Lett. A **359**, 357-358 (2006).
- [5616] M.S. Reis, J.C.C. Freitas, M.T.D. Orlando, E.K. Lenzi and I.S. Oliveira, *Evidences for Tsallis non-extensivity on CMR manganites*, Europhys. Lett. **58**, 42 (2002).
- [5617] M.S. Reis, J.P. Araujo, V.S. Amaral, E.K. Lenzi and I.S. Oliveira, *Magnetic behavior of a non-extensive S-spin system: Possible connections to manganites*, Phys. Rev. B **66**, 134417 (2002).
- [5618] M.S. Reis, V.S. Amaral, J.P. Araujo and I.S. Oliveira, *Magnetic phase diagram for a non-extensive system: Experimental connection with manganites*, Phys. Rev. B **68**, 014404 (2003).
- [5619] F.A.R. Navarro, M.S. Reis, E.K. Lenzi and I.S. Oliveira, *A study on composed nonextensive magnetic systems*, Physica A **343**, 499 (2004).
- [5620] M.S. Reis, *Nao-extensividade magnetica em manganitas*, Doctor Thesis (Centro Brasileiro de Pesquisas Fisicas, 2003).
- [5621] M.S. Reis, V.S. Amaral, J.P. Araujo and I.S. Oliveira, *Non-extensivity of inhomogeneous magnetic systems*, in *Complexity, Metastability and Nonextensivity*, Proc. 31st Workshop of the International School of Solid State Physics (20-26 July 2004, Erice-Italy), eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 230.
- [5622] M.S. Reis, V.S. Amaral, R.S. Sarthour and I.S. Oliveira, *Experimental determination of the nonextensive entropic parameter q* , Phys. Rev. B **73**, 092401 (2006) (4 pages).
- [5623] M.S. Reis, V.S. Amaral, R.S. Sarthour and I.S. Oliveira, *Physical meaning and measurement of the entropic parameter q in a inhomogeneous magnetic system*, Eur. Phys. J. B **50**, 99-103 (2006).
- [5624] L. Guo, *Physical meaning of the parameters in the two-parameter (κ , ζ) generalized statistics*, Mod. Phys. Lett. B **26** (11), 1250064 (2012) (7 pages).
- [5625] D.O. Soares-Pinto, M.S. Reis, R.S. Sarthour and I.S. Oliveira, *On the nonextensive character of some magnetic systems*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 232-236 (New York, 2007).
- [5626] F.A.R. Navarro, M.S. Reis, E.K. Lenzi and I.S. Olivera, *New consideration on composed nonextensive magnetic systems*, preprint (2007) [cond-mat/0701495].
- [5627] D.O. Soares-Pinto, M.S. Reis, R.S. Sarthour and I.S. Oliveira, *Spin-waves in a complex magnetic system: nonextensive approach*, J. Stat. Mech. P08011 (2007) (9 pages).
- [5628] D.O. Soares-Pinto, M.S. Reis, R.S. Sarthour and I.S. Oliveira, *On the nonextensive character of some magnetic system*, preprint (2007), 0709.1628 [cond-mat.stat-mech].

- [5629] N. Crokidakis, D.O. Soares-Pinto, M.S. Reis, A.M. Souza, R.S. Sarthour and I.S. Oliveira, *Finite size analysis of a two-dimensional Ising model within a nonextensive approach*, Phys. Rev. E **80**, 051101 (2009) (8 pages).
- [5630] H. Hasegawa, *Nonextensive thermodynamics of the two-site Hubbard model*, Physica A **351**, 273 (2005).
- [5631] H. Hasegawa, *Nonextensive thermodynamics of the two-site Hubbard model. II. Grand-canonical ensembles*, preprint (2004) [cond-mat/0410045].
- [5632] H. Hasegawa, *Nonextensive thermodynamics of a cluster consisting of M Hubbard dimers ($M = 1, 2, 3$ and ∞)*, in *Complexity and Nonextensivity: New Trends in Statistical Mechanics*, eds. M. Sakagami, N. Suzuki and S. Abe, Prog. Theor. Phys. Suppl. **162**, 70-78 (2006).
- [5633] H. Hasegawa, *Entanglement of Hubbard dimers in the nonextensive statistics*, Physica A **390**, 1486-1503 (2011).
- [5634] H. Hasegawa, *Thermal entanglement of Hubbard dimers in the nonextensive statistics*, Physica A (2010), in press.
- [5635] H. Hasegawa, *Nonextensive quantum method to itinerant-electron ferromagnetism: Factorization approach*, Physica A **388**, 2781-2792 (2009) [Corrigendum: **388**, 3675 (2009)].
- [5636] H. Hasegawa, *Nonextensive quantum method for itinerant-electron ferromagnetism: The interpolation approximation*, 0906.0225 [cond-mat.stat-mech].
- [5637] H. Hasegawa, *The interpolation approach to nonextensive quantum statistics*, Physica A **389**, 2358-2375 (2010).
- [5638] H. Hasegawa, *Quantum Fisher information and q -deformed relative entropies - Additivity vs nonadditivity*, in *Complexity and Nonextensivity: New Trends in Statistical Mechanics*, eds. M. Sakagami, N. Suzuki and S. Abe, Prog. Theor. Phys. Suppl. **162**, 183-189 (2006).
- [5639] F.A.R. Navarro and J.F.V. Flores, *Simulations for the extended Hubbard model through statistical mechanics nonextensive*, preprint (2009), 0912.5386 [cond-mat.stat-mech].
- [5640] F.A.R. Navarro, E.C. Torres-Tapia and P. Pacheco Pena, *Grand canonical ensemble of the extended two-site Hubbard model via a nonextensive distribution*, J. Theor. Appl. Phys. **7**, 20 (2013) (10 pages), <http://www.jtaphys.com/content/7/1/20>
- [5641] I. Rusu, *On the possible use of nonextensive thermodynamics formalism for the prediction of polyurethanes thermal degradation*, preprint (2005).
- [5642] J. Alvarez-Ramirez, F.J. Valdes-Parada and JA Ochoa-Tapia, *Some remarks on non-extensive specific heat properties*, Phys. Lett. A **345**, 231-236 (2005).
- [5643] C.X. Wang and G.W. Yang, *Thermodynamics of metastable phase nucleation at the nanoscale*, Materials Sciences and Engineering R **49**, 157-202 (2005).
- [5644] G. Felix, W. Nicolazzi, M. Mikolasek, G. Molnar and A. Bousseksou, *Non-extensivity of thermodynamics at the nanoscale in molecular spin crossover materials: A balance between surface and volume*, Phys. Chem. Chem. Phys. **16** (16), 7358-7367 (2014), doi: 10.1039/c3cp55031a 2014
- [5645] C.C. Yang and Y.W. Mai, *Thermodynamics at the nanoscale: A new approach to the investigation of unique physicochemical properties of nanomaterials*, Materials Science and Engineering R **79**, 1-40 (2014).
- [5646] G.A. Abakumov and V.B. Fedoseev, *Criteria of nonextensive behaviour of system in conditions of external fields*, J. Materials Science and Engineering A **2** (11), 747-752 (2012).
- [5647] A.G. Ferreira, D.H.A.L. Anselmo and M.S. Vasconcelos, *Contribuicao ao calculo do calor especifico com a estatistica nao-extensiva em uma estrutura quasiperiodica*, communicated at the XXV EFNNE, Encontro de Fisicos do Norte e Nordeste (Natal, 15-20 October 2007).
- [5648] K.D. Sen, J. Antolin and J.C. Angulo, *Fisher-Shannon analysis of ionization processes and isoelectronic series*, Phys.Rev. A **76**, 032502 (2007) (7 pages).
- [5649] S. Lopez-Rosa, J.C. Angulo and J. Antolin, *Rigorous properties and uncertainty-like relationships on product-complexity measures: application to atomic systems*, Physica A **388**, 2081-2091 (2009).
- [5650] P.A. Bouvrie, J. Antolin and J.C. Angulo, *Generalized quantum similarity index: Applications in atoms*, Chem. Phys. Lett, **506**, 326-0331 (2011).
- [5651] J. Antolin, S. Lopez-Rosa, J.C. Angulo and R.O. Esquivel, *Jensen-Tsallis divergence and atomic dissimilarity for position and momentum space electron densities*, J. Chem. Phys. **132**, 044105 (2010) (7 pages).
- [5652] J.C. Angulo, J. Antolin, S. Lopez-Rosa and R.O. Esquivel, *Jensen-Tsallis divergence and atomic dissimilarity for ionized systems in conjugated spaces*, Physica A **390**, 769-780 (2011).
- [5653] A. Grassi, *A relationship between atomic correlation energy and Tsallis entropy*, Int. J. Quantum Chem. **108**, 774-778 (2008).
- [5654] A. Grassi, *A relationship between atomic correlation energy of neutral atoms and generalized entropy*, Int. J. Quantum Chem. **111**, 2390-2397 (2011).

- [5655] A. Grassi, *An entropic form for NLFP with coulombic-like potential*, Phys. Lett. A **376**, 803-808 (2012).
- [5656] J. Cervera and S. Mafe, *Electrical fluctuations in monolayer-protected metal nano-clusters*, Chem. Phys. Lett. **451**, 257-261 (2008).
- [5657] J. Cervera, P. Ramirez, J.A. Manzanares and S. Mafe, *Incorporating ionic size in the transport equations for charged nanopores*, Microfluid Nanofluid **9**, 41-53 (2010).
- [5658] C.H.S. Amador and L.S. Zambrano, *Evidence for energy regularity in the Mendeleev periodic table*, Physica A **389**, 3866-3869 (2010).
- [5659] C.P. Panos, N.S. Nikolaidis, K.Ch. Chatzisavvas and C.C. Tsouros, *A simple method for the evaluation of the information content and complexity in atoms. A proposal for scalability*, preprint (2008), 0812.3963 [quant-ph].
- [5660] E.P. Borges, *Nonextensive local composition models in theories of solutions*, preprint (2012), 1206.0501 [physics.chem-ph].
- [5661] M.M. Hawamdeh, M.K. Al-Sugheir, A.S. Sandouqa and H.B. Ghassib, *Thermodynamic properties of graphene using the static fluctuation approximation (SFA)*, Canadian Journal of Physics **95** (3), 211-219 (2017).
- [5662] M. Lo Schiavo, F. Cipriani, G. De Riso, A. Romano and C. Noce, *Quantum entanglement in an extended Hubbard model as evaluated from a spin concurrence measure*, J. Magnetism and Magnetic Materials **584**, 171066 (2023).
- [5663] A.R. Plastino and A. Plastino, *Stellar polytropes and Tsallis' entropy*, Phys. Lett. A **174**, 384 (1993).
- [5664] J.J. Aly, *Minimum energy / maximum entropy states of a self-gravitating system*, in *N-body problems and gravitational dynamics*, Proceedings of the Meeting held at Aussois-France (21-25 March 1993), eds. F. Combes and E. Athanassoula (Publications de l'Observatoire de Paris, Paris, 1993), page 19.
- [5665] J.J. Aly and J. Perez, *Thermodynamics of a two-dimensional unbounded self-gravitating system*, Phys. Rev. E **60**, 5185 (1999).
- [5666] J. Perez, *Essay on gravitation*, Thesis Physics (Universite Paris 7, 2007), HAL, hal.archives-ouvertes.fr/tel-01141419
- [5667] K.S. Fa and E.K. Lenzi, *Exact equation of state for 2-dimensional gravitating systems within Tsallis statistical mechanics*, J. Math. Phys. **42**, 1148 (2001) [Erratum: **43**, 1127 (2002)].
- [5668] B.B. Soares, J.C. Carvalho, J.D. do Nascimento Jr. and J.R. De Medeiros, *Tsallis maximum entropy distribution function for stellar rotational velocities in the Pleiades*, Physica A **364**, 413-422 (2005).
- [5669] T.M. Santiago, *Uma nova interpretacao acerca do impacto da freagem magnetica e da interacao de mare na evolucao da rotacao estelar*, Doctor Thesis (Universidade Federal do Ceara, Centro de Ciencias, Departamento de Fisica, 2024).
- [5670] J.C. Carvalho, R. Silva, J.D. do Nascimento et al, *Power law statistics and stellar rotational velocities in the Pleiades*, Europhys. Lett. **84**, 59001 (2008).
- [5671] J.C. Carvalho, B.B. Soares, B.L. Canto Martins, J.D. do Nascimento Jr. and J.R. De Medeiros, *Radial velocities of open stellar clusters: A new solid constraint favoring Tsallis maximum entropy theory*, Physica A **384**, 507-515 (2007).
- [5672] J.C. Carvalho, J.D. Jr. do Nascimento, R. Silva and J.R. De Medeiros, *Non-gaussian statistics and stellar rotational velocities of main-sequence field stars*, Astrophys. J. Lett. **696**, L48-L51 (2009).
- [5673] D.B. de Freitas, F.J. Cavalcante, B.B. Soares and J.R.P. Silva, *A nonextensive view of the stellar braking indices*, EPL **111**, 39003 (2015), doi: www.epljournal.org doi: 10.1209/0295-5075/111/39003
- [5674] D.B. de Freitas, F.J. Cavalcante and T.M. Santiago, *Measuring deviation from Skumanich braking index in active stars observed by Kepler mission*, EPL **140**, 29001 (2022).
- [5675] D.B. de Freitas, R.T. Eufrazio, M.M.F. Nepomuceno and J.R.P. da Silva, *A nonextensive insight into the stellar initial mass function*, EPL **125**, 69002 (2019), doi: 10.1209/0295-5075/125/69002
- [5676] D.B. de Freitas, **A new insight on stellar age I. Theoretical trends with gyro-age and rotation**, preprint (2020), 2003.01444 [astro-ph.SR].
- [5677] D.B. de Freitas, *Can gyrochronological ages be affected by the variation of the magnetic braking index?*, preprint (2020), 2003.06287 [astro-ph.SR].
- [5678] D.B. de Freitas, *Stellar age dependence of the nonextensive magnetic braking index: A test for the open cluster α Per*, EPL **135**, 19001 (2021).
- [5679] C.A.P. Viana and D.B. de Freitas, *Non-extensive processes associated with heating of the Galactic disc*, EPL **131**, 69002 (2020), doi: 10.1209/0295-5075/131/69002
- [5680] C.V. da Silva, M.M.F. Nepomuceno and D.B. de Freitas, *Multiscale structure of the gravitational wave signal from GW150914 based on the nonextensivity q -triplet*, EPL **141**, 59002 (2023).

- [5681] D.B. de Freitas, C.V. da Silva and M.M.F. Nepomuceno, *Nonadditive entropy of the gravitational wave signal from GW150914*, IAUS 389 Gravitational Wave Astrophysics **1**, XXIXth IAU General Assembly, August 2015, Ed. David Buckley, preprint (2024), 2412.12211 [gr-qc].
- [5682] C.V. da Silva, F.V. Alencar Filho, J.P. Bravo and D.B. de Freitas, *Anomalous entropic behavior observed in Quasar 3C 273*, preprint (2024), 2405.17244 [astro-ph.HE].
- [5683] C.V. da Silva, S.G.A. Barbosa, F.V. Alencar Filho, J.P. Bravo and D.B. de Freitas, *Nonextensive entropic behavior observed in Quasar 3C 273*, preprint (2025), 2502.04002 [astro-ph.HE].
- [5684] R. da Silva Sobrinho, *Efeitos do freio magnetico sobre a distribuicao da rotacao estelar*, Master Thesis (Universidade Federal do Rio Grande do Norte, Natal, 2015).
- [5685] M. Cure, D.F. Rial, A. Christen and J. Cassetti, *A method to deconvolve stellar rotational velocities*, Astronomy and Astrophysics A 565 **A85** (2014) (7 pages), doi: 10.1051/0004-6361/201323344
- [5686] J.C. Carvalho, R. Silva, J.D. do Nascimento, B.B. Soares Jr. and J.R. De Medeiros, *Observational measurement of open stellar clusters: A test of Kaniadakis and Tsallis statistics*, Europhys. Lett. **91** (6), 69002 (2010) (5 pages).
- [5687] M.P. da Silva, M.M.F. de Lima, E.N. Velloso and J.D. do Nascimento Jr., *Nonextensive behavior of stellar rotation in the galactic disk components*, The Astrophysical Journal **958**, 32 (2023).
- [5688] J.R.P. Silva, M.M.F. Nepomuceno, B.B. Soares and D.B. de Freitas, *Time-dependent nonextensivity arising from the rotational evolution of solar-type stars*, Astrophys. J. **777**, 20 (2013) (7 pages).
- [5689] D.B. de Freitas, M.M.F. Nepomuceno, B.B. Soares and J.R.P. Silva, *Strong evidences for a nonextensive behavior of the rotation period in open clusters*, EPL **108**, 39001 (2014) (6 pages), www.epljournal.org doi: 10.1209/0295-5075/108/39001
- [5690] B.B. Soares and J.R.P. Silva, *On the rotation of ONC stars in the Tsallis formalism context*, Europhys. Lett. **96**, 19001 (2011) (6 pages).
- [5691] B.B. Soares and J.R.P. Silva, *Moments of the generalized distribution for stellar rotation rates*, EPL **101**, 29001 (2013) (6 pages).
- [5692] A.R. Plastino and A. Plastino, *Information theory, approximate time dependent solutions of Boltzmann's equation and Tsallis' entropy*, Phys. Lett. A **193**, 251 (1994).
- [5693] A.R. Plastino and A. Plastino, *Tsallis entropy and the Vlasov-Poisson equations*, in *Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 79 (1999).
- [5694] C. Vignat, A. Plastino and A.R. Plastino, *Entropic upper bound on gravitational binding energy*, Physica A **390**, 2491-2496 (2011).
- [5695] J.A.S. Lima, R. Silva Jr. and J. Santos, *On Tsallis nonextensive thermostatics and Jeans gravitational instability*, preprint (2000).
- [5696] J.M. Silva, J.A.S. Lima and R.E. de Souza, *Nonextensive effects on Chandrasekhar as dynamical friction*, preprint (2012), 1202.1873 [astro-ph.SR].
- [5697] P. Castro and F. Parisio, *Role of viscous friction in the reverse rotation of a disk*, Phys. Rev. E **90**, 013201 (2014) (5 pages).
- [5698] J.A.S. Lima, R. Silva and J. Santos, *Jeans' gravitational instability and nonextensive kinetic theory*, Astronomy and Astrophysics **396**, 309 (2002).
- [5699] A.R. Niknam, M.S.S. Hasani, E. Rastbood, S.A. Rostami and S.M. Khorashadizadeh, *Jeans gravitational instability in a collisional nonextensive dusty plasma with polarization force*, Indian J. Phys. (2022).
- [5700] J.L. Du, *The Chandrasekhar's condition of the equilibrium and stability for a star in the nonextensive kinetic theory*, New Astronomy **12**, 60-63 (2006).
- [5701] J.A.S. Lima and R.E. de Souza, *Power-law stellar distributions*, Physica A **350**, 303 (2005).
- [5702] J.A.S. Lima and L. Marassi, *Mass function of halos: A new analytical approach*, Int. J. Mod. Phys. D **13**, 1345 (2004).
- [5703] L. Marassi and J.A.S. Lima, *Press-Schechter mass function and the normalization problem*, Internat. J. Mod. Phys. D **16**, 445-452 (2007).
- [5704] L. Marassi, J.V. Cunha and J.A.S. Lima, *Constraining the nonextensive mass function of halos from BAO, CMB and X-ray data*, Internat. J. Mod. Phys. D **19** (8-10), 1417-1425 (2010).
- [5705] R. Silva and J.S. Alcaniz, *Negative heat capacity and non-extensive kinetic theory*, Phys. Lett. A **313**, 393 (2003).
- [5706] R. Silva and J.S. Alcaniz, *Non-extensive statistics and the stellar polytrope index*, Physica A **341**, 208 (2004).
- [5707] A. Taruya and M. Sakagami, *Gravothermal catastrophe and Tsallis' generalized entropy of self-gravitating systems*, Physica A **307**, 185 (2002).

- [5708] A. Taruya and M. Sakagami, *Gravothermal catastrophe and Tsallis' generalized entropy of self-gravitating systems II. Thermodynamic properties of stellar polytrope*, Physica A **318**, 387 (2003).
- [5709] A. Taruya and M. Sakagami, *Gravothermal catastrophe and Tsallis' generalized entropy of self-gravitating systems III. Quasi-equilibrium structure using normalized q-values*, Physica A **322**, 285 (2003).
- [5710] A. Taruya and M. Sakagami, *Long-term evolution of stellar self-gravitating systems away from the thermal equilibrium: Connection with nonextensive statistics*, Phys. Rev. Lett. **90**, 181101 (2003).
- [5711] A. Taruya and M. Sakagami, *Fokker-Planck study of stellar self-gravitating system away from the thermal equilibrium: Connection with non-extensive statistics*, Physica A **340**, 453 (2004).
- [5712] M. Sakagami and A. Taruya, *Description of quasi-equilibrium states of self-gravitating systems based on non-extensive thermostatics*, Physica A **340**, 444 (2004).
- [5713] M. Sakagami and A. Taruya, *Self-gravitating stellar systems and non-extensive thermostatics*, in *Nonadditive entropy and nonextensive statistical mechanics*, ed. M. Sugiyama, Continuum Mechanics and Thermodynamics **16**, 279 (Springer-Verlag, Heidelberg, 2004).
- [5714] A. Taruya and M. Sakagami, , Mon. Not. R. Astron. Soc. **364**, 990-1010 (2005).
- [5715] A. Taruya and M.A. Sakagami, *Quasi-equilibrium evolution in self-gravitating N-body systems*, in *Complexity and Nonextensivity: New Trends in Statistical Mechanics*, eds. M. Sakagami, N. Suzuki and S. Abe, Prog. Theor. Phys. Suppl. **162**, 53-61 (2006).
- [5716] M.Sakagami, A. Taruya and T. Okamura, *The application of generalized entropies and generalized variational principle to long-range interacting systems*, communicated at the Research Institute of Mathematical Science Workshop on Mathematical Aspects of Generalized Entropies and their Applications (7-9 July 2009, Kyoto).
- [5717] W.H. Siekman, *The entropic index of the planets of the solar system*, Chaos, Solitons and Fractals **16**, 119 (2003).
- [5718] L. Velazquez and F. Guzman, *Astrophysical systems: A model based on the self-similarity scaling postulates*, preprint (2002) [cond-mat/0205085].
- [5719] H. Yu and J.L. Du, *The nonextensive parameter for the astrophysical systems in an external rotating field*, preprint (2015), 1508.02290 [cond-mat.stat-mech].
- [5720] B. Bhakta, M. Gohain and P.K. Karmakar, *Pulsational mode behaviour in complex non-extensive non-thermal viscous astrophysical fluids*, EPL **119**, 25001 (2017), doi: 10.1209/0295-5075/119/25001
- [5721] K.S. Fa, *Two-dimensional gravitating system in optimal Lagrange multiplier approach*, Phys. Lett. A **299**, 345 (2002).
- [5722] P.H. Chavanis, *Gravitational instability of isothermal and polytropic spheres*, Astronomy and Astrophysics **401**, 15 (2003).
- [5723] P.H. Chavanis, J. Vatteville and F. Bouchet, *Dynamics and thermodynamics of a simple model similar to self-gravitating systems: the HMF model*, Eur. Phys. J. B **46**, 61-99 (2005).
- [5724] K.S. Fa and I.T. Pedron, *Extended King models for star clusters*, preprint (2001) [astro-ph/0108370].
- [5725] P.-H. Chavanis, *Gravitational instability of polytropic spheres and generalized thermodynamics*, Astro. and Astrophys. **386**, 732 (2002).
- [5726] P.-H. Chavanis, *Phase transitions in self-gravitating systems*, Int. J. Mod. Phys. B **20**, 3113-3198 (2006).
- [5727] P.H. Chavanis, *Statistical mechanics of self-gravitating systems in general relativity: I. The quantum Fermi gas*, Eur. Phys. J. Plus **135**, 290 (2020).
- [5728] J.M. Yang, *Alternative framework to quantize fermionic fields*, preprint (2025), 2503.02362 [quant-ph].
- [5729] Z. Chen and X. Xu, *Multifractality can be a universal signature of phase transitions*, preprint (2013), 1304.3189 [cond-mat.stat-mech].
- [5730] P.H. Chavanis, *Lynden-Bell and Tsallis distributions for the HMF model*, Eur. Phys. J. B **53**, 487-501 (2006).
- [5731] J.A.S. Lima, R. Silva and J. Santos, *Gravitational instability and Tsallis' nonextensive statistics*, preprint (2001) [astro-ph/0109474].
- [5732] J.L. Du, *Jeans' criterion and nonextensive velocity distribution function in kinetic theory*, Phys. Lett. A **320**, 347 (2004).
- [5733] J.L. Du, *Jeans criterion in nonextensive statistical mechanics and the nonextensive parameter for self-gravitating systems*, communicated at the 12th UN/ESA Workshop in Basic Space Science (Beijing, 24-28 May 2004).
- [5734] J.L. Du, *The nonextensive parameter and Tsallis distribution for self-gravitating systems*, Europhys. Lett. **67**, 893 (2004).
- [5735] J. Du, *The hydrostatic equilibrium and Tsallis' equilibrium for self-gravitating systems*, Central European J. Phys. **3**, 376-381 (2005).

- [5736] L.G. Cabral-Rosetti, T. Matos, D. Nunez, R. Sussman and J. Zavala, *Fitting stellar polytropes to Navarro-Frenk-White dark matter halos: A connection to Tsallis entropy*, preprint (2004) [astro-ph/0405242].
- [5737] W.J.C. da Silva, H.S. Gimenes and R. Silva, *Extended Λ CDM model*, preprint (2018), 1809.07797 [astro-ph.CO].
- [5738] P.H. Chavanis, *Dissipative self-gravitating Bose-Einstein condensates with arbitrary nonlinearity as a model of dark matter halos*, Eur. Phys. J. Plus **132**, 248 (2017) (61 pages), doi: 10.1140/epjp/i2017-11544-3
- [5739] T.N. Maity, T.S. Ray and S. Sarkar, *Halo uncertainties in electron recoil events at direct detection experiments*, Eur. Phys. J. C **81**, 1005 (2021).
- [5740] E.P. Bento, J.R.P. Silva and R. Silva, *Non-Gaussian statistics, Maxwellian derivation and stellar polytropes*, Physica A **392**, 666-672 (2013).
- [5741] L.L. Sales, F.C. Carvalho, E.P. Bento and H.T.C.M. Souza, *Non-Gaussian effects of the Saha's ionization in the early universe*, Eur. Phys. J. C **82**, 54 (2022).
- [5742] S.H. Hansen, D. Egli, L. Hollenstein and C. Salzmann, *Dark matter distribution function from non-extensive statistical mechanics*, New Astronomy **10**, 379 (2005).
- [5743] S.H. Hansen, *Cluster temperatures and non-extensive thermo-statistics*, New Astronomy **10**, 371 (2005).
- [5744] S.H. Hansen and B. Moore, *A universal density slope - velocity anisotropy relation for relaxed structures*, New Astronomy **11**, 333-338 (2006).
- [5745] G.A. Mamon, A. Biviano and G. Boue, *MAMPOSSt: Modelling anisotropy and mass profiles of observed spherical systems - I. Gaussian 3D velocities*, MNRAS **429**, 3079-3098 (2013), doi:10.1093/mnras/sts565
- [5746] A. Ishikawa and T. Suzuki, *Relations between a typical scale and averages in the breaking of fractal distribution*, Physica A **343**, 376 (2004).
- [5747] M. Razeira, B.E.J. Bodmann and C.A. Zen Vasconcellos, *Strange matter and strange stars with Tsallis statistics*, Internat. J. Mod. Phys. D **16**, 365-372 (2007).
- [5748] J.L. Du, *Nonextensivity and the power-law distributions for the systems with self-gravitating long-range interactions*, Astrophys. and Space Sci. **312**, 47-55 (2007).
- [5749] C. Tsallis, *Nonextensive Statistical Mechanics - An Approach to Complexity*, in *Chaos in Astronomy*, eds. G. Contopoulos and P.A. Patsis, Astrophysics and Space Science Proceedings (Springer, Berlin, 2008), 309-318.
- [5750] B.D. Shizgal, *Suprathermal particle distributions in space physics: Kappa distributions and entropy*, Astrophys. Space Sci. **312**, 227-237 (2007).
- [5751] B.D. Shizgal, *Spectral methods in chemistry and physics - Applications to kinetic theory and quantum mechanics* (Springer, 2015).
- [5752] B.D. Shizgal, *Kappa and other nonequilibrium distributions from the Fokker-Planck equation and the relationship to Tsallis entropy*, Phys. Rev. E **97**, 052144 (2018).
- [5753] W. Zhang and B.D. Shizgal, *Fokker-Planck equation for Coulomb relaxation and wave-particle diffusion: Spectral solution and the stability of the Kappa distribution to Coulomb collisions*, Phys. Rev. E **102**, 062103 (2020).
- [5754] B.D. Shizgal, *Energetic particle distributions in space physics represented by the Pearson differential equation for the kappa distribution*, Astrophys. Space Sci. **366**, 50 (2021).
- [5755] B.D. Shizgal, *The use of the Pearson differential equation to test energetic distributions in space physics as Kappa distributions; implication for Tsallis nonextensive entropy: II*, Astrophys. Space Sci. **367**, 7 (2022).
- [5756] A.D. Oylukan and B. Shizgal, *Nonequilibrium distributions from the Fokker-Planck equation: Kappa distributions and Tsallis entropy*, Phys. Rev. E **108**, 014111 (2023).
- [5757] B. Arbutina and V. Zekovic, *On the distribution function of suprathermal particles at collisionless shocks*, preprint (2021), 2108.09085 [physics.plasm-ph].
- [5758] J. Sarkar, S. Chandra, J. Goswami and B. Ghosh, *Formation of solitary structures and envelope solitons in electron acoustic wave in inner magnetosphere plasma with suprathermal ions*, Contributions to PlasmaPhysics, e201900202. (2020), doi: 10.1002/ctpp.201900202
- [5759] E. Shahid, M. Shamir, Z. Iqbal, I. Zeba and G. Murtaza, *Electron acoustic shock waves in nonthermal and nonextensive dissipative plasmas in the Earth's inner magnetosphere*, IEEE Transactions on Plasma Science (2025).
- [5760] C. Feron and J. Hjorth, *Simulated dark-matter halos as a test of nonextensive statistical mechanics*, Phys. Rev. E **77**, 022106 (2008).
- [5761] P.H. Chavanis and L. Delfini, *Dynamical stability of systems with long-range interactions: application of the Nyquist method to the HMF model*, Eur. Phys. J. B **69**, 389-429 (2009).
- [5762] N. Komatsu, S. Kimura and T. Kiwata, *Nonequilibrium process of self-gravitating N-body systems and quasi-equilibrium structure using normalized q-expectation values for Tsallis' generalized entropy*, communicated at

the Research Institute of Mathematical Science Workshop on Mathematical Aspects of Generalized Entropies and their Applications (7-9 July 2009, Kyoto).

- [5763] N. Komatsu, S. Kimura and T. Kiwata, *Negative specific heat in self-gravitating N -body systems enclosed in a spherical container with reflecting walls*, Phys. Rev. E **80**, 041107 (2009) (9 pages).
- [5764] N. Komatsu and S. Kimura, *Non-adiabatic-like accelerated expansion of the late universe in entropic cosmology*, Phys. Rev. D **87**, 043531 (2013) (15 pages).
- [5765] N. Komatsu and S. Kimura, *Entropic cosmology in a dissipative universe*, Phys. Rev. D **90**, 123516 (2014) (14 pages).
- [5766] N. Komatsu and S. Kimura, *General form of entropy on the horizon of the universe in entropic cosmology*, Phys. Rev. D **93**, 043530 (2016) (11 pages).
- [5767] N. Komatsu, *Alternative dark energy from the holographic equipartition law with a modified Renyi entropy: A thermodynamic scenario for the cosmological constant problem*, preprint (2016), 1611.04084 [gr-qc].
- [5768] J.P. Gazeau, *Tsallis distribution as a Λ -deformation of the Maxwell-Juttner distribution*, Entropy **26**, 273 (2024).
- [5769] I. Brevik and A.V. Timoshkin, *Thermodynamic aspects of entropic cosmology with viscosity*, preprint (2020), 2011.09207 [gr-qc]. International Journal of Modern Physics (2020), in press, doi: 10.1142/S0218271821500085
Thermodynamic aspects of entropic cosmology with viscosity
- [5770] W.S. Chung and H. Hassanabadi, *Modified anti Snyder model with minimal length, momentum cutoff and convergent partition function*, Internat. J. Theoretical Physics (2019) (15 pages), doi: doi.org/10.1007/s10773-019-04118-3
- [5771] A.S. Jahromi, S.A. Moosavi, H. Moradpour, J.P.M. Graca, I.P. Lobo, I.G. Salako and A. Jawad, *Generalized entropy formalism and a new holographic dark energy model*, Phys. Lett. B **780**, 21-24 (2018).
- [5772] A. Jawad, S. Qummer, S. Rani and M. Younas, *Generalized interaction term inspired dark energy model in fractal universe*, Modern Phys. Lett. A **35** (15), 2050126 (2020) (19 pages).
- [5773] S. Rani, A. Jawad, H. Moradpour and A. Tanveer, *Tsallis entropy inspires geometric thermodynamics of specific black hole*, Eur. Phys. J. C **82**, 713 (2022).
- [5774] A. Jawad, S. Maqsood, N. Azhar and M.M. Alam, *Analyzing inflationary parameters and swampland conjectures of modified cosmology according to various entropies*, Physics of the Dark Universe **46**, 101680 (2024).
- [5775] S. Rani and N. Azhar, *Braneworld inspires cosmological implications of Barrow holographic dark energy*, Universe **7**, 268 (2021), doi: 10.3390/universe7080268
- [5776] M. Tavayef, A. Sheykhi, K. Bamba and H. Moradpour, *Tsallis holographic dark energy*, Phys. Lett. B **781**, 195-200 (2018).
- [5777] M.A. Zadeh, A. Sheykhi and H. Moradpour, *Tsallis agegraphic dark energy model*, preprint (2018), 1810.12104 [physics.gen-ph].
- [5778] M.A. Zadeh, *New Tsallis agegraphic dark energy in Chern-Simons modified gravity*, preprint (2019), 1912.09246 [physics.gen-ph].
- [5779] M. Sharif and S. Saba, *Tsallis holographic dark energy in $f(G, T)$ gravity*, Symmetry **11**, 92 (2019), doi: 10.3390/sym11010092
- [5780] A.V. Astashenok and A.S. Tepliakov, *Some models of holographic dark energy on the Randall-Sundrum brane and observational data*, Internat. J. Mod. Phys. D 1950176 (2019) (16 pages), doi: 10.1142/S0218271819501761
- [5781] M.K. Sharma, S. Kundu and P.K. Das, *$SN1987A$ cooling due to plasmon-plasmon scattering in the Randall-Sundrum model*, Physics of the Dark Universe **40**, 101218 (2023).
- [5782] A.V. Astashenok and A. Tepliakov, *Crossing of phantom divide line in model of interacting Tsallis holographic dark energy*, Universe **8**, 265 (2022), doi: 10.3390/universe8050265
- [5783] A.V. Astashenok and A.S. Tepliakov, *Tsallis holographic dark energy model with event horizon cutoff in modified gravity*, International Journal of Geometric Methods in Modern Physics (2022), in press.
- [5784] E.M.C. Abreu, J. Ananias Neto, A.C.R. Mendes and A. Bonilla, *Tsallis and Kaniadakis statistics from a point of view of the holographic equipartition law*, EPL **121** (4), 45002 (2018).
- [5785] N. Sadeghnezhad, *Gravity and cosmology in Kaniadakis statistics*, preprint (2021), 2111.13623 [gr-qc].
- [5786] H. Moradpour, A. Bonilla, E.M.C. Abreu and J. Ananias Neto, *Accelerated cosmos in a nonextensive setup*, Phys. Rev. D **96**, 123504 (2017) (pages).
- [5787] E.M.C. Abreu, J. Ananias Neto, A.C.R. Mendes and A. Bonilla, *Tsallis entropy, modified Newtonian accelerations and the Tully-Fisher relation*, preprint (2018), 1804.06723 [hep-th].
- [5788] N. Komatsu, T. Kiwata and S. Kimura, *Thermodynamic properties of an evaporation process in self-gravitating N -body systems*, Phys. Rev. E **82**, 021118 (2010) (9 pages).

- [5789] I. Yoon, H.M. Lee and J. Hong, *Equilibrium and dynamical evolution of a self-gravitating system embedded in a potential well*, Mon. Not. R. Astron. Soc. **414**, 2728-2738 (2011).
- [5790] M.A. Moret, V. de Senna, G.F. Zebende and P. Vaveliuk, *X-ray binary systems and nonextensivity*, Physica A **389**, 854-858 (2010).
- [5791] C.J. Saxton and I. Ferreras, *Polytropic dark haloes of elliptical galaxies*, Mon. Not. R. Astron. Soc. **405**, 77-90 (2010).
- [5792] C.J. Saxton, *Galaxy stability within a self-interacting dark matter halo*, MNRAS **430**, 1578-1598 (2013), doi:10.1093/mnras/sts689
- [5793] C.J. Saxton, R. Soria and K. Wu, *Dark halo microphysics and massive black hole scaling relations in galaxies*, MNRAS **445**, 3415-3434 (2014), doi:10.1093/mnras/stu1984
- [5794] A. Campa and P.H. Chavanis, *Caloric curves fitted by polytropic distributions in the HMF model*, Eur. Phys. J. B **86**, 170 (2013), DOI: 10.1140/epjb/e2013-30947-0
- [5795] Y. Zheng, W. Luo, Q. Li and J. Li, *The polytropic index and adiabatic limit: Another interpretation to the convection stability criterion*, EPL **102**, 10007 (2013) (5 pages).
- [5796] J.Y. Kim, H.C. Lee, G. Go, Y.H. Choi, Y.S. Hwang and K.J. Chung, *Exploring the nonextensive thermodynamics of partially ionized gas in magnetic field*, Phys. Rev. E **104**, 045202 (2021).
- [5797] I.R. Losada, A. Brandenburg, N. Kleeorin and I. Rogachevskii, *Magnetic flux concentrations in a polytropic atmosphere*, Astronomy and Astrophysics **564**, A2 (2014).
- [5798] G. Livadiotis, *On the origin of the polytropic behavior in space plasmas*, J. Phys.: Conf. Ser. 1332 012010 (2019).
- [5799] Y. Zheng, *The thermodynamic stability criterion in a self-gravitational system with phase transition*, EPL **102**, 10009 (2013) (5 pages).
- [5800] D.B. Kang and P. He, *Fluid-like entropy and equilibrium statistical mechanics of self-gravitating systems*, Mon. Not. R. Astron. Soc. **416**, 32-37 (2011).
- [5801] D.B. Kang, *Roles of statistical mechanics in determining the density profile of mild relaxation*, Astrophys. Space Sci. **349**, 717-725 (2014), doi: 10.1007/s10509-013-1688-7
- [5802] Y. Zheng and J. Li, *A mechanism leading to q-power law distribution due to the inhomogeneity of phase space in the self-gravitational system*, Phys. Lett. A **377**, 1166-1170 (2013).
- [5803] D.J. Zamora, M.C. Rocca and A. Plastino, *Statistical Mechanics of planar stellar systems: solving divergences in self-gravitational systems*, preprint (2020).
- [5804] C.A. Bertulani, T. Frederico, J. Fuqua, M.S. Hussein, O. Oliveira and W. de Paula, *Dark/visible parallel universes and big bang nucleosynthesis*, Astrophys. J. (2013), in press, 1210.0235 [hep-ph].
- [5805] C.A. Bertulani, J. Fuqua and M.S. Hussein, *Big bang nucleosynthesis with a non-Maxwellian distribution*, Astrophys. J. **767**, 67 (2013) (11 pages), doi:10.1088/0004-637X/767/1/67
- [5806] S.Q. Hou, J.J. He et al, *Verification of Maxwell-Boltzmann distribution with big-bang nucleosynthesis theory*, preprint (2014), 1406.4583 [astro-ph.SR].
- [5807] S.Q. Hou, J.J. He, A. Parikh, D. Kahl and C. Bertulani, *Big-Bang nucleosynthesis verifies classical Maxwell-Boltzmann distribution*, preprint (2014), 1408.4422 [astro-ph.CO].
- [5808] A. Lavagno, G. Kaniadakis, M. Rego-Monteiro, P. Quarati and C. Tsallis, *Nonextensive thermostistical approach of the peculiar velocity function of galaxy clusters*, Astrophysical Letters and Communications **35**, 449 (1998).
- [5809] A. Nakamichi, I. Joichi, O. Iguchi and M. Morikawa, *Non-extensive galaxy distributions – Tsallis statistical mechanics*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13**, Number 3, 595 (Pergamon-Elsevier, Amsterdam, 2002).
- [5810] A. Nakamichi and M. Morikawa, *Is galaxy distribution non-extensive and non-Gaussian?*, Physica A **341**, 215 (2004).
- [5811] A. Nakamichi, T. Tatekawa and M. Morikawa, *Statistical mechanics of SDSS galaxy distribution and cosmological N-body simulations*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 267-272 (New York, 2007).
- [5812] A. Nakamichi, T. Tatekawa and M. Morikawa, *Statistical mechanics which describes the universe: SDSS galaxy distribution, N-body simulations, and void probability*, preprint (2008).
- [5813] S.S. Kharintsev and M.K. Salakhov, *Fractional derivatives for finding width, amplitude and shape of overlapping peaks*, Asian J. Spectroscopy **6**, 155 (2002).

- [5814] T. Matos, D. Nunez and R.A. Sussman, *The spacetime associated with galactic dark matter halos*, General Relativity and Gravitation **37**, 769 (2005).
- [5815] M.P. Leubner, *Nonextensive theory of dark matter and gas density profiles*, ApJ **632**, L000 (2005) [ApJL Rapid Release 09/29/05].
- [5816] T. Kronberger, M.P. Leubner and E. van Kampen, *Dark matter density profiles: A comparison of nonextensive statistics with N-body simulations*, Astronomy&Astrophysics **453**, 21-25 (2006).
- [5817] M.V. Medvedev, *Comment on “Nonextensive theory of dark matter and gas density profiles”*, preprint (2005) [astro-ph/0510031].
- [5818] A. Pontzen and F. Governato, *Conserved actions, maximum entropy and dark matter haloes*, MNRAS **430**, 121-133 (2013), doi:10.1093/mnras/sts529
- [5819] K. Freese, M. Lisanti and C. Savage, *Colloquium: Annual modulation of dark matter*, Rev. Mod. Phys. **85**, 1561-1581 (2013).
- [5820] C.A. Wuensche, A.L.B. Ribeiro, F.M. Ramos and R.R. Rosa, *Nonextensivity and galaxy clustering in the Universe*, Physica A **344**, 743 (2004).
- [5821] M.P. Leubner, *Core-halo distribution functions: A natural equilibrium state in generalized thermostatics*, Astrophys. J. **604**, 469 (2004).
- [5822] P.H. Chavanis, *Dynamical stability of collisionless stellar systems and barotropic stars: the nonlinear Antonov first law*, Astronomy and Astrophysics **451**, 109-123 (2006) [astro-ph/0602429].
- [5823] A.S. Betzler and E.P. Borges, *Nonextensive distributions of asteroid rotation periods and diameters*, Astronomy and Astrophysics **539**, A158 (2012) (5 pages).
- [5824] A.S. Betzler and E.P. Borges, *Nonextensive statistical analysis of meteor showers and lunar flashes*, Mon. Not. R. Astron. Soc. **447**, 765-771 (2015).
- [5825] A.S. Betzler and E.P. Borges, *Mass distributions of meteorites*, Mon. Not. R. Astron. Soc. **493**, 4058-4064 (2020).
- [5826] A.S. Betzler, *The monthly rates of TV sporadic meteors between 2014 and 2021*, Earth, Moon, and Planets **127**, 1 (2023).
- [5827] E.I. Barnes, L.L.R. Williams, A. Babul and J.J. Dalcanton, *Velocity distributions from nonextensive thermodynamics*, Astrophys. J. **655**, 847-850 (2007).
- [5828] M.A. Moret, V. de Senna, M.G. Pereira and G.F. Zebende, *Newcomb-Benford law in astrophysical sources*, Int. J. Mod. Phys. C **17**, 1597-1604 (2006).
- [5829] W. Hurlimann, *Benford’s law in scientific research*, Internat. J. Scientific and Engineering Res. **6** (7), 143-148 (2015), ISSN 2229-5518
- [5830] A.C.P. Rosa Jr., J.C.O. de Jesus and M.A. Moret, *Nonextensivity and entropy of astrophysical sources*, Physica A **392**, 6079-6083 (2013), <http://dx.doi.org/10.1016/j.physa.2013.07.034>
- [5831] C. Altamirano and A. Robledo, *Possible thermodynamic structure underlying the laws of Zipf and Benford*, Eur. Phys. J. B **81**, 345-351 (2011).
- [5832] M.A. Moret, G.F. Zebende, V. de Senna and P. Vaveliuk, *Black holes, x-ray binary systems and non-extensivity*, preprint (2006).
- [5833] M.P. Leubner, *Consequences of entropy bifurcation in non-Maxwellian astrophysical environments*, Nonlin. Processes Geophys. **15**, 531-540 (2008).
- [5834] J.M. Silva, R.E. de Souza and J.A.S. Lima, *Lowered nonextensive stellar distribution*, preprint (2009), 0903.0423 [astro-ph.GA].
- [5835] V.F. Cardone, M.P. Leubner and A. Del Popolo, *Spherical galaxy models as equilibrium configurations in nonextensive statistics*, Mon. Not. R. Astron. Soc. **414**, 2265-2274 (2011).
- [5836] J.M. Silva, J.A.S. Lima, R.E. de Souza, A. Del Popolo, M. Le Delliou and X.G. Lee, *Chandrasekhar’s dynamical friction and non-extensive statistics*, J. Cosmology and Astroparticle Physics **05**, 021 (2016) (18 pages).
- [5837] M.A. Dopita, J. Scharwachter, P. Shastri, L.J. Kewley, R. Davies, R. Sutherland, P. Kharb, J. Jose, E. Hampton, C. Jin, J. Banfield, H. Basurrah and S. Fischer, *Probing the physics of narrow-line regions of Seyfert galaxies I: The case of NGC 5427*, Astronomy and Astrophysics **566**, A41 (2014), doi: 10.1051/0004-6361/201423467
- [5838] Y. Zheng and J.L. Du, *Two physical explanations of the nonextensive parameter in a self-gravitating system*, EPL **107**, 60001 (2014) (6 pages), www.epljournal.org doi: 10.1209/0295-5075/107/60001
- [5839] C.F. Martins, J.A.S. Lima and P. Chimenti, *Galaxy rotation curves and nonextensive statistics*, MNRAS **449**, 3645-3650 (2015), doi:10.1093/mnras/stu2583

- [5840] A. Krishnamurthy, K. Kandasamy, B. Poczós and L. Wasserman, *Nonparametric estimation of Rényi divergence and friends*, 31st International Conference on Machine Learning, **3**, 2550-2571 (2014) (ICML 2014, Beijing, China, 21 to 26 June 2014; Code 109601).
- [5841] S.M.R. Jeffreson, J.L. Sanders, N.W. Evans, A.A. Williams, G.F. Gilmore, A. Bayo, A. Bragaglia, E. Flaccomio, R. Jackson, R.D. Jeffries, P. Jofre, C. Lardo, L. Morbidelli, E. Pancino and S. Zaggia, *The Gaia-ESO Survey: Dynamical models of flattened, rotating globular clusters*, preprint (2017), 1704.07833 [astro-ph.GA].
- [5842] Y. Ito, *An accurate solution of the self-similar orbit-averaged Fokker-Planck equation for core-collapsing isotropic globular clusters: Properties and application*, Doctor Thesis (City University of New York, 2020).
- [5843] Y. Zheng, J. Du and F. Liang, *The limit behavior of the evolution of the Tsallis entropy in self-gravitating systems*, EPL **118**, 50007 (2017) (6 pages), doi: 10.1209/0295-5075/118/50007
- [5844] Y. Zheng, J. Du and F. Liang, *Thermodynamic stability criterion and fluctuation theory in nonextensive thermodynamics*, Continuum Mech. Thermodyn. (2018), in press, doi: 10.1007/s00161-018-0628-8
- [5845] Y. Zheng, B. Hao, Y. Wen and X. Liu, *The effect of heat radiation on the evolution of the Tsallis entropy in self-gravitating systems and plasmas*, EPL **121**, 10004 (2018), doi: 10.1209/0295-5075/121/10004
- [5846] K. Ourabah, *Quasiequilibrium self-gravitating systems*, Phys. Rev. D **102**, 043017 (2020).
- [5847] G. Lucatelli, *A new approach to galaxy structural analysis with the curvature of the brightness profile*, Master Thesis (Universidade Rio Grande, 2019).
- [5848] A. Babapoor, S. Sobhanian, M. Kouhi and R. Talebzadeh, *Inverse Bremsstrahlung absorption coefficient in inhomogeneous plasma with nonextensive electron velocity distribution and Tsallis exponential electron density profile*, Contributions to Plasma Physics (2021), doi: 10.1002/ctpp.202100029
- [5849] J. Sanchez Almeida, I. Trujillo and A.R. Plastino, *Physically motivated fit to mass surface density profiles observed in galaxies*, preprint (2021), 2109.02615 [astro-ph.GA].
- [5850] J. Sanchez Almeida, *The principle of maximum entropy and the distribution of mass in galaxies*, Universe **8**, 214 (2022).
- [5851] H. Moradpour, M. Javaherian, B. Afshar and S. Jalalzadeh, *Tsallisian non-extensive stars*, Physica A **636**, 129564 (2024).
- [5852] T.M. Santiago, S.G.A. Barbosa, F.J. Cavalcante and D.B. de Freitas, *Star-planet interaction and its impact on the stellar rotation*, preprint (2024), 2404.06958 [astro-ph.EP].
- [5853] L.L. Sales and F.C. Carvalho, *Non-gaussian Saha's ionization in Rindler spacetime and the equivalence principle*, Eur. Phys. J. C **84**, 671 (2024).
- [5854] N. Kan, T. Maki and K. Shiraiishi, *Isothermal spheres from grand partition functions in nonextensive statistical mechanics*, preprint (2024), 2410.21860 [gr-qc].
- [5855] D.W. Cohen, *A formal gradient flow interpretation of a class of McKean-Vlasov equations a new adaptation of the Wasserstein metric*, preprint (2024), 2411.05696 [math.AP].
- [5856] J.L. Wu and X.M. Huang, *Density fluctuation of the He-3 reaction-diffusion model in nonextensive statistical mechanics*, Chinese Phys. **16**, 3216-3219 (2007).
- [5857] F. Michael, *Nonextensive Bloch-Torrey equation*, preprint (2010), 1003.5422 [cond-mat.stat-mech].
- [5858] Z. Huang, G. Su, A. El Kaabouchi, Q.A. Wang and J. Chen, *Self-similar motion for modeling anomalous diffusion and nonextensive statistical distributions*, J. Stat. Mech. L05001 (2010) (9 pages).
- [5859] C. Valenzuela, L.A. del Pino and S. Curilef, *Analytical solutions for a nonlinear diffusion equation with convection and reaction*, Physica A **416**, 439-451 (2014).
- [5860] M.A.F. dos Santos, *Sobre difusoes normal e anomala - Formalismos e aplicacoes*, Doctor Thesis (Universidade Estadual de Maringá, Brazil, 2015).
- [5861] L. Cheng, H. Ding, F. Yan, W. Zhang and E. Wang, *Thermodynamics of two particle system in anomalous diffusion*, preprint (2016), 1610.00596 [cond-mat.stat-mech].
- [5862] P.A. Alemany and D.H. Zanette, *Fractal random walks from a variational formalism for Tsallis entropies*, Phys. Rev. E **49**, R956 (1994).
- [5863] C. Tsallis, A.M.C. de Souza and R. Maynard, *Derivation of Lévy-type anomalous superdiffusion from generalized statistical mechanics*, in *Lévy flights and related topics in Physics*, eds. M.F. Shlesinger, G.M. Zaslavsky and U. Frisch (Springer, Berlin, 1995), p. 269.
- [5864] D.H. Zanette and P.A. Alemany, *Thermodynamics of anomalous diffusion*, Phys. Rev. Lett. **75**, 366 (1995).
- [5865] C. Tsallis, S.V.F. Levy, A.M.C. de Souza and R. Maynard, *Statistical-mechanical foundation of the ubiquity of Levy distributions in nature*, Phys. Rev. Lett. **75**, 3589 (1995); Erratum: Phys. Rev. Lett. **77**, 5442 (1996).
- [5866] M.O. Caceres and C.E. Budde, *Comment on "Thermodynamics of anomalous diffusion"*, Phys. Rev. Lett. **77**, 2589 (1996).

- [5867] D.H. Zanette and P.A. Alemany, *Reply to Comment on "Thermodynamics of anomalous diffusion"*, Phys. Rev. Lett. **77**, 2590 (1996).
- [5868] K.I. Hopcraft, E. Jakeman and R.M.J. Tanner, *Lévy random walks with fluctuating step number and multiscale behavior*, Phys. Rev. E **60**, 5327 (1999).
- [5869] M.R. Ubriaco, *A simple mathematical model for anomalous diffusion via Fisher's information theory*, Phys. Lett. A **373**, 4017-4021(2009).
- [5870] A.N. Petridis, *Levy-statistics for partially equilibrated systems*, Central European J. Phys. **4**, 363-368 (2006).
- [5871] C.A. Condat and J. Rangel, *Anomalous diffusion in the non-asymptotic regime*, preprint (1998). [Preliminary results communicated at the MAR97 Meeting, American Physical Society (1997)].
- [5872] C.A. Condat, J. Rangel and Pedro W. Lamberti, *Anomalous diffusion in the nonasymptotic regime*, Phys. Rev. E **65**, 026138 (2002).
- [5873] A.M.C. de Souza, *Sistemas estatísticos complexos e Mecânica estatística não extensiva*, PhD Thesis (Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro - Brasil, 1997).
- [5874] A.S. Chaves, *A fractional diffusion equation to describe Levy flights*, Phys. Lett. A **239**, 13 (1998).
- [5875] H. Hara and Y. Tamura, *Dynamical process of complex systems and fractional differential equations*, Cent. Eur. J. Phys. (2013), in press, DOI: 10.2478/s11534-013-0224-2
- [5876] E. Barkai and V.N. Fleurov, *Levy walks and generalized stochastic collision models*, Phys. Rev. E **56**, 6355 (1997).
- [5877] M. Buiatti, P. Grigolini and A. Montagnini, *Dynamic approach to the thermodynamics of superdiffusion*, Phys. Rev. Lett. **82**, 3383 (1999).
- [5878] D. Prato and C. Tsallis, *Nonextensive foundation of Levy distributions*, Phys. Rev. E **60**, 2398 (1999).
- [5879] C. Budde, D. Prato and M. Re, *Superdiffusion in decoupled continuous time random walks*, Phys. Lett. A **283**, 309 (2001).
- [5880] C. Budde, D. Prato and M. Re, *Modelos desacoplados de caminatas aleatorias para superdifusão*, Anales AFA **12**, 6-11 (2000).
- [5881] M.A. Re, C.E. Budde and D.P. Prato, *Lévy decoupled random walks*, Physica A **323**, 9 (2003).
- [5882] A. Robledo, *The renormalization group, optimization of entropy and non-extensivity at criticality*, Phys. Rev. Lett. **83**, 2289 (1999).
- [5883] A. Robledo, *The renormalization group and optimization of entropy*, J. Stat. Phys. **100**, 475 (2000).
- [5884] A. Robledo and J. Quintana, *Anomalous transport, the renormalization group and optimization of entropy*, Granular Matter **3**, 29 (2001).
- [5885] A. Robledo and J. Quintana, *Scale-invariant random-walks and optimization of non-extensive entropy*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13**, Number 3, 521 (Pergamon-Elsevier, Amsterdam, 2002).
- [5886] F.A. Oliveira, B.A. Mello and I.M. Xavier Jr., *Scaling transformation of random walk distributions in a lattice*, Phys. Rev. E **61** (6), 7200-7203 (2000).
- [5887] F.A. Oliveira, B.A. Mello and I.M. Xavier, *Fractal aspects of scaling transformation in random walks*, communication at the IUPAP International Conference on "New Trends in the Fractal Aspects of Complex Systems", Maceio-Brazil, 16-20 October 2000.
- [5888] F.A. Oliveira, J.A. Cordeiro and A.S. Chaves, *Scaling transformation of random walk and generalized statistics*, Physica A **295**, 201 (2001) [Proc. IUPAP Workshop on New Trends on Fractal Aspects of Complex Systems (16-20 October 2000, Maceio-AL, Brazil), ed. M.L. Lyra (Elsevier, Amsterdam, 2001)].
- [5889] R.S. Mendes and C. Tsallis, *Renormalization group approach to nonextensive statistical mechanics*, Phys. Lett. A **285**, 273 (2001).
- [5890] C. Vignat, A.O. Hero III and J.A. Costa, *About closedness by convolution of the Tsallis maximizers*, Physica A **340**, 147 (2004).
- [5891] C. Vignat and J. Naudts, *Stability of families of probability distributions under reduction of the number of degrees of freedom*, Physica A **350**, 296-302 (2005).
- [5892] C. Vignat and A. Plastino, *The p-sphere and the geometric substratum of power-law probability distributions*, Phys. Lett. A **343**, 411 (2005).
- [5893] C. Vignat and A. Plastino, *Scale invariance and related properties of q-Gaussian systems*, Phys. Lett. A **365**, 370-375 (2007).
- [5894] C. Vignat and A. Plastino, *Geometric origin of probabilistic distributions in statistical mechanics*, preprint (2005) [cond-mat/0503337].
- [5895] C. Vignat and A. Plastino, *A geometric characterization of Tsallis canonical distributions*, Proc. of Statistical Mechanics of Non-Extensive Systems, Comptes Rendus Acad. Sc. (Paris) (2006), in press.

- [5896] C. Vignat and A. Plastino, *Poincaré's observation and the origin of Tsallis generalized canonical distributions*, Physica A **365**, 167-172 (2006).
- [5897] C. Vignat, A. Plastino and A.R. Plastino, *Correlated Gaussian systems exhibiting additive power-law entropies*, Phys. Lett. A **354**, 27-30 (2006).
- [5898] P.-O. Amblard and C. Vignat, *A note on bounded entropies*, Physica A **365**, 50-56 (2006).
- [5899] S. Abe and A.K. Rajagopal, *Properties of convergence of nonextensive statistical distribution to the Lévy distribution*, J. Phys. A **33**, 8723 (2000).
- [5900] A.K. Rajagopal and S. Abe, *Lévy distribution in half space based on nonextensive statistical mechanics*, preprint (2000) [cond-mat/0003304].
- [5901] C. Anteneodo and C. Tsallis, *Two-dimensional turbulence in pure-electron: A nonextensive thermostistical description*, J. Mol. Liq. **71**, 255 (1997).
- [5902] R. Kawahara and H. Nakanishi, *Final states of the two dimensional electron plasma trapped in magnetic field*, preprint (2005) [cond-mat/0509239].
- [5903] R. Kawahara and H. Nakanishi, *Quasi-stationary states of two-dimensional electron plasma trapped in magnetic field*, J. Phys. Soc. Japan **75**, 054001 (2006).
- [5904] R. Kawahara and H. Nakanishi, *Simulation of stationary states of the two dimensional electron plasma trapped in magnetic field*, in *Complexity and Nonextensivity: New Trends in Statistical Mechanics*, eds. M. Sakagami, N. Suzuki and S. Abe, Prog. Theor. Phys. Suppl. **162**, 228-235 (2006).
- [5905] H. Akatsuka and Y. Tanaka, *Discussion on electron temperature of gas-discharge plasma with non-Maxwellian electron energy distribution function based on entropy and statistical physics*, Entropy **25**, 276 (2023).
- [5906] L. Liu and J. Du, *Ion acoustic waves in the plasma with the power-law q -distribution in nonextensive statistics*, Physica A **387**, 4821-4827 (2008).
- [5907] X.D. Li, *Atomic structure calculation model based on plasma fluctuation*, Acta Physica Sinica **60** (5), 053201 (2011).
- [5908] P. Eslami, M. Mottaghizadeh and H.R. Pakzad, *Nonplanar ion-acoustic solitary waves in electron-positron-ion plasmas with electrons following a q -nonextensive distribution*, Physica Scripta **83**, 065502 (2011) (6 pages).
- [5909] P. Eslami, M. Mottaghizadeh and H.R. Pakzad, *Head-on collision of ion-acoustic solitary waves in a plasma with a q -nonextensive electron velocity distribution*, Physica Scripta **84** (1), 015504 (2011).
- [5910] P. Eslami, M. Mottaghizadeh and H.R. Pakzad, *Head-on collision of electron acoustic solitary waves in a plasma with nonextensive hot electrons*, Astrophys. Space Sci. (2012) **338**, 271-278 (2012).
- [5911] H.R. Pakzad, R. Javadzadeh and D. Nobahar, *Head-on collision of dust-ion acoustic solitary waves in a plasma with a nonextensive electron*, preprint (2022), doi: 10.21203/rs.3.rs-1447023/v1
- [5912] H. Demiray, *Higher order perturbation expansion for ion-acoustic solitary waves with q -nonextensive non-thermal velocity distribution*, Turkish World Mathematical Society Journal of Applied and Engineering Mathematics **8** (2), 438-447 (2018).
- [5913] H. Demiray, E.R. El-Zahar and S.A. Shan, *On progressive wave solution for non-planar KDV equation in a plasma with q -nonextensive electrons and two oppositely charged ions*, Turkish World Mathematical Society J. App. and Eng. Math. **10** (2), 532-546 (2020).
- [5914] A. Arghand-Hesar, A. Esfandyari-Kalejahi and M. Akbari-Moghanjoughi, *Effects of a monoenergetic electron beam on the sheath formation in a plasma with a q -nonextensive electron velocity distribution*, Phys. Plasmas **24**, 063504 (2017) (8 pages), doi: 10.1063/1.4984785
- [5915] X. Zhao, B. Zhang and C. Wang, *Dust charging and levitating in a magnetized plasma sheath containing superextensive electrons*, Phys. Plasmas **27**, 113705 (2020), doi: 10.1063/5.0018339
- [5916] H. Qiu, D. Xiao, Y. Gao, X. Peng, Y. Zhu, X. Zhang, Z. Zhou, W. Xiong, Z. Ming, T. Xu, P. Xiang, H. Yang, J. Zhang, T. Huang and J. Zhou, *Sheath potential coefficient in plasma with nonextensive distribution*, AIP Advances **10**, 065135 (2020).
- [5917] B. Azarvand-Hassanfard, A. Esfandyari-Kalejahi and M. Akbari-Moghanjoughi, *Ion energy spectrum in expansion of plasmas with nonextensive electrons*, Results in Physics **7**, 4213-4221 (2017), doi: 10.1016/j.rinp.2017.10.054
- [5918] F. Verheest, *Comment on "Head-on collision of electron acoustic solitary waves in a plasma with nonextensive hot electrons"*, preprint (2012), 1204.1478 [physics.space-ph].
- [5919] H.B. Qiu, H.Y. Song and S.B. Liu, *Two-plasmon-decay driven by an extraordinary electromagnetic wave in a magnetized plasma with nonextensive distribution*, Phys. Plasmas **23**, 032101 (2016) (6 pages).
- [5920] S.S. Ruan, W.Y. Jin, S. Wu and Z. Cheng, *Head-on collision of ion-acoustic solitary waves in magnetized plasmas with nonextensive electrons and positrons*, Astrophys. Space Sci. **350**, 523-529 (2014), in press, doi: 10.1007/s10509-013-1757-y

- [5921] D.S. Oliveira and R.M.O. Galvao, *Non-extensive transport equations in magnetized plasmas for non-Maxwellian distribution functions*, Phys. Plasmas **25**, 102308 (2018).
- [5922] S. Basnet and R. Khanal, *Magnetized plasma sheath properties in the presence of Maxwellian low-temperature and non-Maxwellian high-temperature electrons*, Phys. Plasmas **26**, 043516 (2019).
- [5923] S. Basnet and R. Khanal, *Tungsten and molybdenum surfaces exposed to warm deuterium ion plasma with Q -nonextensive distribution of electrons*, J. Nepal Physical Society **6** (1), 50-58 (2020).x
- [5924] S. Basnet, A. Patel and R. Khanal, *Electronegative magnetized plasma sheath properties in the presence of non-Maxwellian electrons with a homogeneous ion source*, Plasma Phys. Control Fusion **62**, 115011 (2020).
- [5925] X. Zou, H. Liu, Y. Zhu, X. Zhang and M. Qiu, *The structure of an electronegative magnetized plasma sheath with non-extensive electron distribution*, Plasma Sci. Technol. **22**, 125001 (2020), doi: 10.1088/2058-6272/abb3dc
- [5926] X. Zou, H.P. Liu, X.N. Zhang and M.H. Qiu, *Structure of collisional magnetized plasma sheath with non-extensive distribution of electrons*, Acta Physica Sinica **70**, 015201 (2021), doi: 10.7498/aps.70.20200794
- [5927] L. Chen, Y. An, S. Sun, P. Duan, B. Jiang, Y. Yang and Z. Cui, *Study on the characteristics of non-Maxwellian magnetized sheath in Hall thruster acceleration region*, Plasma Sci. Technol. (2022), in press, doi: 10.1088/2058-6272/ac57fe
- [5928] M. El Bojaddaini and H. Chatei, *Ion source terms effect on collisional plasma sheath characteristics with non-extensively distributed electrons*, Eur. Phys. J. Plus **135**, 680 (2020), doi: 10.1140/epjp/s13360-020-00699-9
- [5929] D. Czegeł, S.G. Balogh, P. Pollner and G. Palla, *Generalized entropies and anomalous diffusion*, preprint (2017), 1708.09726 [physics.gen-ph].
- [5930] D. Czegeł, S.G. Balogh, P. Pollner and G. Palla, *Phase space volume scaling of generalized entropies and anomalous diffusion scaling governed by corresponding non-linear Fokker-Planck equations*, Scientific Reports **8**, 1883 (2018) (8 pages), doi: 10.1038/s41598-018-20202-w
- [5931] J. Anderson and S. Moradi, *Anomalous diffusion by the fractional Fokker-Planck equation and Levy stable processes*, in *Fractional dynamics, anomalous transport and plasma science*, 77-92 (Springer, 2018).
- [5932] M.A.F. dos Santos, *Analytic approaches of the anomalous diffusion: a review*, Chaos, Solitons and Fractals **124**, 86-96 (2019).
- [5933] M.A.F. dos Santos, *Mittag-Leffler functions in superstatistics*, preprint (2019).
- [5934] H. Agahi and M. Khalili, *Truncated Mittag-Leffler distribution and superstatistics*, Physica A (2020), in press, doi: doi.org/10.1016/j.physa.2020.124620.
- [5935] P. Delhaes, *Evidences experimentales de systemes physiques non Gaussiens*, preprint (2020).
- [5936] A. Asserghine, A. Missaoui, M. El Kaouini and H. Chatei, *Numerical study of the effect of secondary electron emission on the sheath characteristics in q -non-extensive plasma*, Contributions Plasma Physics (2021), doi: 10.1002/ctpp.20210008
- [5937] A. Asserghine and F. Maaroufi, *Behavior of thermal electropositive plasma near electron emitting surfaces*, E3S Web of Conferences **632**, 04001 (2025).
- [5938] E.C. Gabrick, P.R. Protachevich, D.L.M. Souza, J. Trobia, E. Sayari, F.S. Borges, M.K. Lenzi, I.L. Caldas, A.M. Batista and E.K. Lenzi, *Transient dynamics of a fractional Fisher Equation*, Fractal Fract. **8**, 143 (2024).
- [5939] B.M. Boghosian, *Navier-Stokes equation for generalized thermostatistics*, in *Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 91 (1999).
- [5940] F.M. Ramos, R.R. Rosa and C. Rodrigues Neto, *Non-extensivity and turbulent-like behavior of financial markets*, preprint (1999) [cond-mat/9907348].
- [5941] F.M. Ramos, C. Rodrigues Neto and R.R. Rosa, *Generalized thermostatistical description of intermittency and non-extensivity in turbulence and financial markets*, preprint (2000) [cond-mat/0010435].
- [5942] F.M. Ramos, R.R. Rosa, C.R. Neto, M.J.A. Bolzan and L.D.A. Sa, *Nonextensive thermostatistics description of intermittency in turbulence and financial markets*, Nonlinear Analysis-Theory, Methods and Applications **47**, 3521 (2001).
- [5943] T. Arimitsu and N. Arimitsu, *Analysis of fully developed turbulence in terms of Tsallis statistics*, Phys. Rev. E **61**, 3237 (2000).
- [5944] T. Arimitsu and N. Arimitsu, *Tsallis statistics and fully developed turbulence*, J. Phys. A **33**, L235 (2000) [Corrigenda: **34**, 673 (2001)].
- [5945] T. Arimitsu and N. Arimitsu, *Tsallis statistics and turbulence*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13**, Number 3, 479 (Pergamon-Elsevier, Amsterdam, 2002).

- [5946] T. Arimitsu and N. Arimitsu, *Analysis of fully developed turbulence by a generalized statistics*, Prog. Theor. Phys. **105**, 355 (2001).
- [5947] T. Arimitsu and N. Arimitsu, *Analysis of fully developed turbulence based on Tsallis statistics*, "Nagare", Journal of Japan Society of Fluid Mechanics **19**, 346 (2000) [in Japanese].
- [5948] T. Arimitsu and N. Arimitsu, *Analysis of turbulence by statistics based on generalized entropies*, Physica A **295**, 177 (2001) [Proc. IUPAP Workshop on New Trends on Fractal Aspects of Complex Systems (16-20 October 2000, Maceio-AL, Brazil), ed. M.L. Lyra (Elsevier, Amsterdam, 2001)].
- [5949] T. Arimitsu and N. Arimitsu, *PDF of velocity fluctuation in turbulence by a statistics based on generalized entropy*, Physica A **305**, 218 (2002).
- [5950] N. Arimitsu and T. Arimitsu, *Multifractal analysis of turbulence by using statistics based on non-extensive Tsallis' or extensive Renyi's entropy*, J. Korean Phys. Soc. **40**, 1032 (2002).
- [5951] N. Arimitsu and T. Arimitsu, *An aspect of granulence in view of multifractal analysis*, in *Traffic and Granular Flow '03*, eds. S.P. Hoogendoorn, S. Luding, P.H.L. Bovy, M. Schreckenberg and D.E. Wolf, 597-602 (Springer-Verlag, Berlin, 2005).
- [5952] K. Saitoh, V. Magnanimo and S. Luding, *A master equation for force distributions in polydisperse frictional particles*, IV International Conference on Particle-based Methods - Fundamentals and Applications, Particles (2015), eds. E. Onate, M. Bischoff, D.R.J. Owen, P. Wriggers and T. Zohdi, 1505.07701 [cond-mat.soft].
- [5953] T. Arimitsu and N. Arimitsu, *Analysis of velocity fluctuation in turbulence based on generalized statistics*, J. Phys. Condens. Matter **14**, 2237-2246 (2002).
- [5954] T. Arimitsu and N. Arimitsu, *Analysis of accelerations in turbulence based on generalized statistics*, Condensed Matter Phys. (Lviv, Ukraine) **6**, 85-92 (2003).
- [5955] N. Arimitsu and T. Arimitsu, *Analysis of velocity derivatives in turbulence based on generalized statistics*, Europhys. Lett. **60**, 60 (2002).
- [5956] T. Arimitsu and N. Arimitsu, *Multifractal analysis of fluid particle accelerations in turbulence*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 218 (2004).
- [5957] T. Arimitsu and N. Arimitsu, *Multifractal analysis of various probability density functions in turbulence*, J. Comp. Methods. Sciences and Engineering **2** (3) (2003), in press [cond-mat/0301516].
- [5958] T. Arimitsu and N. Arimitsu, *Multifractal analysis of various PDF in turbulence based on generalized statistics: A way to tangles in superfluid He*, in *Highlights in Condensed Matter Physics*, eds. A. Avella, R. Citro, C. Noce and M. Salerno, AIP Conference Proceedings **695**, 135-144 (2003).
- [5959] T. Arimitsu and N. Arimitsu, *Harmonious representation of PDF's reflecting large deviations*, Physica A **340**, 347 (2004).
- [5960] T. Arimitsu and N. Arimitsu, *Multifractal analysis of the fat-tail PDFs observed in fully developed turbulence*, Journal of Physics: Conference Series **7**, 101-120 (2005), Proceedings of *International Workshop on Chaotic Transport and Complexity in Fluids and Plasmas*, (20-25 June 2004, Carry le Rouet, France). [Translated into Japanese: Suri-Butsuri eno Sasoi 5 (Introduction to Mathematical Physics 5), (Yusei-sha, Tokyo, Feb. 2005) pp.41-68].
- [5961] T. Arimitsu and N. Arimitsu, *Multifractal analysis of turbulence and granular flow*, in *Complexity, Metastability and Nonextensivity*, Proc. 31st Workshop of the International School of Solid State Physics (20-26 July 2004, Erice-Italy), eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 236.
- [5962] T. Arimitsu and N. Arimitsu, *Multifractal PDF analysis for intermittent systems*, Physica A **365**, 190-196 (2006).
- [5963] T. Arimitsu, N. Arimitsu, K. Yoshida and H. Mouri, *Multifractal PDF analysis for intermittent systems*, in *Anomalous Fluctuation Phenomena in Complex Systems: Plasma Physics, Bio-Science and Econophysics*, eds. C. Riccardi and H.E. Roman, 25-55 (Research Signpost, India, 2008).
- [5964] T. Arimitsu, N. Arimitsu, K. Yoshida and H. Mouri, *Multifractal PDF analysis of energy dissipation rates in turbulence*, IUTAM Symposium on *Computational Physics and New Perspectives in Turbulence*, ed. Y. Kaneda, 117-123 (Springer, IUTAM BookSeries, 2008).
- [5965] N. Arimitsu and T. Arimitsu, *Verification of the scaling relation within MPDFT by analyzing PDFs for energy dissipation rates out of 4096³ DNS*, Physica A **390**, 161-176 (2011).
- [5966] T. Arimitsu and N. Arimitsu, *Analysis of PDFs for energy transfer rates from 4096³ DNS - Verification of the scaling relation within MPDFT*, J. Turbulence **12** (1), 1-25 (2011).

- [5967] T. Arimitsu, N. Arimitsu, K. Takechi, Y. Kaneda and T. Ishihara, *Study of two elements constituting turbulence by a multifractal theory for probability density functions -Through the analyses of 4096³ DNS*, J. Phys. Conference Series **410**, 012083 (2013) (4 pages).
- [5968] T. Arimitsu, N. Arimitsu and H. Mouri, *Analyses of turbulence in a wind tunnel by a multifractal theory for probability density functions*, Fluid Dyn. Res. **44**, 031402 (2012) (15 pages).
- [5969] E. Gravanis, E. Akylas, C. Michailides, G. Livadiotis, *Superstatistics and isotropic turbulence*, Physica A (2021), in press, doi: 10.1016/j.physa.2020.125694
- [5970] E. Gravanis and E. Akylas, *Blackbody radiation, kappa distribution and superstatistics*, Physica A **578**, 126132 (2021).
- [5971] F. Carbone, D. Telsoni, A.G. Bruno, I.M. Hedgecock, F. De Simone, F. Sprovieri, L. Sorriso-Valvo and N. Pirrone, *Scaling properties of atmospheric wind speed in mesoscale range*, Atmosphere **10**, 611 (2019), doi: 10.3390/atmos10100611
- [5972] G. Katul, A. Porporato, D. Cava and M. Siqueira, *An analysis of intermittency, scaling and surface renewal in atmospheric surface layer turbulence*, Physica D **215**, 117-126(2006).
- [5973] H. Shibata, *Statistics of phase turbulence II*, Physica A **317**, 391 (2003).
- [5974] H. Brands, P.H. Chavanis, R. Pasmanter and J. Sommeria, *Maximum entropy versus minimum enstrophy vortices*, Phys. Fluids **11**, 3465 (1999).
- [5975] B. Shi, B. Vidakovic, G.G. Katul and J.D. Albertson, *Assessing the effects of atmospheric stability on the fine structure of surface layer turbulence using local and global multiscale approaches*, Phys. Fluids **17**, 055104 (2005).
- [5976] P.-H. Chavanis, *Generalized thermodynamics and Fokker-Planck equations. Applications to stellar dynamics and two-dimensional turbulence and*, Phys. Rev. E **68**, 036108 (2003).
- [5977] P.-H. Chavanis, *Statistical mechanics of geophysical turbulence: application to jovian flows and Jupiter's great red spot*, Physica D **200**, 257 (2005).
- [5978] P.-H. Chavanis, *Generalized Fokker-Planck equations and effective thermodynamics*, Physica A **340**, 57 (2004).
- [5979] P.-H. Chavanis, P. Laurencot and M. Lemou, *Chapman-Enskog derivation of the generalized Smoluchowski equation*, Physica A **341**, 145 (2004).
- [5980] P.-H. Chavanis and C. Sire, *Anomalous diffusion and collapse of self-gravitating Langevin particles in D dimensions*, Phys. Rev. E **69**, 016116 (2004).
- [5981] P.-H. Chavanis and M. Lemou, *Kinetic theory of point vortices in two dimensions: analytical results and numerical simulations*, Eur. Phys. J. B **59**, 217-247 (2007).
- [5982] P.-H. Chavanis and C. Sire, *Jeans type analysis of chemotactic collapse*, Physica A **387**, 4033-4052 (2008).
- [5983] W.H. Xiong, W.H. Yang, X.C. Chen, K.R. He and S.Q. Liu, *Jeans instability of Eddington-inspired Born-Infeld gravitational systems in the context of nonextensive statistics*, New Astronomy **84**, 101546 (2021).
- [5984] M. Coraddu, M. Lissia, G. Mezzorani and P. Quarati, *Deuterium burning in Jupiter interior*, Physica A **305**, 282 (2002).
- [5985] M. Lissia and P. Quarati, *Nuclear astrophysical plasmas: Ion distributions and fusion rates*, Europhysics News **36**, 211 (2005) [Europhysics News Special Issue *Nonextensive Statistical Mechanics: New Trends, new perspectives*, eds. J.P. Boon and C. Tsallis (November/December 2005)].
- [5986] A. Lavagno and P. Quarati, *Metastability of electron-nuclear astrophysical plasmas: Motivations, signals and conditions*, Astrophys. Space Sci. **305**, 253-259 (2006).
- [5987] A. Lavagno and P. Quarati, *Non-extensive statistical effects in nuclear many-body problems*, Romanian Reports in Physics **59**, 951-962 (2007).
- [5988] P. Quarati and A.M. Scarfone, *Modified Debye-Huckel electron shielding and penetration factor*, Astrophys. J. **666**, 1303-1310 (2007).
- [5989] P.-H. Chavanis, *Brownian theory of 2D turbulence and generalized thermodynamics*, preprint (2002) [cond-mat/0209098].
- [5990] P.-H. Chavanis, *Generalized thermodynamics and kinetic equations: Boltzmann, Landau, Kramers and Smoluchowski*, preprint (2003) [cond-mat/0304073].
- [5991] P.-H. Chavanis, *Kinetic equations for systems with long-range interactions: a unified description*, J. Stat. Mech. P05019 (2010).
- [5992] P.-H. Chavanis, *Linear response theory for hydrodynamic and kinetic equations with long-range interactions*, Eur. Phys. J. Plus (2013) **128**, 38 (2013) (26 pages), DOI 10.1140/epjp/i2013-13038-8
- [5993] C. Beck, *Application of generalized thermostatics to fully developed turbulence*, Physica A **277**, 115 (2000).

- [5994] C. Beck, *Scaling exponents in fully developed turbulence from nonextensive statistical mechanics*, Physica A **295**, 195 (2001) [Proc. IUPAP Workshop on New Trends on Fractal Aspects of Complex Systems (16-20 October 2000, Maceio-AL, Brazil), ed. M.L. Lyra (Elsevier, Amsterdam, 2001)].
- [5995] C. Beck, *On the small-scale statistics of Lagrangian turbulence*, Phys. Lett. A **287**, 240 (2001).
- [5996] S. Miah and C. Beck, *Lagrangian quantum turbulence model based on alternating superfluid/normal fluid stochastic dynamics*, EPL **108**, 40004 (2014) (6 pages), doi: 10.1209/0295-5075/108/40004
- [5997] C. Beck, *Dynamical foundations of nonextensive statistical mechanics*, preprint (2001) [cond-mat/0105374].
- [5998] B.K. Shivamoggi and C. Beck, *A note on the application of non-extensive statistical mechanics to fully developed turbulence*, J. Phys. A **34**, 4003 (2001).
- [5999] B.K. Shivamoggi, *Critical exponents and universality in fully developed turbulence*, Chaos, Solitons and Fractals **32**, 628-639 (2007).
- [6000] B.K. Shivamoggi, *Multi-fractal formulation of compressible fully developed turbulence: Parabolic-profile approximation for the singularity spectrum*, Annals Phys. **322**, 967-976 (2007).
- [6001] C. Beck, *Generalized statistical mechanics and fully developed turbulence*, Physica A **306**, 189 (2002).
- [6002] C. Beck, *Superstatistics in hydrodynamic turbulence*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 195 (2004).
- [6003] C. Beck and S. Miah, *Statistics of Lagrangian quantum turbulence*, Phys. Rev. E **87**, 031002R (2013) (5 pages).
- [6004] C. Beck, *Superstatistics, escort distributions, and applications*, preprint (2003) [cond-mat/0312134].
- [6005] R.F. Rodriguez and I. Santamaria-Holek, *Superstatistics of Brownian motion: A comparative study*, Physica A **385**, 456-464 (2007).
- [6006] M. Peyrard and I. Daumont, *Statistical properties of one dimensional "turbulence"*, Europhys. Lett. **59**, 834 (2002).
- [6007] M. Peyrard, *The statistical distributions of one-dimensional "turbulence"*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 265 (2004).
- [6008] A. Rossani and A.M. Scarfone, *Tsallis distribution functions for charged particles in electric and magnetic fields*, Physica A **282**, 212 (2000).
- [6009] V.F. Klepikov, V.E. Novikov and D.S. Kruchinin, *Dynamics of charged particles in fractal media*, Mod. Phys. Lett. B **2040066** (2020) (5 pages), doi: 10.1142/S0217984920400667
- [6010] A. Rossani, *Generalized kinetic theory of electrons and phonons*, Physica A **305**, 323 (2002).
- [6011] H.R. Pakzad, *Effect of q-nonextensive electrons on electron acoustic solitons*, Physica Scripta **83** (1), 015505 (2011) (4 pages).
- [6012] H.R. Pakzad, *Effect of q-nonextensive distribution of electrons on electron acoustic solitons*, Astrophys. Space Sci. **333**, 247-255 (2011).
- [6013] H.R. Pakzad, *Ion acoustic solitary waves in a weakly relativistic plasma with q-nonextensive electrons and thermal positrons*, Astrophys. Space Sci. **334**, 337-343 (2011).
- [6014] H.R. Pakzad, *Effect of q-nonextensive distribution of electrons on dust-ion acoustic solitons*, Astrophys. Space Sci. **353**, 551-557 (2014), doi: 10.1007/s10509-014-2037-1
- [6015] H.G. Abdelwahed, R. Sabry and A.F. Alsarhan, *Role of electrons non-extensivity on the fully nonlinear dust-ion acoustic solitary waves*, Physica Scripta (2021), in press.
- [6016] S.A. El-Wakil, E.M. Abulwafa, A.M. El-Hanbaly and A.I. Kassem, *Propagation of solitary waves and double-layers in electron-positron pair plasmas with stationary ions and nonextensive electrons*, Int. J. Appl. Comput. Math. **5**, 113 (2019), doi: doi.org/10.1007/s40819-019-0696-x
- [6017] F.J. Lin, Z.H. Chen, X.Q. Li, J.J. Liao and Y. Zhu, *Generation and evolution of magnetic field in the relativistic plasma following q-nonextensive distribution*, Phys. Plasmas **24**, 022120 (2017) (11 pages).
- [6018] K. Roy, T.K. Maji, M.K. Ghorui, P. Chatterjee and R. Roychoudhury, *Overtaking collision of two ion acoustic soliton in a plasma with a q-nonextensive electron and thermal positrons*, Astrophys. Space Sci. **352**, 151-157 (2014), doi: 10.1007/s10509-014-1906-y
- [6019] P. Chatterjee, K. Roy and U.N. Ghosh, *Waves and wave interaction in plasmas*, preprint (2023).
- [6020] M. Manesh, V. Anu, T.W. Neethu, S. Sijo, G. Sreekala and C. Venugopal, *Effects of nonextensive ions (heavier and lighter) on ion acoustic solitary waves in a magnetized five component cometary plasma with kappa described electrons*, Plasma Physics Reports **46** (5), 541-551 (2020) [in Russian in Fizika Plazmy **46** (7), 633-644 (2020)].
- [6021] M. Michael, S. Shilpa, S. Sebastian and C. Venugopal, *Effects of heavier Ions (O^+ and O^-) on the characteristics of ion-acoustic double layers in comet 1P/Halley*, IEEE Transactions on Plasma Science (2023).

- [6022] H.R. Pakzad, *Cylindrical and spherical electron acoustic solitary waves with nonextensive hot electrons*, Phys. Plasmas **18**, 082105 (2011) (5 pages).
- [6023] B. Sahu, *Ion acoustic solitary waves and double layers with nonextensive electrons and thermal positrons*, Phys. Plasmas **18**, 082302 (2011) (6 pages).
- [6024] B. Sahu, *Dissipative dust acoustic solitons in magnetized nonextensive warm dusty plasma*, Chinese J. Physics (2021), in press, doi: 10.1016/j.cjph.2021.10.002
- [6025] R. Maity and B. Sahu, *Nonlinear wave structures of electron acoustic waves in nonextensive magnetized electron-positron-ion plasmas*, Plasma Physics Reports, (2022).
- [6026] R. Maity and B. Sahu, *Arbitrary amplitude electron acoustic solitary excitations with Cairns-Tsallis distributed hot electrons and positrons in magnetized space plasmas*, Chinese Journal of Physics **89**, 649-656 (2024).
- [6027] Y. Benmadani, Z. Kechidi, R. Amour and M. Ibrir, *Oblique propagation of dust acoustic solitary waves in a magnetized plasma in the presence of Cairns-Tsallis distributed ions*, Physica Scripta **99** (11) (2024).
- [6028] E. Shahid, M. Shamir, Z. Iqbal, I. Zeba and G. Murtaza, *Ion acoustic waves in generalized electron distributed un-magnetized plasmas*, Fourth iiScience International Conference 2024: Recent Advances in Photonics and Physical Sciences, eds by M.Y.A. Raja, Z.N. Kayani and S.A. Haider, Proc. of SPIE **13440**, 134400D (2024).
- [6029] M. Bilal, A. ur-Rehman, M.A. Shahzad, M. Sarfraz, M. Ishaque and S. Mahmood, *EMIC mode instability stimulated by non-thermal non-extensive particles in non-equilibrium bi-Cairns-Tsallis distributed magnetized plasmas*, Eur. Phys. J. Plus **139**, 1029 (2024).
- [6030] M.A. Shahzad, A. ur-Rehman, M. Bilal, N. Rubab, S. Zaheer and M. Sarfraz, *Influence of Vasyliunas-Cairns distributed non-thermal cold and hot electrons on the electron acoustic mode: a kinetic theory based exact numerical analysis*, Eur. Phys. J. Plus **140**, 283 (2025).
- [6031] A.W. Alrowaily, M. Khalid, A. Kabir, C.G.L. Tiofack, W. Alhejaili, S.M.E. Ismaeel and S.A. El-Tantawy, *On the electrostatic solitary waves in an electron-positron-ion plasma with Cairns-Tsallis distributed electrons*, Rendiconti Lincei - Scienze Fisiche e Naturali (2025), doi: 10.1007/s12210-025-01304-w
- [6032] A. Singla, S. Singla, N.S. Saini and F.S. Gill, *Ion-acoustic solitons in multicomponent plasma with two temperature non-Maxwellian electrons*, Radiation Effects and Defects in Solids (2024).
- [6033] E.I. El-Awady and W. M. Moslem, *On a plasma having nonextensive electrons and positrons: Rogue and solitary wave propagation*, Phys. Plasmas **18**, 082306 (2011) (8 pages).
- [6034] D.V. Douanla, Alim , C.G.L. Tiofack, A. Mohamadou and L.S. El-Sherif, *Three-dimensional dissipative ion-acoustic rogue waves in magnetized plasma with adiabatic ions and nonextensive electrons*, Waves in Random and Complex Media, (2020), doi: 10.1080/17455030.2020.1839143
- [6035] C.G.L. Tiofack, D.V. Douanla, Alim, A. Mohamadou, S.M.E. Ismaeel and S.A. El-Tantawy, *Dust-acoustic modulated structures in self-gravitating magnetized electron depleted dusty plasmas: multi-rogue waves and dark soliton collisions*, Eur. Phys. J. Plus **136**, 699 (2021).
- [6036] U. Imon and M.S. Alam, *Consequence of head-on collision and double-layer soliton with linear analysis in multi-component dusty plasmas*, Contributions to Plasma Physics (2023).
- [6037] W. Alhejaili, B.B. Mouhammadoul Alim, C.G.L. Tiofack, A. Mohamadou and S.A. El-Tantawy, *Modulational instability and associated breathers in collisional electronegative non-Maxwellian plasmas*, Physics of Fluids **35**, 103101 (2023).
- [6038] S. Ali, *Spacecraft charging in non-Maxwellian plasmas at GEO altitudes*, in *Emerging Applications of Plasma Science in Allied Technologies*, (2024).
- [6039] B.M. Alotaibi, H.A. Al-Yousef, R.E. Tolba and W.M. Moslem, *Nonlinear dust-acoustic modes in homogeneous dusty plasmas: Bifurcation analysis*, Phys. Scr. **96**, 125611 (2021), doi: 10.1088/1402-4896/ac2183
- [6040] B.M. Alotaibi, M. Khalid, S.H. Bacha, C.G.L. Tiofack, A.H. Almuqrin and S.A. El-Tantawy, *Coexistence of low-frequency compressive and rarefactive electrostatic excitations in electronegative plasmas having Cairns-Tsallis-distributed electrons*, AIP Advances **15**, 055213 (2025).
- [6041] U.M. Abdelsalam, W.M. Moslem, A.H. Khater and P.K. Shukla, *Solitary and freak waves in a dusty plasma with negative ions*, Phys. Plasmas **18**, 092305 (2011) (7 pages).
- [6042] S.A. Morsi, W.M. Moslem, A.S. El-Said and H. Bahlouli, *Creation of surface nanometer-scale plasma region by irradiation with slow highly charged ions*, Physica Scripta Phys. Scr. **95**, 095602 (2020) (10 pages), doi: 10.1088/1402-4896/aba865
- [6043] W.M. Moslem, R. Sabry, S.K. El-Labany and P.K. Shukla, *Dust-acoustic rogue waves in a nonextensive plasma*, Phys. Rev. E **84**, 066402 (2011) (7 pages).
- [6044] S.A. El-Wakil, E.M. Abulwafa and A.A. Elhanbaly, *Super-soliton dust-acoustic waves in four-component dusty plasma using non-extensive electrons and ions distributions*, Phys. Plasmas **24**, 073705 (2017) (10 pages), doi: 10.1063/1.4991406

- [6045] N.S. Saini, B. Kaur, M. Singh and A.S. Bains, *Dust kinetic Alfvén solitary and rogue waves in a dusty plasma with two temperature nonextensive ions*, Phys. Plasmas **24**, 073701 (2017) (11 pages).
- [6046] R. Kaur, G. Slathia and N.S. Saini, *Ion acoustic kinetic Alfvén dressed and breather solitons in two temperature electrons plasma*, Eur. Phys. J. Plus **138**, 815 (2023).
- [6047] M.M. Hasan, M.R. Hossen and A.A. Mamun, *Kinetic Alfvén solitary waves in astrophysical plasmas*, AIP Advances **14**, 095217 (2024), doi: 10.1063/5.0226568
- [6048] M.R. Hossen, M. Sarker, M.M. Hasan and A.A. Mamun, *Role of adiabatic pressure on dust kinetic Alfvén solitary waves in an electron-depleted dusty magnetized plasma*, AIP Advances **15**, 065020 (2025).
- [6049] M.M. Hasan, S. Sultana and A.A. Mamun, *Linear properties of dust-acoustic waves in viscous and collisional dusty plasmas*, Contributions to Plasma Physics 0:e70007 (2025).
- [6050] N.S. Saini, K. Singh and P. Sethi, *Interaction of dust-acoustic shock waves in a magnetized dusty plasma under the influence of polarization force*, Laser and Particle Beams 6679085 (2021) (8 pages), doi: 10.1155/2021/6679085
- [6051] P. Sethi, Y. Ghai, M. Singh and N.S. Saini, *Shock waves in an electron depleted dusty plasma with nonextensive Ions*, J. Power Electronics & Power Systems (JoPEPS) **10** (1) (2020).
- [6052] R. Mebrek, R. Fermous, M. Benzekka and R. Amour, *Comparative analysis of dust-acoustic shock waves in nonextensive dusty plasma under gravity and microgravity conditions with adiabatic and nonadiabatic charge variations*, Phys. Rev. E **111**, 055203 (2025).
- [6053] D.V. Douanla, Alim, C.G.L. Tiofack and A. Mohamadou, *Heavy ion-acoustic rogue waves in magnetized electron-positron multi-ion plasmas*, Contributions to Plasma Physics (2020), doi: 10.1002/ctpp.202000036
- [6054] D. Kolay, D. Dutta and B. Sahu, *Coexistence of positive and negative polarity solitons, double layers and supersolitons in electron-positron multi-ion plasmas*, Waves in Random and Complex Media (2023), doi: 10.1080/17455030.2023.2226236
- [6055] D.V. Douanla, Alim, C.G.L. Tiofack and A. Mohamadou, *Dust-acoustic envelope Solitons and rogue waves in a magnetized electron-depleted plasma*, Plasma Physics Reports **47** (4), 384-395 (2021).
- [6056] M. Singh, K. Singh, P. Sethi, N. Kaur and N.S. Saini, *Three dimensional ion acoustic solitary waves in a magnetized plasma consisting of two temperature nonextensive electrons*, AIP Conference Proceedings **2136**, 060003 (2019), doi: doi.org/10.1063/1.5120949
- [6057] I.A. Khan, T.H. Khokhar, H.A. Shah and G. Murtaza, *Distinct features of Alfvén wave in non-extensive plasmas*, Physica A **535**, 122385 (2019).
- [6058] M. Shamir, I.A. Khan and G. Murtaza, *Charged particles energization during magnetic reconnection in the Earth's magnetosphere by double layers: An analytical approach*, Oxford University Press on behalf of Royal Astronomical Society (2021), in press.
- [6059] M.H. Rahman, A. Mannan, N.A. Chowdhury and A.A. Mamun, *Generation of rogue waves in space dusty plasmas*, Phys. Plasmas **25**, 102118 (2018).
- [6060] D.M.S. Zaman, A. Mannan, N.A. Chowdhury and A.A. Mamun, *Dust-acoustic rogue waves in opposite polarity dusty plasma featuring nonextensive statistics*, High Temperature **58** (6), 789-794 (2020).
- [6061] M.K. Islam, A.A. Noman, J. Akter, N.A. Chowdhury, A. Mannan, T.S. Roy, M. Salahuddin and A.A. Mamun, *Modulational instability of dust-ion-acoustic waves in pair-ion plasma having non-thermal non-extensive electrons*, preprint (2021),
- [6062] N.K. Tamanna, J. Akter, N.A. Chowdhury and A.A. Mamun, *Modulational instability of dust-ion-acoustic mode and associated rogue waves in a non-extensive plasma medium*, preprint (2019), 1911.08557 [physics.plasm-ph].
- [6063] S. Jahan, M.N. Haque, N.A. Chowdhury, A. Mannan and A.A. Mamun, *Ion-acoustic rogue waves in double pair plasma having non-extensive particles*, preprint (2020), 2012.09487 [physics.plasm-ph].
- [6064] S. Jahan, R.K. Shikha, A. Mannan and A.A. Mamun, *Modulational instability of ion-acoustic waves in pair-ion plasma*, Plasma **5**, 1-11 (2022).
- [6065] M.H. Rahman, N.A. Chowdhury, A. Mannan and A.A. Mamun, *Dust-acoustic rogue waves in an electron-positron-ion-dust plasma medium*, Galaxies **9**, 31 (2021).
- [6066] J. Akter, N.A. Chowdhury, A. Mannan and A.A. Mamun, *Dust-acoustic envelope solitons in an electron depleted plasma*, Indian J. Phys. (2021), doi: 10.1007/s12648-020-01927-9; Plasma Physics Reports **47** (7), 725-731 (2021).
- [6067] Z.Z. Li, D.N. Gao, Z.E. Fan, S.D. Liang and L.Q. Xie, *Effect of nonthermal and nonextensive electrons on dust acoustic waves in planetary rings*, ontributions to Plasma Physics (2024), doi: 10.1002/ctpp.202300185

- [6068] G. Ullah, M. Saleem, M. Khalid, A. Rahman, M. Khan and S. Nabi, *Ion acoustic solitary waves in magnetized electron-positron-ion plasmas with Tsallis distributed electrons*, Contrib. Plasma Phys., e202000068 (2020), doi: 10.1002/ctpp.202000068
- [6069] M. Khalid, M. Khan, A. ur-Rahman and M. Irshad, *Ion acoustic solitary waves in magnetized anisotropic nonextensive plasmas*, Zeitschrift fur Naturforschung A (2021), doi: 10.1515/zna-2021-0262
- [6070] M. Khalid, A. Khan, M. Khan, D. Khan, S. Ahmad and A. Rahman, *Electron acoustic solitary waves in unmagnetized nonthermal plasmas*, Commun. Theor. Phys. **73**, 055501 (2021) (5 pages), doi: 10.1088/1572-9494/abd0eb
- [6071] M. Khan, S. Shabbir and M. Kamran, *Ion polytropic coefficient in bounded plasmas with Cairns-Tsallis distributed electrons*, Contributions to Plasma Physics, 0:e70010 (2025).
- [6072] F. Verheest and C.P. Olivier, *Nonlinear periodic ion-acoustic waves in nonthermal plasmas*, Phys. Plasmas **31**, 032305 (2024).
- [6073] G.S. Dragan, V.V. Kutarov and A.Y. Bekshaev, *Non-extensive thermodynamics of the radiation in heterogeneous thermal plasmas*, Condensed Matter Physics **25** (1), 13502 (2022), doi: 10.5488/CMP.25.13502
- [6074] M. Khalid, A. Rahman, A. Althobaiti, S.K. Elagan, S.A. Alkhateeb, E.A. Elghmaz and S.A. El-Tantawy, *Linear and nonlinear electrostatic excitations and their stability in a nonextensive anisotropic magnetoplasma*, Symmetry **13**, 2232 (2021).
- [6075] B.B. Mouhammadoul, A. Alim, C.G.L. Tiofack, A. Mohamadou, A.W. Alrowaily, S.M.E. Ismaeel and S.A. El-Tantawy, *On the super positron-acoustic rogue waves in q-nonextensive magnetoplasmas*, Phys. Fluids **35**, 054109 (2023).
- [6076] M. Khalid, A. Kabir and M. Irshad, *Ion-scale solitary waves in magnetoplasma with nonthermal electrons*, EPL (2022), in press.
- [6077] M. Khalid, *Oblique ion acoustic solitary waves in anisotropic plasma with Tsallis distribution*, EPL (2022), in press, doi: 10.1209/0295-5075/ac6a08
- [6078] S.K. Zaghbeer, E.K. El-Shewy, A.M. El-Hanbaly, H.H. Salah, N.H. Sheta and A. Elgarayh, *On the growth rate instability of nonextensively opposite polarity dusty plasmas*, Advances in Space Research **62**, 1728-1736 (2018).
- [6079] M.H. Rahman, N.A. Chowdhury, A. Mannan, M. Rahman and A.A. Mamun, *Modulational instability, rogue waves, and envelope solitons in opposite polarity dusty plasmas*, Chinese J. Phys. **56**, 2061-2068 (2018).
- [6080] H.S. Du, M.M. Lin, X. Gong and W.S. Duan, *The characters of ion acoustic rogue waves in nonextensive plasma*, Phys. Plasmas **24**, 102131 (2017) (6 pages).
- [6081] Z.Z. Li, J.F. Han, D.N. Gao and W.S. Duan, *Small amplitude double layers in an electronegative dusty plasma with q-distributed electrons*, Chin. Phys. B **27** (10), 105204 (2018).
- [6082] B.S. Chahal, M. Singh, Shalini and N.S. Saini, *Dust ion acoustic freak waves in a plasma with two temperature electrons featuring Tsallis distribution*, Physica A **491**, 935-945 (2018), doi: 10.1016/j.physa.2017.10.004
- [6083] U.M. Abdelsalam, *Dust ion acoustic waves for magnetized multi-component plasma*, Ain Shams Engineering Journal (2021), in press.
- [6084] N.A. Chowdhury, A. Mannan, M.M. Hasan, and A.A. Mamun, *Heavy ion-acoustic rogue waves in electron-positron multi-ion plasmas*, Chaos **27** (9), 093105 (2017).
- [6085] D.M.S. Zaman, A. Mannan and A.A. Mamun, *Dust-acoustic rogue waves in an opposite polarity dusty plasma featuring non-extensive statistics*, preprint (2017), 1712.09582 [physics.plasm-ph].
- [6086] S. Jahan, N.A. Chowdhury, A. Mannan and A.A. Mamun, *Modulated dust-acoustic wave packets in an opposite polarity dusty plasma system*, Commun. Theor. Phys. **71**, 327-333 (2019).
- [6087] F.J. Lin, J.J. Liao and Y. Zhu, *Ion-acoustic solitary waves in a q-nonextensive plasma*, Chinese Astronomy and Astrophysics **39**, 295-306 (2015).
- [6088] S.K. El-Labany, N.A. El-Bedwehy, M.M. Selim and O.M. Al-Abbasy, *Effect of dust-charge fluctuations on dust acoustic solitary waves in an inhomogeneous dusty plasma with nonextensive electrons*, Phys. Plasmas **22**, 023711 (2015) (8 pages).
- [6089] A. El-Depsy and M.M. Selim, *Propagation of cylindrical ion acoustic waves in a plasma with q-nonextensive electrons with nonthermal distribution*, Eur. Phys. J. Plus **131**, 431 (2016) (9 pages), doi: 10.1140/epjp/i2016-16431-9
- [6090] S.A. El-Tantawy and W.M. Moslem, *Nonlinear structures of the Korteweg-de Vries and modified Korteweg-de Vries equations in non-Maxwellian electron-positron-ion plasma: Solitons collision and rogue waves*, Phys. Plasmas **21**, 052112 (2014) (10 pages).
- [6091] F. Verheest, *Critical densities for Korteweg-de Vries-like acoustic solitons in multi-ion plasmas*, J. Plasma Phys. **81**, 905810605 (2015) (10 pages), doi:10.1017/S0022377815001282

- [6092] L. Mandi, K.K. Mondal and P. Chatterjee, *Analytical solitary wave solution of the dust ion acoustic waves for the damped forced modified Korteweg-de Vries equation in q -nonextensive plasmas*, Eur. Phys. J. Special Topics **228**, 2753-2768 (2019).
- [6093] L. Mandi, R. Ali and P. Chatterjee, *Quasiperiodic route to chaos for the dust ion acoustic waves in magnetized dusty plasmas*, Plasma Physics Reports **47** (5), 419-426 (2021).
- [6094] S. Raut, K.K. Mondal, P. Chatterjee and A. Roy, *Propagation of dust-ion-acoustic solitary waves for damped modified Kadomtsev-Petviashvili-Burgers equation in dusty plasma with a q -nonextensive nonthermal electron velocity distribution*, SeMA Journal (2021), (23 pages), doi: 10.1007/s40324-021-00242-5
- [6095] S. Raut, A. Roy, K.K. Mondal, P. Chatterjee and N.M. Chadha, *Non-stationary solitary wave Solution for damped forced Kadomtsev-Petviashvili equation in a magnetized dusty plasma with q -nonextensive velocity distributed electron*, Int. J. Appl. Comput. Math. **7**, 223 (2021).
- [6096] J. Mondal, S. Raut, P. Chatterjee and L. Mandi, *Characteristic study of head-on collision of ion acoustic dissipative solitons in a ultracold neutral plasma through the both sided damped KdV-Burgers equation*, Brazilian Journal of Physics **55**, 182 (2025).
- [6097] F. Verheest and W.A. Hereman, *Collisions of acoustic solitons and their electric fields in plasmas at critical compositions*, J. Plasma Phys. **85**, 905850106 (2019).
- [6098] E.I. El-Awady and M. Djebli, *Dust-acoustic waves in strongly coupled dusty plasmas with nonextensive electrons and ions*, Canadian J. Phys. **90** (7), 675-681 (2012).
- [6099] C. Beck, *Non-extensive statistical mechanics approach to fully developed hydrodynamic turbulence*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13**, Number 3, 499 (Pergamon-Elsevier, Amsterdam, 2002).
- [6100] C. Tsallis, *Remark on the Second Principle of Thermodynamics*, in *Relativistic Aspects of Nuclear Physics*, eds. T. Kodama, C.E. Aguiar, H.T. Elze, F. Grassi, Y. Hama and G.G. Klein (World Scientific, Singapore, 2001), p. 234 [RANP 2000, 17 - 20 October 2000, Caraguatutuba, Sao Paulo, Brazil].
- [6101] M.J.A. Bolzan, L.D. Abreu Sa, F.M. Ramos, C.R. Neto and R.R. Rosa, *Nonextensivity in atmospheric surface layer turbulence*, communicated at the 15th Conference on Hydrology, 80th American Meteorological Society Annual Meeting (Long Beach, California, 9-14 January 2000), **1**, 379.
- [6102] N. Su, *Distributed-order infiltration, absorption and water exchange in mobile and immobile zones of swelling soils*, Journal of Hydrology **468-469**, 1-10 (2012).
- [6103] F.M. Ramos, C. Rodrigues Neto, R.R. Rosa, M.J.A. Bolzan and L.D.A. Sa, *Nonextensivity and multifractality in three-dimensional fully developed turbulence*, communication at the IUPAP International Conference on "New Trends in the Fractal Aspects of Complex Systems", Maceio-Brazil, 16-20 October 2000.
- [6104] F.M. Ramos, R.R. Rosa, C. Rodrigues Neto, M.J.A. Bolzan, L.D.A. Sa and H.F. Campos Velho, *Non-extensive statistics and three-dimensional fully developed turbulence*, Physica A **295**, 250 (2001) [Proc. IUPAP Workshop on New Trends on Fractal Aspects of Complex Systems (16-20 October 2000, Maceio-AL, Brazil), ed. M.L. Lyra (Elsevier, Amsterdam, 2001)].
- [6105] C. Lassner and R. Lienhart, *Norm-induced entropies for decision forests*, IEEE Winter Conference on Applications of Computer Vision, 968-975 (2015), doi: 10.1109/WACV.2015.134
- [6106] M.J.A. Bolzan, F.M. Ramos, L.D.A. Sa, R.R. Rosa and C. Rodrigues Neto, *Analysis of fully developed turbulence above and below Amazon forest canopy using Tsallis' generalized thermostatics*, preprint (2001).
- [6107] M.J.A. Bolzan, *Um estudo sobre características estatísticas do subdomínio inercial da turbulência desenvolvida em escoamentos acima e dentro da copa da floresta amazônica em terra firme*, Doctor Thesis (INPE, Sao Jose dos Campos-Brazil, 2002).
- [6108] L.D.A. Sa, M.J.A. Bolzan, F.M. Ramos, C. Rodrigues Neto, R.R. Rosa and A. Souza, *Análise da intermitência no subdomínio inercial da turbulência desenvolvida acima do pantanal matogrossense (Experimento IPE-2)*, preprint (2001).
- [6109] C. Rodrigues Neto, A. Zangrandea, F.M. Ramos, R.R. Rosa, M.J.A. Bolzan and L.D.A. Sa, *Multiscale analysis from turbulent time series with wavelet transform*, Physica A **295**, 215 (2001).
- [6110] H.F. Campos Velho, R.R. Rosa, F.M. Ramos, R.A. Pielke, G.A. Degrazia, C. Rodrigues Neto and Z. Zangrandea, *Multifractal model for eddy diffusivity and counter-gradient term in atmospheric turbulence*, Physica A **295**, 219 (2001) [Proc. IUPAP Workshop on New Trends on Fractal Aspects of Complex Systems (16-20 October 2000, Maceio-AL, Brazil), ed. M.L. Lyra (Elsevier, Amsterdam, 2001)].
- [6111] H.F. Campos Velho, R.R. Rosa, F.M. Ramos, R.A. Pielke Sr and G.A. Degrazia, *Representing intermittency in turbulent fluxes: An application to the stable atmospheric boundary layer*, Physica A **354**, 88 (2005).

- [6112] E.H. Shiguemori, H.F.D. Velho and J.D.S. da Silva, *Atmospheric temperature retrieval from satellite data: New non-extensive artificial neural network approach*, Proceedings of the 23rd Annual ACM Symposium on Applied Computing, 1688-1692 (2008).
- [6113] J.R.G. Braga, H.F. de Campos Velho and E.H. Shiguemori, *Lidar and non-extensive particle filter for UAV autonomous navigation*, in *Studies in Computational Intelligence Springer Series* **872** (2020).
- [6114] N. Rayon, S. Wheelless, G. Broom and H.E. Sevil, *How to swarm: Entropy-based model parameter analysis*, IEEE SoutheastCon (2024).
- [6115] L. Fina, D.S. Smith Jr., J. Carnahan and H.E. Sevil, *Entropy-based distributed behavior modeling for multi-agent UAVs*, Drones **6**, 164 (2022).
- [6116] S. Lee, N. Rayon and H.E. Sevil, *A visual question answering-based object detection framework using a team of multi-agent UAVs*, Florida Conference on Recent Advances in Robotics (2025).
- [6117] T. Kobayashi and T. Enomoto, *Towards autonomous driving of personal mobility with small and noisy dataset using Tsallis-statistics-based behavioral cloning*, preprint (2021), 2111.14294 [cs.LG].
- [6118] B. Wang and Y.X. Hou, *Measurement of incompatible probability in information retrieval: A case study with user clicks*, Trans. Tianjin Univ. **19**, 37-42 (2013).
- [6119] G.A. Degrazia, J.C. Carvalho, D.M. Moreira, M.T. Vilhena, D.R. Roberti and S.G. Magalhaes, *Derivation of a decorrelation timescale depending on source distance for inhomogeneous turbulence in a convective boundary layer*, Physica A **374**, 55-65 (2007).
- [6120] M.C.A. Arbage, G.A. Degrazia, G.S. Welter, D.R. Roberti, O.C. Acevedo, O.L.L. Moraes, S.T. Ferraz, A.U. Timm and V.S. Moreira, *Turbulent statistical characteristics associated to the north wind phenomenon in southern Brazil with application to turbulent diffusion*, Physica A **387**, 4376-4386 (2008).
- [6121] V.S. Moreira, G. Degrazia, A.U. Timm, D.R. Roberti and S. Maldaner, *Connecting turbulence and meandering parameterization to describe passive scalars dispersion in low wind speed conditions*, ISRN Atmospheric Sciences, 738024 (Hindawi Publishing Corporation, 2013) (8 pages).
- [6122] H.F. de Campos Velho, E.H. Shiguemori, F.M. Ramos and J.C. Carvalho, *A Unified regularized theory: The maximum non-extensive entropy principle*, Computational and Applied Mathematics **25**, 307-330 (2006).
- [6123] F.M. Ramos, R.R. Rosa, C. Rodrigues Neto, M.J.A. Bolzan and L.D.A. Sa, *Generalized thermostatics description of probabilities densities of turbulent temperature fluctuations*, Comp. Phys. Comm. **147**, 556 (2002).
- [6124] F.M. Ramos, A.L.B. Ribeiro and R.R. Rosa, *Multiscaling and nonextensivity of large-scale structures in the universe*, Physica D **168-169**, 404-409 (2002).
- [6125] M.J.A. Bolzan, F.M. Ramos, L.D.A. Sa, C. Rodrigues Neto and R.R. Rosa, *Analysis of fine-scale canopy turbulence within and above an Amazon forest using Tsallis' generalized thermostatics*, J. Geophys. Research-Atmospheres **107**, 8063 (2002).
- [6126] F.M. Ramos, M.J.A. Bolzan, L.D.A. Sa and R.R. Rosa, *Atmospheric turbulence within and above an Amazon forest*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 278 (2004).
- [6127] H.F. de Campos Velho, R.R. Rosa, F.M. Ramos, R.A. Pielke Sr. and G.A. Degrazia, *Turbulence parameterization considering intermittency*, communicated at IX Latin American Workshop on Nonlinear Phenomena (23-28 October 2005, Bariloche).
- [6128] J.D.C. Carvalho, G.A. Degrazia, M.T. de Vilhena, S.G. Magalhaes, A.G. Goulart, D. Anfossi, O.C. Acevedo and O.L.L. Moraes, *Parameterization of meandering phenomenon in a stable atmospheric boundary layer*, Physica A **368**, 247-256 (2006).
- [6129] S. Martinez, F. Pennini, C. Tessone and A. Plastino, *Electron plasma two-dimensional turbulence using Tsallis OLM normalized thermostatics*, communication at the IUPAP International Conference on "New Trends in the Fractal Aspects of Complex Systems", Maceio-Brazil, 16-20 October 2000.
- [6130] B.K. Shivamoggi, *Non-extensive statistical mechanics of compressible turbulence*, Physica A **318**, 358 (2003).
- [6131] C. Beck, G.S. Lewis and H.L. Swinney, *Measuring non-extensivity parameters in a turbulent Couette-Taylor flow*, Phys. Rev. E **63**, 035303 (2001).
- [6132] C.N. Baroud and H.L. Swinney, *Nonextensivity in turbulence in rotating two-dimensional and three-dimensional flows*, Physica D **184**, 21 (2003).
- [6133] S. Jung, B.D. Storey, J. Aubert and H.L. Swinney, *Nonextensive statistical mechanics for rotating quasi-two-dimensional turbulence*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 252 (2004).
- [6134] C. Beck, *Dynamical foundations of nonextensive statistical mechanics*, Phys. Rev. Lett. **87**, 180601 (2001).

- [6135] F.A. Oliveira, R. Morgado, M.V.B.T. Lima, B.A. Mello, A. Hansen and G.G. Batrouni, *Comment on “Dynamical foundations of nonextensive statistical mechanics” by C. Beck*, Phys. Rev. Lett. **90**, 218901 (2003).
- [6136] C. Beck, *Reply to the Comment by Oliveira et al*, Phys. Rev. Lett. **90**, 218902 (2003).
- [6137] A.M. Crawford, N. Mordant and E. Bodenschatz, *Comment on “Dynamical foundations of nonextensive statistical mechanics*, preprint (2002) [cond-mat/0212080].
- [6138] N. Mordant, A.M. Crawford and E. Bodenschatz, *Experimental Lagrangian Acceleration probability density function measurement*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 245 (2004).
- [6139] K.E. Daniels, C. Beck and E. Bodenschatz, *Defect turbulence and generalized statistical mechanics*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 208 (2004).
- [6140] C. Beck, *Lagrangian acceleration statistics in turbulent flows*, preprint (2002) [cond-mat/0212566].
- [6141] F. Sattin and L. Salasnich, *Multiparameter generalization of nonextensive statistical mechanics*, Phys. Rev. E **65**, 035106 (2002).
- [6142] F. Sattin, *Derivation of Tsallis’ statistics from dynamical equations for a granular gas*, J. Phys. A **36**, 1583 (2003).
- [6143] C. Tsallis, *Remark on the Second Principle of Thermodynamics*, Relativistic Aspects of Nuclear Physics (Proceedings Sixth International Workshop RANP 2000), eds. T. Kodama, C.E. Aguiar, H.T. Elze, F. Grassi, Y. Hama and G. Krein (World Scientific, Singapore, 2001) [cond-mat/0012371].
- [6144] F.Q. Potiguar and U.M.S. Costa, *Transport theory in the context of the normalized generalized statistics*, Physica A **303**, 457 (2002).
- [6145] J.R. Bezerra, R. Silva and J.A.S. Lima, *Transport coefficients and nonextensive statistics*, Physica A **322**, 256 (2003).
- [6146] B.M. Boghosian, P.J. Love, P.V. Coveney, I.V. Karlin, S. Succi and J. Yepez, *Galilean-invariant lattice-Boltzmann models with H-theorem*, Phys. Rev. E **68**, 025103(R) (2003).
- [6147] R. Khazaeli, M.R. Nazari and A. Zadehghol, *Introducing a modified exact difference method for incorporating unsteady and non-uniform force terms in lattice kinetic models*, Computers and Mathematics with Applications (2019), in press, doi: 10.1016/j.camwa.2019.02.032
- [6148] M. Hua and Y. Wu, *Bifurcation in most probable phase portraits for a bistable kinetic model with coupling Gaussian and non-Gaussian noises*, Appl. Math. Mech. **42** (12), 1759-1770 (2021).
- [6149] I. Karlin and S. Succi, *On the H-theorem in lattice kinetic theory*, Riv. Mat. Univ. Parma **6** (2), 143-154 (1999).
- [6150] B.M. Boghosian, *General theory of Galilean-invariant entropic lattice Boltzmann models*, in *Complexity, Metastability and Nonextensivity*, eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 185.
- [6151] P.J. Love and B.M. Boghosian, *On the dependence of the Navier-Stokes equations on the distribution of molecular velocities*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 182 (2004).
- [6152] B.M. Boghosian, P.J. Love, J. Yepez and P.V. Coveney, *Galilean-invariant multi-speed entropic lattice Boltzmann models*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 169 (2004).
- [6153] B. Keating, G. Vahala, J. Yepez, M. Soe and L. Vahala, *Entropic lattice Boltzmann representations required to recover Navier-Stokes flows*, Phys. Rev. E **75**, 036712 (2007).
- [6154] B.M. Boghosian, P. Love and J. Yepez, *Entropic lattice Boltzmann model for Burgers’s equation*, Phil. Trans. R. Soc. Lond. A **362**, 1691-1701 (2004).
- [6155] S. Gheorghiu, J.R. van Ommen and M.-O. Coppens, *Power-law distribution of pressure fluctuations in multiphase flow*, Phys. Rev. E **67**, 041305 (2003).
- [6156] T. Gotoh and R.H. Kraichnan, *Turbulence and Tsallis statistics*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 231 (2004).
- [6157] A. Razdan, *Lamb-Mossbauer factor using non-extensive statistics*, Phys. Lett. A **321**, 190 (2004).
- [6158] A. Razdan, *Low temperature specific heat of glasses: A non-extensive approach*, Phys. Lett. A **341**, 504 (2005).
- [6159] A. Razdan, *On non-extensive nature of thermal conductivity*, Pramana - J. Phys. **68**, 61-65 (2007).
- [6160] Y. Li, N. Li, U. Tirnakli, B. Li and C. Tsallis, *Thermal conductance of the coupled-rotator chain: Influence of temperature and size*, EPL **117**, 60004 (2017).

- [6161] C. Tsallis, H.S. Lima, U.Tirnakli and D. Eroglu, *First-principle validation of Fourier's law in $d = 1, 2, 3$* , Physica D **446**, 133681 (2023).
- [6162] H.S. Lima and C. Tsallis, *Ising chain: Thermal conductivity and first-principle validation of Fourier law*, Physica A **628**, 129161 (2023).
- [6163] H.S. Lima, C. Tsallis and F.D. Nobre, *First-principle validation of Fourier's law: One-dimensional classical inertial Heisenberg model*, Entropy **26**, 25 (2024).
- [6164] H.S. Lima, *First-principle validation of Fourier's law on n -vector models and related applications of q -statistics*, Doctor Thesis (Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro, 2024).
- [6165] H.S. Lima, C. Tsallis, D. Eroglu and U. Tirnakli, *Fourier's law breakdown for the planar-rotor chain with long-range coupling*, preprint (2024), 2407.13843 [cond-mat.stat-mech].
- [6166] A. Razdan, *q -Gaussian representation of non-Lorentzian Mossbauer line shapes*, communicated at ICAME 2007 - International Conference on the Applications of the Mossbauer Effect (14-19 October 2007, Kanpur), T9-P8.
- [6167] A. Razdan, *On deformation and non-extensive nature of Lamb Mossbauer factor*, communicated at ICAME 2007 - International Conference on the Applications of the Mossbauer Effect (14-19 October 2007, Kanpur), T9-P19.
- [6168] A. Razdan, *Non-extensivity in magnetic systems: possible impact on Mossbauer results*, preprint (2009), 0901.4436 [cond-mat.stat-mech].
- [6169] A.M. Reynolds, M. Veneziani and A. Griffa, *Turbulent rotational dynamics and Tsallis distributions*, preprint (2004).
- [6170] A.M. Reynolds and M. Veneziani, *Rotational dynamics of turbulence and Tsallis statistics*, Phys. Lett. A **327**, 9 (2004).
- [6171] S. Rizzo and A. Rapisarda, *Environmental atmospheric turbulence at Florence airport, 8th Experimental Chaos Conference* (14-17 June 2004, Florence, Italy), American Institute of Physics Conference Proceedings **742**, 176-181 (2004) [cond-mat/0406684].
- [6172] G.C. Yalcin and C. Beck, *Environmental superstatistics*, Physica A **392**, 5431-5452 (2013).
- [6173] S. Rizzo and A. Rapisarda, *Application of superstatistics to atmospheric turbulence*, in *Complexity, Metastability and Nonextensivity*, eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 246 [cond-mat/0502305].
- [6174] C. Beck, E.G.D. Cohen and S. Rizzo, *Atmospheric turbulence and superstatistics*, Europhysics News **36**, 189 (2005) [Europhysics News Special Issue *Nonextensive Statistical Mechanics: New Trends, new perspectives*, eds. J.P. Boon and C. Tsallis (November/December 2005)].
- [6175] A. Coniglio, A. de Candia, A. Fierro, M. Nicodemi and M. Tarzia, *Statistical mechanics approach to the jamming transition in granular materials*, Physica A **344**, 431 (2004).
- [6176] G. Combe, V. Richefeu, G. Viggiani, S.A. Hall, A. Tengattini and A.P.F. Atman, *Experimental evidence of "Granulence"*, *Powders and Grains* (Sidney, Australia, 2013), AIP Conf. Proc. **1542**, 453-456 (2013); doi: 10.1063/1.4811965
- [6177] A.P.F. Atman, E. Kolb, G. Combe, H.A. Paiva and G.H.B. Martins, *Non-Gaussian behavior in jamming / unjamming transition in dense granular materials*, *Powders and Grains* (Sidney, Australia, 2013), AIP Conf. Proc. **1542**, 381-384 (2013); doi: 10.1063/1.4811947
- [6178] G. Combe, V. Richefeu, M. Stasiak and A.P.F. Atman, *Experimental validation of nonextensive scaling law in confined granular media*, Phys. Rev. Lett. **115**, 238301 (2015) (5 pages) [Editors' Suggestion].
- [6179] L. Viallon-Galiner, G. Combe, V. Richefeu and A.P.F. Atman, *Emergence of shear bands in confined granular systems: singularity of the q -statistics*, Entropy **20**, 862 (2018), doi: 10.3390/e20110862
- [6180] V. Richefeu and G. Combe, *The particle image tracking technique: An accurate optical method for measuring individual kinematics of rigid particles*, Strain (2020), doi: 10.1111/str.12362
- [6181] K. Heinze, X. Frank, V. Lullien-Pellerin, M. George, F. Radjai and J.-Y. Delenne, *Stress transmission in cemented bidisperse granular materials*, Phys. Rev. E **101**, 052901 (2020).
- [6182] S.V. Mykulyak, V.O. Polyakovskiy and S.I. Skurativskiy, *Statistical properties of shear deformation of granular media and analogies with natural seismic processes*, Pure and Applied Geophysics (2019), doi: doi.org/10.1007/s00024-019-02209-0
- [6183] A.P. Pereira, J.P. Fernandes, A.P.F. Atman and J.L. Acebal, *Parameter calibration between models and simulations: connecting linear and non-linear descriptions of anomalous diffusion*, Physica A **509**, 369-382 (2018).

- [6184] A.P.P. Pereira, J.P. Fernandes, A.P.F. Atman and J.L. Acebal, *Simulation and calibration between parameters of continuous time random walks and subdiffusive model*, *Tendencias em Matematica Aplicada e Computacional* **18** (2), 305-315 (2017), doi: 10.5540/tema.2017.018.02.0305
- [6185] A. Walczak, *Patient treatment prediction by continuous time random walk inside complex system*, *MATEC Web of Conferences* **210**, 02006 (2018), doi: 10.1051/mateconf/201821002006
- [6186] G. Combe, V. Richefeu and G. Viggiani, *Displacement fluctuations in granular materials: A direct manifestation of grain rearrangement*, 3rd International Symposium on Geomechanics from Micro to Macro (2014, Univ Cambridge, Cambridge), *Geomechanics from Micro to Macro, Vols. I and II*, 1179-1182 (2015).
- [6187] B. Kou, Y. Cao, J. Li, C. Xia, Z. Li, H. Dong, A. Zhang, J. Zhang, W. Kob and Y. Wang, *Granular materials flow like complex fluids*, *Nature Letter* (2017), doi:10.1038/nature24062
- [6188] C.L. Chong, *Geometrical methods in dynamics of complex fluids and kinetic theory*, Doctor Thesis (Oxford University, 2022).
- [6189] M. Tolomeo, K. Saitoh, G. Combe, S. Luding, V. Magnanimo, V. Richefeu and G. Viggiani, *Stochastic model for the micromechanics of jammed granular materials: experimental studies and numerical simulations*, *EPJ Web of Conferences* **140**, 02021 (2017) (4 pages), doi: 10.1051/epjconf/201714002021 (Powders & Grains 2017).
- [6190] N. Guo and J. Zhao, *Local fluctuations and spatial correlations in granular flows under constant-volume quasistatic shear*, *Phys. Rev. E* **89**, 042208 (2014) (16 pages).
- [6191] H. Bonakdari, Z. Sheikh and M. Tooshmalani, *Comparison between Shannon and Tsallis entropies for prediction of shear stress distribution in open channels*, *Stoch. Environ. Res. Risk Assess.* **29**, 1-11 (2015), doi: 10.1007/s00477-014-0959-3
- [6192] F. Vallianatos and D. Triantis, *Is pressure stimulated current relaxation in amphibolite a case of non-extensivity?*, *EPL* **99**, 18006 (6 pages).
- [6193] F. Vallianatos and D. Triantis, *A non-extensive view of the pressure stimulated current relaxation during repeated abrupt uniaxial load-unload in rock samples*, *EPL* **104**, 68002 (2013) (6 pages).
- [6194] G. Korvin, *Entropy and rock physics*, (Springer, 2024).
- [6195] I.P. Shcherbakov, V.S. Kuksenko and A.E. Chmel, *Nonextensive statistical analysis of the data on the high-speed impact fracture of solids*, *JETP Letters* **94** (5), 378-381(2011).
- [6196] A. Guha and P.K. Das, *Specific heat of solid in q-deformed statistics*, preprint (2017), 1708.01887 [cond-mat.stat-mech].
- [6197] A. Guha and P.K. Das, *q-deformed Einstein's model to describe specific heat of solid*, *Physica A* **495**, 18-29. (2018).
- [6198] A. Chmel and V. Smirnov, *Non-extensive dynamics of drifting sea ice*, preprint (2012).
- [6199] A. Chmel and I. Shcherbakov, *Acoustic, electromagnetic, and photon emission from dynamically fracturing granite*, *Pure Appl. Geophys.* **169**, 2139-2148 (2012).
- [6200] I.P. Shcherbakov and A.E. Chmel, *Study of damage initiation in SiO₂ glass and ceramics by fractoluminescence and acoustic emission techniques*, *Glass Physics and Chemistry* **39** (5), 527-532 (2013) [Original Russian in *Fizika i Khimiya Stekla*].
- [6201] S.V. Uvarov, M.M. Davydova and V.V. Chudinov, *Energy absorption and strength of ceramics with different porosity under dynamic loading*, *AIP Conference Proceedings Mechanics, Resources and Diagnostics of Materials and Structures*, MRDMS-2016, eds. E.S. Gorkunov, V.E. Panin and S. Ramasubbu (2016).
- [6202] P. Grosfils and J.P. Boon, *Nonextensive statistics in viscous fingering*, *Physica A* **362**, 168-173 (2006).
- [6203] B.M. Boghosian and J.P. Boon, *Lattice Boltzmann equation and fingering*, *Europhysics News* **36**, 192 (2005) [Europhysics News Special Issue *Nonextensive Statistical Mechanics: New Trends, new perspectives*, eds. J.P. Boon and C. Tsallis (November/December 2005)].
- [6204] R. Lambiotte and L. Brenig, *Truncated Lévy distribution in an inelastic gas*, *Phys. Lett. A* **345**, 309-313 (2005).
- [6205] P. Grosfils and J.P. Boon, *Nonextensive statistics precursors to the onset of fingering*, preprint (2005).
- [6206] P. Grosfils and J.P. Boon, *Nonextensive statistics precursors*, preprint (2005).
- [6207] P. Grosfils and J.P. Boon, *Statistics of precursors to fingering processes*, *Europhys. Lett.* **74**, 609-615 (2006).
- [6208] R. Arevalo, A. Garcimartin and D. Maza, *Anomalous diffusion in silo drainage*, *Eur. Phys. J. E* **23**, 191-198 (2007)[DOI10.1140/epje/i2006-10174-1].
- [6209] F. Vallianatos and M. Kouli, *Evidence of hierarchy in the drainage basins size distribution of Greece derived from ASTER GDEM-v2 data*, *Appl. Sci.* **10**, 248 (2020), doi:10.3390/app10010248

- [6210] R. Arevalo, A. Garcimartin and D. Maza, *A non-standard statistical approach to the silo discharge*, in *Complex Systems - New Trends and Expectations*, eds. H.S. Wio, M.A. Rodriguez and L. Pesquera, Eur. Phys. J.-Special Topics **143** (2007) [DOI: 10.1140/epjst/e2007-00087-9].
- [6211] Y. Marandet, H. Capes, L. Godbert-Mouret, M. Koubiti, J. Rosato and R. Stamm, *Spectral line shapes modeling in turbulent plasmas*, Eur. Phys. J. D **39**, 247-260 (2006).
- [6212] B. Liu and J. Goree, *Superdiffusion and non-Gaussian statistics in a driven-dissipative 2D dusty plasma*, Phys. Rev. Lett. **100**, 055003 (2008) (4 pages).
- [6213] B. Liu, J. Goree and Y. Feng, *Non-Gaussian statistics and superdiffusion in a driven-dissipative dusty plasma*, Phys. Rev. E **78**, 046403 (2008) (10 pages).
- [6214] A.K. Mukhopadhyay and J. Goree, *Experimental measurement of velocity correlations for two microparticles in a plasma with ion flow*, Phys. Rev. E **90**, 013102 (2014) (9 pages).
- [6215] B. Liu, J. Goree, M.Y. Pustynnik, H.M. Thomas, V.E. Fortov, A.M. Lipaev, A.D. Usachev, V.I. Molotkov, O.F. Petrov and M.H. Thoma, *Particle velocity distribution in a three-dimensional dusty plasma under microgravity conditions*, in *Diverse World of Dusty Plasmas*, AIP Conf. Proc. **1925**, 020005 (2018), doi: 10.1063/1.5020393
- [6216] Z. Wei, B. Liu, J. Goree, M.Y. Pustynnik, H.M. Thomas, V.E. Fortov, A.M. Lipaev, A.D. Usachev, V.I. Molotkov, O.F. Petrov and M.H. Thoma, *Diffusive motion in a 3-D cluster in PK-4*, IEEE Transactions on Plasma Science **47** (7), 8631131, 3100-3106 (2019).
- [6217] J. Berumen and J. Goree, *Frequency-dependent complex viscosity obtained for a liquid two-dimensional dusty plasma experiment*, Phys.Rev. E **105**, 015209 (2022).
- [6218] A.K. Mukhopadhyay, *Statistics for motion of microparticles in a plasma*, Doctor Thesis (Graduate College of the University of Iowa, 2014).
- [6219] R. Amour and M. Tribeche, *Variable charge dust acoustic solitary waves in a dusty plasma with a q -nonextensive electron velocity distribution*, Phys. Plasmas **17**, 063702 (2010) (7 pages).
- [6220] A.M. El-Hanbaly, E.K. El-Shewy, A. Elgarayhi and A.I. Kassem, *Propagation of electron acoustic soliton, periodic and shock waves in dissipative plasma with a q -nonextensive electron velocity distribution*, Commun. Theor. Phys. **64**, 529-536 (2015).
- [6221] A.M. El-Hanbaly, E.K. El-Shewy, M. Sallah and H.F. Darweesh, *Nonlinear dust acoustic waves in dissipative space dusty plasmas with superthermal electrons and nonextensive ions*, Commun. Theor. Phys. **65** (5), 606-612 (2016).
- [6222] H. Qiu, D. Xiao, J. Wu, S. Wu, C. Zhong, X. Li, X. Peng, Y. Yuan, Q. Cai, J. Chang, T. Hu, Z. Hu and Y. Zhu, *Initial measurement of ion nonextensive parameter with geodesic acoustic mode theory*, Scientific Reports **12**, 3412 (2022).
- [6223] H. Qiu, Z. Hu, S. Wu, J. Chen, C. Zhong, J. Wu, X. Li, D. Xiao, C. Shi, J. Liu, W. Xiong, T. Hu, Q. Cai and Y. Yuan, *Initial analytical theory of plasma disruption and experimental evidence*, Scientific Reports **13**, 9551 (2023).
- [6224] R. Amour and M. Tribeche, *Semi-analytical study of variable charge dust acoustic solitary waves in a dusty plasma with a q -nonextensive ion velocity distribution*, Commun. Nonlinear Sci. Num. Simulat. **16** (9), 3533-3539 (2011).
- [6225] M. Tribeche et K. Ourabah, *Etat de l' art sur la generalisation de la statistique de Boltzmann-Gibbs*, Revue Algerienne de Physique **2** (2), 110-122 (2015).
- [6226] K. Ourabah et M. Tribeche, *Generalisation non-extensive de la statistique de Boltzmann-Gibbs*, (Universite des Sciences et de la Technologie Houari Boumedienne, Faculte de Physique, Departement de Physique Theorique, 2016).
- [6227] K. Ourabah, *Demystifying the success of empirical distributions in space plasmas*, Phys. Rev. Research **2**, 023121 (2020).
- [6228] K. Ourabah, *Continuous quantum systems in a fluctuating environment*, Eur. Phys. J. Plus **135**, 136 (2020).
- [6229] M. Tribeche and L. Djebarni, *Electron-acoustic solitary waves in a nonextensive plasma*, Phys. Plasmas **17**, 124502 (2010) (3 pages).
- [6230] S. Ratynskaia, G. Regnoli, K. Rypdal, B. Klumov and G. Morfill, *Critical fluctuations and anomalous transport in soft Yukawa-Langevin systems*, Phys. Rev. E **80**, 046404 (2009) (11 pages).
- [6231] R.A. Treumann and C.H. Jaroschek, *Gibbsian theory of power-law distributions*, Phys. Rev. Lett. **100**, 155005 (2008) (4 pages).
- [6232] E.L. Rempel, A.C.L. Chian, D. Koga, R.A. Miranda and W.M. Santana WM, *Alfven complexity*, Int. J. Bifurcation and Chaos, **18**, 1697-1703 (2008).

- [6233] A.C.L. Chian, F.A. Borotto, T. Hada, R.A. Miranda, P.R. Munoz and E.L. Rempel, *Nonlinear dynamics in space plasma turbulence: temporal stochastic chaos*, Rev. Modern Plasma Physics **6**, 34 (2022).
- [6234] R. Gaelzer and L.F. Ziebell, *The dispersion relations of dispersive Alfvén waves in superthermal plasmas*, J. Geophysical Research - Space Physics **119** (12), 9334-9356 (2014), doi: 10.1002/2014JA020667
- [6235] H.F. Liu, L. Yang, C.J. Tang, Y. Luo, X. Zhang and Y.H. Xu, *Alfvénic turbulence driven temperature anisotropies of thermal non-equilibrium ions*, EPL **123**, 65004 (2018), doi: 10.1209/0295-5075/123/65004
- [6236] L.F. Ziebell, R. Gaelzer and F.J.R. Simoes Jr., *Dispersion relation for electrostatic waves in plasmas with isotropic and anisotropic Kappa distributions for electrons and ions*, J. Plasma Phys. **83**, 905830503 (2017), doi:10.1017/S0022377817000733
- [6237] H.G. Sun and W. Chen, *Fractal derivative multi-scale model of fluid particle transverse accelerations in fully developed turbulence*, Science in China Series E - Technological Sciences **52**, 680-683 (2009).
- [6238] W. Chen and H.G. Sun, *Multiscale statistical model of fully-developed turbulence particle accelerations*, Mod. Phys. Lett. B **23**, 449-452 (2009).
- [6239] A. Razdan, *Non-extensivity in magnetic systems: Possible impact on Mossbauer results*, Physica B **404**, 1568-1570 (2009).
- [6240] A. Razdan, *Crab pulsar spectrum: a non-extensive approach*, preprint (2014), 1403.6942 [astro-ph.HE].
- [6241] G. Livadiotis and D.J. McComas, *Beyond kappa distributions: Exploiting Tsallis Statistical Mechanics in space plasmas*, J. Geophys. Res. - Space Physics **114**, A11105 (2009).
- [6242] G. Livadiotis, *Kappa distributions: Thermodynamic origin and generation in space plasmas*, J. Phys. Conf. Ser. **1100**, 012017 (2018).
- [6243] C.M. Espinoza, M. Stepanova, P.S. Moya, E.E. Antonova and J.A. Valdivia, *Ion and electron κ -distribution functions along the plasma sheet*, Geophys. Research Lett. **45** (13), 6362-6370 (2018).
- [6244] A.V. Eyelade, C.M. Espinoza, M. Stepanova, E.E. Antonova, I.L. Ovchinnikov and I.P. Kirpichev, *Influence of MHD turbulence on ion Kappa distributions in the Earth's plasma sheet as a function of plasma β parameter*, Front. Astron. Space Sci. **8**, 647121 (2021), doi: 10.3389/fspas.2021.647121
- [6245] B. Acosta-Tripailao, D. Pasten and P.S. Moya, *Applying the horizontal visibility graph method to study irreversibility of electromagnetic turbulence in non-thermal plasmas*, Entropy **23**, 470 (2021), doi: 10.3390/e23040470
- [6246] J. Zhu and D. Wei, *Analysis of stock market based on visibility graph and structure entropy*, Physica A **576**, 126036 (2021), doi: 10.1016/j.physa.2021.126036
- [6247] G. Livadiotis, G. Nicolaou and F. Allegrini, *Anisotropic kappa distributions I: Formulation based on particle correlations*, Astrophysical J. Supplement Series **253**, 16 (2021) (28 pages), doi: 10.3847/1538-4365/abd4ed
- [6248] G. Livadiotis, *Curie law for systems described by kappa distributions*, EPL **113**, 10003 (2016) (6 pages), doi: 10.1209/0295-5075/113/10003
- [6249] G. Livadiotis, *Kappa distribution in the presence of a potential energy*, J. Geophys. Research A: Space Physics **120** (2), 880-903 (2015).
- [6250] G. Livadiotis and D.J. McComas, *Dynamic of stationary states out of equilibrium in space plasmas*, communicated at the 7th General Conference of the Balkan Physical Union (Alexandroupolis, 9-13 September 2009).
- [6251] G. Livadiotis and D.J. McComas, *Exploring transitions of space plasmas out of equilibrium*, Astrophys. J. **714** (1), 971-987 (2010).
- [6252] G. Livadiotis and D.J. McComas, *Measure of the departure of the q-metastable stationary states from equilibrium*, Phys. Scripta **82**, 035003 (2010) (9 pages).
- [6253] G. Livadiotis and D.J. McComas, *Non-equilibrium stationary states in the heliosphere and the influence of pick-up ions*, in *Pickup Ions Throughout the Heliosphere and Beyond* **1302**, 70-76 (2010).
- [6254] S. Perri, A. Bykov, H. Fahr, H. Fichtner and J. Giacalone, *Recent developments in particle acceleration at shocks: Theory and observations*, Space Science Reviews **218**, 26 (2022).
- [6255] G. Livadiotis and D.J. McComas, *The influence of pick-up ions on space plasma distributions*, Astrophys. J. **738** (1), 64 (2011).
- [6256] G. Livadiotis, *On the simplification of statistical mechanics for space plasmas*, Entropy **19**, 285 (2017) (16 pages).
- [6257] G. Livadiotis, D.J. McComas, M.A. Dayeh, H.O. Funsten and N.A. Schwadron, *First sky map of the inner heliosheath temperature using IBEX spectra*, Astrophys. J. **734** (1) (2011)(19 pages).
- [6258] G. Livadiotis and D.J. McComas, *Non-equilibrium thermodynamic processes: Space plasmas and the inner heliosheath*, Astrophys. J., **749** (11) (2012) (4 pages).

- [6259] G. Livadiotis, *Superposition of polytropes in the inner heliosheath*, *Astrophys. J. Supplement Series* **223**, 13 (2016) (13 pages), doi:10.3847/0067-0049/223/1/13
- [6260] G. Livadiotis, D.J. McComas, H.O. Funsten, N.A. Schwadron, J.R. Szalay and E. Zirnstein, *Thermodynamics of the inner heliosheath*, *Astrophysical Journal Supplement Series* **262** (2), 53 (2022).
- [6261] G. Livadiotis, *Rankine-Hugoniot shock conditions for space and astrophysical plasmas described by kappa distributions*, *Astrophysical Journal*, **886**, 3 (2019) (10 pages).
- [6262] O. El Ghani, I. Driouch and H. Chatei, *Effects of non-extensive electrons on the sheath of dusty plasmas with variable dust charge*, *Contrib. Plasma Phys.* e201900030 (2019) (10 pages), doi: doi.org/10.1002/ctpp.201900030
- [6263] O. El Ghani, I. Driouch and H. Chatei, *Effects of two temperature non-extensive electrons on the sheath of dusty plasma*, *Materials Today: Proceedings* (2019), in press.
- [6264] M. EL Bojaddaini and H. Chatei, *Study of sheath properties in collisional plasma consisting of non-extensive electrons and thermal ions*, *Materials Today: Proceedings* (2019), in press.
- [6265] X.C. Chen, S.Q. Liu and Y. Liu, *Effect of dust charge fluctuation on ion acoustic waves in a plasma with nonextensive electrons*, *Plasma Physics Reports* **45** (7), 714-721 (2019).
- [6266] G. Livadiotis and D.J. McComas, *Invariant kappa distribution in space plasmas out of equilibrium*, *Astrophys. J.* **741** (2), 88 (2011) (28 pages).
- [6267] G. Livadiotis and D.J. McComas, *Understanding Kappa distributions: A toolbox for space science and astrophysics*, *Space Sci. Rev.* **175** (1-4), 183-214 (2013).
- [6268] G. Nicolaou and G. Livadiotis, *Misestimation of temperature when applying Maxwellian distributions to space plasmas described by kappa distributions*, *Astrophys. Space Sci.* **361**, 359 (2016), doi: 10.1007/s10509-016-2949-z
- [6269] G. Nicolaou, G. Livadiotis, C.J. Owen, D. Verscharen and R.T. Wicks, *Determining the Kappa distributions of space plasmas from observations in a limited energy range*, *Astrophys. J.* **864**, 3 (2018) (11 pages), doi: 10.3847/1538-4357/aad45d
- [6270] G. Nicolaou and G. Livadiotis, *Statistical uncertainties of space plasma properties described by kappa distributions*, *Entropy* **22**, 541 (2020), doi: 10.3390/e22050541
- [6271] G. Livadiotis, *Introduction to a special section on origins and properties of kappa distributions: Statistical background and properties of kappa distributions in space plasmas*, *J. Geophys. Res. - Space Physics* **120** (3), 1607-1619 (2015), doi: 10.1002/2014JA020825
- [6272] R.F. Abdul and R.L. Mace, *A method to generate kappa distributed random deviates for particle-in-cell simulations*, *Computer Physics Communications* **185**, 2383-2386 (2014), doi: http://dx.doi.org/10.1016/j.cpc.2014.05.0
- [6273] B. Layden, *Second-order nonlinear processes in warm unmagnetized plasmas*, Doctor Thesis (School of Physics, Faculty of Science, University of Sydney, December 2013).
- [6274] G.D. Fleishman and A.A. Kuznetsov, *Theory of gyroresonance and free-free emissions from non-maxwellian quasi-steady-state electron distributions*, *Astrophys. J.* **781**, 77 (2014) (16 pages), doi:10.1088/0004-637X/781/2/77
- [6275] G. Le Chat, K. Issautier, N. Meyer-Vernet, I. Zouganelis, M. Maksimovic and M. Moncuquet, *Quasi-thermal noise in space plasma: "kappa" distributions*, *Phys. Plasmas* **16**, 102903 (2009).
- [6276] S.Q. Liu and X.C. Chen, *Dispersion relation of longitudinal oscillation in relativistic plasmas with nonextensive distribution*, *Physica A* **390**, 1704-1712 (2011).
- [6277] H.B. Qiu and S.Q. Liu, *Dispersion relation of longitudinal oscillation in relativistic plasmas with nonextensive distribution*, *Phys. Plasmas* **25**, 102102 (2018), doi: 10.1063/1.5047937
- [6278] M. Mehrafarin, *Superstatistics as the statistics of quasiequilibrium states: Application to fully developed turbulence*, *Phys. Rev. E* **84**, 022102 (2011) (5 pages).
- [6279] F. Vallianatos, *On the non-extensive nature of the isothermal depolarization relaxation currents in cement mortars*, *J. Phys. Chem. Solids* **73**, 550-553 (2012).
- [6280] Q. Zeng and S. Xu, *A two-parameter stretched exponential function for dynamic water vapor sorption of cement-based porous materials*, *Materials and Structures* **50**, 128 (2017) (13 pages), doi: 10.1617/s11527-017-0997-7
- [6281] C.H. Lee and K.C. Hover, *Extracting kinetic parameters from penetration resistance measurements*, *Cement and Concrete Research* **83**, 140-151 (2016).
- [6282] Q. Li, S. Xu and Q. Zeng, *A fractional kinetic model for drying of cement-based porous materials*, *Drying Technology: An International Journal* (2015).

- [6283] M.S. Tabass and G.R.M. Borzadaran, *The generalized maximum Tsallis entropy estimators and applications to the Portland cement data base*, Communications in Statistics- Simulation and Computation **46** (4), 3284-3293 (2017).
- [6284] M.S. Tabass and G.R.M. Borzadaran, *On the choice of the ridge parameter: a generalized maximum Tsallis entropy approach*, Communications in Statistics - Simulation and Computation
- [6285] P. Brault, J.M. Bauchire, A. Caillard, A.L. Thomann, S.J. Wu, F. James and C. Josserand, *Transport / adsorption / diffusion / agregation d'atomes pulverises par plasma dans les materiaux poreux. Experiences et modelisations*, in *Plasma et son environnement. Plasmas froids en France et au Quebec*, eds. A. Bourdon, A. Denoirjean and G. Marcos 137-158 (2012).
- [6286] G. Livadiotis, *"Lagrangian temperature": Derivation and physical meaning for systems described by kappa distributions*, Entropy **16**, 4290-4308 (2014), doi:10.3390/e16084290
- [6287] G. Livadiotis, *Kappa and q indices: Dependence on the degrees of freedom*, Entropy **17**, 2062-2081 (2015), doi:10.3390/e17042062
- [6288] G. Livadiotis, M.I. Desai and L.B. Wilson III, *Generation of kappa distributions in solar wind at 1 au*, Astrophys. J. **853** (2) (2018), doi: 10.3847/1538-4357/aaa713
- [6289] G.C. Brito, *Influencia da distribuicao de particulas do vento solar na instabilidade de ondas em plasmas*, Master thesis (Universidade Federal de Pelotas, Instituto de Fisica e Matematica, 2018).
- [6290] D. Verscharen, K.G. Klein and B.A. Maruca, *The multi-scale nature of the solar wind*, Living Reviews in Solar Physics **16**, 5 (2019), doi: doi.org/10.1007/s41116-019-0021-0
- [6291] D. Wojcik and W.M. Macek, *Testing for Markovian character of transfer of fluctuations in solar wind turbulence on kinetic scales*, Phys. Rev. E **110**, 025203 (2024).
- [6292] G.G. Nampoothiri, R.S. Thampi, S.V. Thampi, T.K. Pant and J.K. Abhishek, *Nature and variability of the electron velocity distribution functions and the nonequilibrium Boltzmann entropy in the solar wind at the first Lagrangian (L1) point during the halo CME event on 25 July 2004*, SolarPhysics **296**, 159 (2021), doi: 10.1007/s11207-021-01900-7
- [6293] J.F. Carbary, M. Kane, B.H. Mauk and S.M. Krimigis, *Using the kappa function to investigate hot plasma in the magnetospheres of the giant planets*, J. Geophys. Research A: Space Physics **119** (10), 8426-8447 (2014).
- [6294] S. Dilmi, F. Khalfoui and A. Boumali, *The effects of superstatistics properties on hot plasma*, Engineering, Technology and Applied Science Research **12** (5), 9342-9346 (2022).
- [6295] K. Scherer, E. Husidic, M. Lazar and H. Fichtner, *The κ -cookbook: a novel generalizing approach to unify κ -like distributions for plasma particle modeling*, MNRAS **497**, 1738-1756 (2020), doi: 10.1093/mnras/staa1969
- [6296] D. Tsuji and H. Katsuragi, *Temporal analysis of acoustic emission from a plunged granular bed*, preprint (2015), 1509.05675 [cond-mat.stat-mech].
- [6297] K. Saitoh, V. Magnanimo and S. Luding, *The effect of microscopic friction and size distributions on conditional probability distributions in soft particle packings*, Comp. Part. Mech. **4**, 409-417 (2017), doi: 10.1007/s40571-016-0138-z
- [6298] N.G. Javadov and M.I. Aliyev, *Space-time scale invariance at dynamic fragmentation of quasi-brittle materials*, Science and Applied Engineering Quarterly, Issue 10 (2016) (25 pages).
- [6299] P.W. Egolf and K. Hutter, *Tsallis extended thermodynamics applied to 2-d turbulence: Levy statistics and q-fractional generalized Kraichnianian energy and enstrophy spectra*, Entropy **20**, 109 (2018) (41 pages), doi: 10.3390/e20020109
- [6300] P.W. Egolf and K. Hutter, *Thermodynamics of turbulence*, in *Nonlinear, Nonlocal and Fractional Turbulence*, 297-353 (2020).
- [6301] P.W. Egolf and K. Hutter, *Turbulence: A cooperative phenomenon*, in *Nonlinear, Nonlocal and Fractional Turbulence*, 355-393 (2020).
- [6302] S. Calik and A.M. Karakas, *Entropy approach for volatility of wind energy*, Thermal Science **23** (6), S1863-S1874 (2019).
- [6303] A.M. Karakas, *Volatility measurement of the world indices using different entropy methods*, Thermal Science **23** (6), S1849-S1861 (2019).
- [6304] A.M. Karakas and S. Calik, *Entropy method for earthquake volatility*, Sigma J. Eng. & Nat. Sci. **38** (1), 329-348 (2020).
- [6305] M. Hashemzadeh, *Discrete eigenmodes of filamentation instability in the presence of a q-nonextensive distribution*, Phys. Rev. E **101**, 013202 (2020).
- [6306] I. Gallo-Mendez and P.S. Moya, *Langevin based turbulence model and its relationship with Kappa distributions*, Scientific Reports **12**, 2136 (2022).

- [6307] M.J. Lee, N. Ashikawa and Y.D. Jung, *Influence of Tsallis q -entropy on occurrence scattering time in a nonextensive plasma*, Physica Scripta **99**, 015606 (2024).
- [6308] M.J. Lee and Y.D. Jung, *Occurrence scattering time in nonextensive plasmas*, communicated at the 7th Asia-Pacific Conference on Plasma Physics (12-17 Nov, 2023, Port Messe Nagoya).
- [6309] Y. Zhou, Y. Feng, Y. Cao, S. Chen, Z. Lei, M. Xi, J. Sun, Y. Wang, T. Hao and X. Tong, *An improved radiative transfer inversion of physical temperatures in Antarctic ice sheet using SMOS observations*, Remote Sensing Applications: Society and Environment **37**, 101487 (2025).
- [6310] G. Kaniadakis, A. Lavagno and P. Quarati, *Generalized statistics and solar neutrinos*, Phys. Lett. B **369**, 308 (1996).
- [6311] Yu.L. Bolotin and V.V. Yanovsky, *Barrow entropy and spacetime foam*, International Journal of Modern Physics D 2550015 (2025).
- [6312] T. Ghorui, P. Rudra and F. Rahaman, *A new type of $f(T)$ gravity from Barrow entropy*, International Journal of Modern Physics D 2550014 (2025).
- [6313] P. Quarati, A. Carbone, G. Gervino, G. Kaniadakis, A. Lavagno and E. Miraldi, *Constraints for solar neutrinos fluxes*, Nucl. Phys. A **621**, 345c (1997).
- [6314] G. Kaniadakis, A. Lavagno and P. Quarati, *Non-extensive statistics and solar neutrinos*, Astrophysics and Space Science **258**, 145 (1998).
- [6315] G. Kaniadakis, A. Lavagno, M. Lissia and P. Quarati, *Anomalous diffusion can modify the solar neutrino fluxes*, preprint (1997).
- [6316] G. Kaniadakis, A. Lavagno, M. Lissia and P. Quarati, *The solar neutrino problem and Tsallis statistics*, Proc. 5th International Workshop on *Relativistic Aspects of Nuclear Physics* (Rio de Janeiro-Brazil, 1997); eds. T. Kodama, C.E. Aguiar, S.B. Duarte, Y. Hama, G. Odyniec and H. Strobele (World Scientific, Singapore, 1998), p. 193.
- [6317] A. Lavagno, *Nonextensive statistics in high energy nuclear collisions*, communicated at Baryons 98 (Bonn, 22-26 September 1998); Proceedings, eds. D.W. Menze and B. Metsch (World Scientific, Singapore, 1999), page 709.
- [6318] G. Gervino, G. Kaniadakis, A. Lavagno, M. Lissia and P. Quarati, *Non-markovian effects in the solar neutrino problem*, communicated at "Nuclei in the Cosmos" (Volos-Greece, July 1998).
- [6319] M. Coraddu, G. Kaniadakis, A. Lavagno, M. Lissia, G. Mezzorani and P. Quarati, *Thermal distributions in stellar plasmas, nuclear reactions and solar neutrinos*, in *Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 153 (1999).
- [6320] A. Lavagno and P. Quarati, *Solar reaction rates, non-extensivity and quantum uncertainty*, preprint (2001) [nucl-th/0102016].
- [6321] P. Mandayam and M.D. Srinivas, *A disturbance tradeoff principle for incompatible quantum observables*, preprint (2014), 1402.7311 [quant-ph].
- [6322] P. Mandayam and M.D. Srinivas, *Disturbance trade-off principle for quantum measurements*, Phys. Rev. A **90**, 062128 (2014) (8 pages).
- [6323] M.D. Srinivas and P. Mandayam, *Uncertainty trade-off and disturbance trade-off for quantum measurements*, Current Science **109** (11), 2044-2051 (2015).
- [6324] G. Gervino, A. Lavagno and P. Quarati, *Quantum uncertainty in weakly non-ideal astrophysical plasma*, Braz. J. Phys. **35**, 523 (2005).
- [6325] G. Gervino, A. Lavagno and P. Quarati, *CNO reaction rates and chemical abundance variations in dense stellar plasma*, J. Phys. G **31**, S1865-S1868 (2005).
- [6326] F. Ferro, A. Lavagno and P. Quarati, *Metastable and stable equilibrium states of stellar electron-nuclear plasmas*, Phys. Lett. A **336**, 370 (2005).
- [6327] M. Coraddu, P. Quarati and A.M. Scarfone, *Nuclear astrophysics in a q -environment*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 249-258 (New York, 2007).
- [6328] P. Quarati and A.M. Scarfone, *Nuclear electron capture rate in stellar interiors and the case of Be-7*, J. Phys. G - Nucl. and Particle Phys. **36**, 025203 (2009).
- [6329] G. Maero, P. Quarati and F. Ferro, *Nonextensive interpretation of radiative recombination in electron cooling*, Eur. Phys. J. B **50**, 23-26 (2006).
- [6330] G. Kaniadakis, A. Lavagno, M. Lissia and P. Quarati, *Nonextensive statistical effects in nuclear physics problems*, Proc. VII Convegno su Problemi di Fisica Nucleare Teorica (Cortona-Italy, 19-21 October 1998), in *Perspectives on theoretical nuclear physics*, eds. A. Fabrocini, G. Pisent and S. Rosati, page 293 [nucl-th/9812033].

- [6331] W.M. Alberico, A. Lavagno and P. Quarati, *Non-extensive statistics, fluctuations and correlations in high energy nuclear collisions*, Eur. Phys. J C **12**, 499 (2000).
- [6332] H. Zheng and L. Zhu, *Comparing the Tsallis distribution with and without thermodynamical description in $p + p$ collisions*, Advances High Energy Phys. 2016, ID 9632126 (2016) (10 pages), doi: <http://dx.doi.org/10.1155/2016/9632126>
- [6333] L.L. Zhu and C.B. Yang, *Universal scaling of $p(T)$ distribution of particles in relativistic nuclear collisions*, Phys. Rev. C **75**, 044904 (2007).
- [6334] L. Yang, Y. Wang, W. Hao, N. Liu, X. Du and W. Zhang, *Universal scaling of strange particle pT spectra in pp collisions*, Eur. Phys. J. A **54**, 54 (2018), doi: 10.1140/epja/i2018-12484-7
- [6335] J. Gu, C. Li, Q. Wang, W. Zhang and H. Zheng, *Collective expansion in pp collisions using the Tsallis statistics*, J. Phys. G: Nucl. Part. Phys. **49**, 115101 (2022).
- [6336] ALICE Collaboration, *Measurement of $f_1(1285)$ production in pp collisions at $\sqrt{s} = 13\text{ TeV}$* , Physics Letters B **866**, 139562 (2025).
- [6337] ALICE Collaboration, *First observation of strange baryon enhancement with effective energy in pp collisions at the LHC*, preprint (2024), 2409.12702 [nucl-ex].
- [6338] ALICE Collaboration, *Rapidity dependence of antideuteron coalescence in pp collisions at $\sqrt{s} = 13\text{ TeV}$ with ALICE*, Phys. Lett. B **860**, 139191 (2025).
- [6339] ALICE Collaboration, *First observation of strange baryon enhancement with effective energy in pp collisions at the LHC*, preprint (2024), 2409.12702 [nucl-ex].
- [6340] ALICE Collaboration, *Observation of the $\Omega(2012)$ baryon at the LHC*, preprint (2025), 2502.18063 [hep-ex].
- [6341] ALICE Collaboration, *First observation of strange baryon enhancement with effective energy in pp collisions at the LHC*, JHEP **03**, 029 (2025).
- [6342] S.D. Campos, V.A. Okorokov and C.V. Moraes, *The Tsallis entropy and the BKT-like phase transition in the impact parameter space for pp and $\bar{p}p$ collisions*, Phys. Scr. **95**, 025301 (2020) (11 pages).
- [6343] S.D. Campos and A.M. Amarante, *The effects of the Tsallis entropy in the proton internal pressure*, Internat. J. Modern Physics A **35** (19), 2050095 (2020) (18 pages).
- [6344] A. Lavagno and P. Quarati, *Nonextensive statistics in stellar plasma and solar neutrinos*, Nucl. Phys. B, Proc. Suppl. **87**, 209 (2000) (communicated at TAUP99, September 6-10, 1999, Paris).
- [6345] F. Ferro, A. Lavagno and P. Quarati, *Temperature dependence of modified CNO nuclear reaction rates in dense stellar plasmas*, Physica A **340**, 477 (2004).
- [6346] F. Ferro, A. Lavagno and P. Quarati, *Non-extensive resonant reaction rates in astrophysical plasmas*, Eur. Phys. J. A **21**, 529 (2004).
- [6347] A. Lavagno and P. Quarati, *Classical and quantum non-extensive statistics effects in nuclear many-body problems*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13**, Number 3, 569 (Pergamon-Elsevier, Amsterdam, 2002).
- [6348] X. Li, *The entropy of the $Au + Au$ system in low energy nuclear reaction*, Modern Phys. Lett. A **33** (33), 1850191 (2018), doi: 10.1142/S0217732318501912
- [6349] M. Coraddu, M. Lissia, G. Mezzorani and P. Quarati, *Fusion rates in nuclear plasmas*, preprint (2000) [nucl-th/0012002].
- [6350] M. Coraddu, M. Lissia and P. Quarati, *Anomalous enhancements of low-energy fusion rates in plasmas: the role of ion momentum distributions and inhomogeneous screening*, Central Eur. J. Phys. **7**, 527-533 (2009).
- [6351] C.M. Cossu, *Neutrini solari e statistica di Tsallis*, Master Thesis, Universita degli Studi di Cagliari (2000).
- [6352] F.I.M. Pereira, R. Silva and J.S. Alcaniz, *Nonextensive effects on the relativistic nuclear equation of state*, Phys. Rev. C **76**, 015201 (2007) (5 pages).
- [6353] M. Baiesi, M. Paczuski and A.L. Stella, *Intensity thresholds and superstatistics in the temporal occurrence of solar flares*, Phys. Rev. Lett. **96**, 051103 (2006).
- [6354] F.K. Peng, J.J. Wei and H.Q. Wang, *Scale invariance in gamma-ray flares of the Sun and 3C 454.3*, Astrophysical Journal **959**, 109 (2023).
- [6355] G. Balasis, I.A. Daglis, A. Anastasiadis, C. Papadimitriou, M. Mandaia and K. Eftaxias, *Universality in solar flare, magnetic storm and earthquake dynamics using Tsallis statistical mechanics*, Physica A **390**, 341-346 (2011).
- [6356] S. Taran, *Complex network in solar features*, preprint (2024), arxiv 2410.09814
- [6357] G. Balasis, S.M. Potirakis and M. Mandaia, (2016) *Investigating dynamical complexity of geomagnetic jerks using various entropy measures*, Front. Earth Sci. **4**, 71 (2016) (10 pages), doi: 10.3389/feart.2016.00071

- [6358] E. Sanchez and P. Vega-Jorquera, *Frequency distribution model for geomagnetic SYM-H fluctuations*, Acta Geodaetica et Geophysica (2020), doi: 10.1007/s40328-020-00304-6
- [6359] E. Sanchez and P. Vega-Jorquera, *Cairns-Tsallis distribution applied to differences of magnetic field intensity in solar wind*, Nonlinear Processes in Geophysics (2024).
- [6360] E. Sanchez, *Emergence of non-extensive seismic magnitude-frequency distribution from a Bayesian framework*, Earthquake Science **35**, 186-192 (2022).
- [6361] P. Vega-Jorquera, E. De la Barra, H. Torres and Y. Vasquez, *Statistical modeling of the seismic moments via Mathai distribution*, Entropy **24**, 695 (2022).
- [6362] V. Ojeda, P. Vega-Jorquera, E. de la Barra, L. Palma-Chilla, L. Vidal, J. Saavedra and A. Pizarro, *Characterization of seismicity and seismic hazard in the Coquimbo region, Chile: A probabilistic study*, Pure Appl. Geophys. (2024).
- [6363] G. Balasis, C. Papadimitriou, I.A. Daglis, A. Anastasiadis, I. Sandberg and K. Eftaxias, *Similarities between extreme events in the solar-terrestrial system by means of nonextensivity*, Nonlin. Processes Geophys. **18**, 563-572 (2011).
- [6364] F. Vallianatos, V. Karakostas and E. Papadimitriou, *A non-extensive statistical physics view in the spatiotemporal properties of the 2003 (Mw6.2) Lefkada, Ionian Island Greece, aftershock sequence*, Pure Appl. Geophys. **171**, 1343-1354 (2014), doi: 10.1007/s00024-013-0706-6
- [6365] G. Balasis, R.V. Donner, S.M. Potirakis, J. Runge, C. Papadimitriou, I.A. Daglis, K. Eftaxias and J. Kurths, *Statistical mechanics and information-theoretic perspectives on complexity in the Earth system*, Entropy **15**, 4844-4888 (2013), doi:10.3390/e15114844
- [6366] F. Papadimitriou, *Spatial entropy, non-extensive thermodynamics and landscape change*, Spatial Entropy and Landscape Analysis, 03-121 (2022).
- [6367] D. Mastrogiannis and S.M. Potirakis, *Experimental study of the dynamic evolution of cumulative energy release during LiF fracture under uniaxial compression*, Internat. J. Solids and Structures **132**, 59-65 (2018).
- [6368] R.V. Donner and G. Balasis, *Correlation-based characterisation of time-varying dynamical complexity in the Earth's magnetosphere*, Nonlin. Processes Geophys. **20**, 965-975 (2013), doi: 10.5194/npg-20-965-2013
- [6369] G. Minadakis, S.M. Potirakis, J. Stonham, C. Nomicos and K. Eftaxias, *The role of propagating stress waves in geophysical scale: evidence in terms of nonextensivity*, Physica A **391**, 5648-5657 (2012).
- [6370] G. Minadakis, S. M. Potirakis, J. Stonham, C. Nomicos and K. Eftaxias, *Verifying the self-affine nature of regional seismicity using nonextensive Tsallis statistics*, preprint (2012), 1211.7227 [physics.geo-ph].
- [6371] F. Vallianatos, G. Michas and G. Papadakis, *A description of seismicity based on non-extensive statistical physics: A review*, Earthquakes and Their Impact on Society, Series Springer Natural Hazards 1-41 (2015).
- [6372] S.M. Potirakis, P.I. Zitis and K. Eftaxias, *Dynamical analogy between economical crisis and earthquake dynamics within the nonextensive statistical mechanics framework*, Physica A **392**, 2940-2954 (2013).
- [6373] P.I. Zitis, S. Kakinaka, K. Umeno, M.P. Haniias, S.G. Stavrinides and S.M. Potirakis, *Investigating dynamical complexity and fractal characteristics of bitcoin/US dollar and euro/US dollar exchange rates around the COVID-19 outbreak*, Entropy **25**, 214 (2023).
- [6374] F.J. Esquivel Sanchez, *Analysis of fractality characteristics in spatio-temporal processes. Applications to geophysical data*, Doctor Thesis (University of Granada, Spain, 2013).
- [6375] D. Borie, *Decision, risque, interactions sociales*, Doctor Thesis, (Universite Nice Sophia Antipolis, Institut Supérieur d' Economie et de Management, 2013).
- [6376] S. Araujo, *Teoria basica y aplicaciones de las propiedades emergentes de la sociedad como un sistema complejo*, Momento Revista de Fisica **59**, 11-20 (2019).
- [6377] D.S.R. Ferreira, A. Papa and R. Menezes, *Small world picture of worldwide seismic events*, Physica A **408**, 170-180 (2014).
- [6378] D.S.R. Ferreira, J. Ribeiro, A. Papa and R. Menezes, *Towards evidence of long-range correlations in shallow seismic activities*, EPL **121**(5), 58003 (2018).
- [6379] L.I. Barbieri and D.S.R. Ferreira, *Redes complexas: A dinamica de eventos sismicos ao redor do mundo*, Proceeding Series of the Brazilian Society of Computational and Applied Mathematics **6** (2) (2018).
- [6380] D. Samudio, P. Weigandt, J. Toral and O. Sotolongo-Costa, *No extensividad en catalogos sismicos de Panama*, [Non extensivity in seismic catalogs of Panama], preprint (2014).
- [6381] D. Pasten, E.E. Vogel, G. Saravia, A. Posadas and O. Sotolongo, *Tsallis entropy and mutability to characterize seismic sequences: The case of 2007-2014 Northern Chile earthquakes*, Entropy **25**, 1417 (2023).
- [6382] D. Pasten, E.E. Vogel, G. Saravia and A. Posadas, *Spatial, temporal, and dynamic behavior of different entropies in seismic activity: The February 2023 earthquakes in Turkiye and Syria*, Entropy **27**, 462 (2025).

- [6383] E.E. Vogel, D. Pasten, G. Saravia, M. Aguilera and A. Posadas, *2021 Alaska earthquake: entropy approach to its precursors and aftershock regimes*, Nat. Hazards Earth Syst. Sci. **24**, 3895-3906 (2024).
- [6384] J.A. Cuanalo Vazquez, *Aplicacion de la estadistica de Tsallis a fenomenos sismicos en Mexico*, Master Thesis (Universidad Autonoma del Estado de Morelos, Instituto de Investigacion en Ciencias Basicas y Aplicadas, 2016).
- [6385] M. Coraddu, M. Lissia, G. Mezzorani and P. Quarati, *Super-Kamiokande hep neutrino best fit: A possible signal of nonmaxwellian solar plasma*, Physica A **326**, 473 (2003).
- [6386] C. Beck, *Nonextensive methods in turbulence and particle physics*, Physica A **305**, 209 (2002).
- [6387] C. Tsallis, J.C. Anjos and E.P. Borges, *Fluxes of cosmic rays: A delicately balanced stationary state*, Phys. Lett. A **310**, 372 (2003).
- [6388] G.C. Yalcin and C. Beck, *Generalized statistical mechanics of cosmic rays: Application to positron-electron spectral indices*, Scientific Reports **8**, 1764 (2018) (10 pages), doi: 10.1038/s41598-018-20036-6
- [6389] J.L. Diaz Palencia, *Modeling anomalous transport of cosmic rays in the heliosphere using a fractional Fokker-Planck equation*, Fractal Fract. **9**, 24 (2025).
- [6390] M. Abrahao, W.G. Dantas, R.M. de Almeida and J.C. dos Anjos, *Constraints of the entropic index of Tsallis statistics in the context of hadronic collisions at ultra high energies using measures of the depth of maximum of air showers*, 34th International Cosmic Ray Conference (30 July - 6 August 2015, Hague, Netherlands), Proceedings of Science **523** (8 pages).
- [6391] M. Abrahao, W.G. Dantas, R.M. de Almeida, D.R. Gratieri and T.J.P. Penna, *Fingerprint of Tsallis statistics in cosmic ray showers*, Advances High Energy Physics (2016), in press, 1606.03923 [hep-ph].
- [6392] Z. Wlodarczyk and G. Wilk, *Cosmic rays from thermal source*, preprint (2007), 0708.1609 [astro-ph].
- [6393] G. Wilk and Z. Wlodarczyk, *Nonextensive thermal sources of cosmic rays?*, preprint (2009), 0904.0528 [hep-ph].
- [6394] C. Beck, *Generalized statistical mechanics of cosmic rays*, Physica A **331**, 173 (2003).
- [6395] M. Taylor and M. Molla, *Towards a unified source-propagation model of cosmic rays*, Advances in Hellenic Astronomy During the IYA09 **424**, 98-103 (2010).
- [6396] M. Iranmanesh and H.A. Kermani, *Description of the energy spectrum of cosmic rays using superstatistics and Gamma distribution*, Iran J. Sci. (2024).
- [6397] M. Iranmanesh, H.A. Kermani and K. Ourabah, *Superstatistics and stellar rotation: Modeling velocity distributions in six stellar groups*, New Astronomy **119**, 102408 (2025).
- [6398] G. Miritello, *Interpretazione del flusso dei raggi cosmici in termini di meccanica statistica generalizzata*, Laurea Thesis (Universita degli Studi di Catania, 2005).
- [6399] F. Gulminelli, Ph. Chomaz and V. Duflot, *Bimodality in non-extensive statistics*, Compilation GANIL 1998-2000.
- [6400] Ph. Chomaz and F. Gulminelli, *Generalized definitions of phase transitions*, Physica A **305**, 330 (2002).
- [6401] M. Rybczynski, Z. Wlodarczyk and G. Wilk, *Rapidity spectra analysis in terms of non-extensive statistic approach*, Nucl. Phys. B (Proc. Suppl.) **122**, 325-328 (2003).
- [6402] T. Bhattacharyya, M. Rybczynski and Z. Wlodarczyk, *Rapidity spectra in high-energy collisions and longitudinal nuclear suppression from nonadditive statistics*, preprint (2025), 2504.02726 [nucl-th].
- [6403] D. Tlustý, *A Study of open charm production in p+p collisions at STAR*, Doctor Thesis (Czech Technical University in Prague, Faculty of Nuclear Sciences and Physical Engineering, Department of Physics, 2014).
- [6404] STAR Collaboration, *Measurements of dielectron production in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV from the STAR Experiment*, preprint (2015), 1504.01317 [hep-ex].
- [6405] STAR Collaboration, *Observation of D^0 meson nuclear modifications in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV*, Phys. Rev. Lett. **113**, 142301 (2014). Erratum: preprint (2018), 1809.08737 [nucl-ex].
- [6406] L.L. Li and A.A.K.H. Ismail, *Study of bulk properties of strange particles in Au+Au collisions at $\sqrt{s_{NN}} = 54.4$ GeV*, Entropy **24**, 1720 (2022).
- [6407] M. Ajaz, R. Khan, Z. Wazir, I. Khan and T. Bibi, *Model prediction of transverse momentum spectra of strange hadrons in pp collisions at $\sqrt{s} = 200$ GeV*, Internat. J. Theoretical Physics (2020), doi: 10.1007/s10773-020-04584-0
- [6408] STAR Collaboration, *K^{*0} production in Au+Au collisions at $\sqrt{s_{NN}} = 7.7, 11.5, 14.5, 19.6, 27$ and 39 GeV from RHIC beam energy scan*, Phys. Rev. C **107**, 034907 (2023).
- [6409] ALICE Collaboration, *Multi-strange baryon production at mid-rapidity in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV*, Phys. Lett. B **728**, 216-227 (2014).
- [6410] Y.F. Geng and B.C. Li, *Properties of the particle distribution in Pb-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV and $\sqrt{s_{NN}} = 2.76$ TeV*, Frontiers in Phys. **11**, 1257937 (2023).

- [6411] ALICE Collaboration, *Φ -Meson production at forward rapidity in p-Pb collisions at $\sqrt{s_{NN}} = 5.02\text{TeV}$ and in pp collisions at $\sqrt{s} = 2.76\text{TeV}$* , Phys. Lett. B **768**, 203-217 (2017), doi: <http://dx.doi.org/10.1016/j.physletb.2017.01.074>
- [6412] ALICE Collaboration, *Energy dependence of Φ meson production at forward rapidity in pp collisions at the LHC*, Eur. Phys. J. C **81**, 772 (2021). <https://doi.org/10.1140/epjc/s10052-021-09545-3>
- [6413] G.F. Budiski, P.M.M. Mendes and M.G. Munhoz, *Transverse Momentum Distributions of Charm Meson in Relativistic Heavy-Ions Collisions Studied through Non-Extensive Statistics*, preprint (2024).
- [6414] ALICE Collaboration, *Multiplicity dependence of π , K, and p production in pp collisions at $\sqrt{s} = 13\text{TeV}$* , Eur. Phys. J. C **80**, 693 (2020), doi: 10.1140/epjc/s10052-020-8125-1
- [6415] ALICE Collaboration, *Production of light (anti)nuclei in pp collisions at $\sqrt{s} = 13\text{TeV}$* , J. High Energy Physics (2022), doi: 10.1007/JHEP01(2022)106
- [6416] ALICE Collaboration, *Measurement of the production of (anti)nuclei in p-Pb collisions at $\sqrt{s_{NN}} = 8.16\text{TeV}$* , Phys. Lett. B **846**, 137795 (2023).
- [6417] ALICE Collaboration, *Production of light (anti)nuclei in pp collisions at $\sqrt{s} = 5.02\text{TeV}$* , Eur. Phys. J. C **82**, 289 (2022).
- [6418] ALICE Collaboration, *Multiplicity-dependent production of $\Sigma(1385)^\pm$ and $\Xi(1530)^0$ in pp collisions at $\sqrt{s} = 13\text{TeV}$* , JHEP, 05317 (2024).
- [6419] D. Ivanishchev, E. Kryshen, D. Kotov, M. Malaev, V. Riabov and Y. Riabov, for the MPD Collaboration, *Feasibility of thermal photon measurements in heavy ion collisions at NICA energies*, J. Physics: Conference Series **1690**, 012109 (2020), doi: 10.1088/1742-6596/1690/1/012109
- [6420] J.H. Shi, Z.Y. Qin, J.P. Zhang, J. Cao, Z.F. Jiang, W.C. Zhang and H. Zheng, *Non-extensive (3+1)-dimensional hydrodynamics for relativistic heavy-ion collisions*, Phys. Rev. D **111**, 036010 (2025).
- [6421] B. Wang, H. Xu, X. Chen, Y. Wang, D. Han, L. Zhao and B. Guo, *The external time-of-flight wall for CEE experiment*, Eur. Phys. J. C **83**, 817 (2023).
- [6422] H. Ding, T. Dai, L. Cheng, E. Wang and W.N. Zhang, *The spectrum of low- p_T J/Ψ in heavy ion collisions in a fractal description*, preprint (2023), 2302.13879 [hep-ph].
- [6423] O. Kovalenko, *Neutral meson and direct photon measurements with the ALICE experiment*, Ukr. J. Phys. **64** (7), 602 (2019), doi: doi.org/10.15407/ujpe64.7.602
- [6424] A.J. Larkoski and T. Melia, *A large- N expansion for minimum bias*, preprint (2021), arxiv 2107.04041
- [6425] A. Hornung, *Messung von π^0 - und η -Mesonen mit dem ALICE-PHOS in p-Pb-Kollisionen bei $\sqrt{s_{NN}} = 5.02\text{TeV}$* , Master Thesis (Universitat Frankfurt am Main, 2019).
- [6426] N. Liu, X. Du, L. Qiao, G. Che and W. Zhang, *Universal scaling of meson and baryon spectra in p-Pb collisions at 5.02 TeV*, preprint (2019),
- [6427] L. Qiao, G. Che, J. Gu, H. Zheng and W. Zhang, *Nuclear modification factor in Pb-Pb and p-Pb collisions using Boltzmann transport equation*, J. Phys. G: Nucl. Part. Phys. **47**, 075101 (2020) (15 pages).
- [6428] ALICE Collaboration, *Photoproduction of low- p_T J/Ψ from peripheral to central Pb-Pb collisions at 5.02 TeV*, Phys. Lett. B **846**, 137467 (2023).
- [6429] T. Bhattacharyya, *Nonextensive Boltzmann transport equation: the relaxation time approximation and beyond*, Physica A **624**, 128910 (2023).
- [6430] G. Wilk and Z. Wlodarczyk, *Beyond the relaxation time approximation*, preprint (2021), 2106.11777 [cond-mat.stat-mech].
- [6431] L. Leardini (ALICE Collaboration), *Study of the neutral mesons in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76\text{TeV}$ in the ALICE experiment at LHC*, J. Physics: Conference Series **612**, 012005 (2015), doi:10.1088/1742-6596/612/1/012005
- [6432] F.E. Taylor, *Applications of p_T - xR variables in describing inclusive cross sections at the LHC*, Universe **7**, 196 (2021).
- [6433] P. Pareek (ALICE collaboration), *Energy dependence of light neutral meson p_T spectrum produced in pp collisions at the LHC measured in ALICE*, preprint (2020), 2010.01605 [nucl-ex].
- [6434] P. Pareek, *Energy dependence of light neutral meson p_T spectrum produced in pp collisions at the LHC measured in ALICE*, 8th Annual Conference on Large Hadron Collider Physics, LHCP 2020, Proceedings of Science **382**, 234 (2020).
- [6435] C. Pinto, *Light (anti)nuclei production in high-energy nuclear collisions at the LHC with ALICE*, 8th Annual Conference on Large Hadron Collider Physics, LHCP 2020, Proceedings of Science **382**, 239 (2020).
- [6436] Alice Collaboration, *System-size dependence of the hadronic rescattering effect at energies available at the CERN Large Hadron Collider*, Phys. Rev. C **109**, 014911 (2024).

- [6437] M. Ajaz, A.H. Ismail, M. Waqas, A.M. Quraishi, J.H. Baker, A. Jagnandan, M.A. Ahmad, S. Jagnandan, H.I. Alrebdi, E.A. Dawi and M. Badshah, *Multiplicity dependence of the freeze-out parameters in symmetric and asymmetric nuclear collisions at Large Hadron Collider energies*, *Symmetry* **15**, 2063 (2023).
- [6438] M. Waqas, A.H. Ismail, H.I. Alrebdi and M. Ajaz, *Centrality and system size dependence among freezeout parameters and the implications for EOS and QGP in high-energy collisions*, *Entropy* **25**, 1586 (2023).
- [6439] H.I. Alrebdi, M. Ajaz, M. Waqas, M.A. Ahmad, M. Waqar, A.M. Quraishi, J.H. Baker, S. Jagnandan and A. Jagnandan, *Comparative analysis of charged particle distributions and model predictions for underlying events with track-based selection in 13 TeV pp collisions*, *Eur. Phys. J. Plus* **140**, 371 (2025).
- [6440] M. Ajaz, M. Shehzad, M. Waqas, H.I. Alrebdi, M.A. Ahmad, A. Jagnandan, S. Jagnandan, M. Badshah, J.H. Baker and A.M. Quraishi, *Multiplicity dependence of the freezeout parameters in high energy hadron-hadron collisions*, *Chinese Physics C* **48** (5), 053108 (2024).
- [6441] ALICE Collaboration, *Production of light (anti)nuclei in pp collisions at $\sqrt{s} = 13\text{ TeV}$* , *JHEP* **01**, 106 (2022), doi: 10.1007/JHEP01(2022)106
- [6442] ALICE Collaboration, *Production of π^0 and η mesons up to high transverse momentum in pp collisions at 2.76 TeV*, *Eur. Phys. J. C* **77**, 339 (2017), doi: 10.1140/epjc/s10052-017-4890-x
- [6443] ALICE Collaboration, *Production of $\Sigma(1385)^\pm$ and $\Xi(1530)^0$ in p-Pb collisions at $\sqrt{s_{NN}} = 5.02\text{ TeV}$* , *Eur. Phys. J. C* **77**, 389 (2017) (17 pages), doi: 10.1140/epjc/s10052-017-4943-1
- [6444] ALICE Collaboration, *$K^*(892)^0$ and $\Phi(1020)$ meson production at high transverse momentum in pp and Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76\text{ TeV}$* , *Phys. Rev. C* **95**, 064606 (2017).
- [6445] P. Hanus, K. Reygers and A. Mazeliauskas, *Entropy production in pp and Pb-Pb collisions at energies available at the CERN Large Hadron Collider*, *Phys. Rev. C* **100**, 064903 (2019).
- [6446] S. Trogolo, *Recent results on (anti-)(hyper-)nuclei production in pp, p-pb and pb-pb collisions with Alice*, European Physical Society Conference on High Energy Physics, EPS-HEP 2017, Code 135837 (Venice, Italy, 5 to 12 July 2017).
- [6447] M. Faggin, *Misura di elettroni da decadimenti di adroni con charm e beauty in collisioni Pb-Pb a LHC con ALICE*, Thesis (Universita degli Studi di Padova, Dipartimento di Fisica e Astronomia, 2017).
- [6448] M. Ishihara, *Transverse momentum fluctuation under the Tsallis distribution at high energies*, *Internat. J. Mod. Phys. E* **26** (11), 1750071 (2017) (14 pages).
- [6449] F.A.W. Hermsen, *Go with the flow – Probing the strongest magnetic field in the Universe*, Bachelor Thesis (Physics and Astronomy, Utrecht University, 2018).
- [6450] K. Shen, G.G. Barnafoldi, G. Biro, T.S. Biro, E. Wang and B.W. Zhang, *Study of non-extensive parameters in transverse momentum spectra of hadrons*, communicated at CERN (2017).
- [6451] G. Biro, G.G. Barnafoldi, G. Papp and T.S. Biro, *Multiplicity dependence in the non-extensive hadronization model calculated by the HIJING++ framework*, preprint (2019), 1905.11272 [hep-ph].
- [6452] G. Biro, G.G. Barnafoldi, T.S. Biro and K. Shen, *Mass hierarchy and energy scaling of the Tsallis-Pareto parameters in hadron productions at RHIC and LHC energies*, *EPJ Web of Conferences* **171**, 14008 (2018) (4 pages).
- [6453] G. Biro, G.G. Barnafoldi and T.S. Biro, *Tsallis-thermometer: a QGP indicator for large and small collisional systems*, *J.Physics G: Nuclear and Particle Physics* **47**(10), 105002 (2020).
- [6454] G. Biro, L. Serkin, G. Paic and G.G. Barnafoldi, *Investigating the soft and hard limits in transverse momentum spectra in pp collisions*, *Eur. Phys. J. Spec. Top.* (2025), doi: 10.1140/epjs/s11734-025-01468-4
- [6455] L. Gyulai, G. Biro, R. Vertesi and G.G. Barnafoldi, *Evolution of the hot dense matter at LHC energies through light and heavy-flavor hadrons using non-extensive thermodynamics*, *International Journal of Modern Physics A* **40** (9), 2444010 (2025).
- [6456] M.I. Abdulhamid, *Non-linear waves in extensive and non-extensive quark-gluon plasma*, INTERNATIONAL REEmote Student Training at Joint Institute for Nuclear Research (7 June 2021 to July 2022, Russia).
- [6457] L.S. Moriggi and M.V.T. Machado, *Non-extensive aspects of gluon distribution and the implications for QCD phenomenology*, *Physics* **7**, 5 (2025).
- [6458] T. Bhattacharyya and M. Hasanujjaman, *Nonlinear pulse dynamics in a magnetized and nonextensive quark-gluon plasma*, preprint (2024), 2403.11630 [hep-ph].
- [6459] T. Dai, H. Ding, L. Cheng, W. Zhang and E. Wang, *The boundary effect of QGP droplet and self-similarity effect of hadrons on QGP-hadron phase transition*, preprint (2024), 2411.06821 [hep-ph].
- [6460] B.F. Jiang, J. Chen and D.F. Hou, *Electromagnetic responses of a nonextensive quark-gluon plasma*, preprint (2024), 2408.16528 [hep-ph].

- [6461] Z.J. Jiang, J.Q. Hui and Y. Zhang, *A hydrodynamical model including phase transition and the thermal motion-induced transverse momentum distributions in high energy heavy ion collisions*, Int. J. Modern Physics E (2017).
- [6462] S. Jena and R. Gupta, *A unified formalism to study transverse momentum spectra in heavy-ion collision*, Phys. Lett. B **807**, 135551 (2020).
- [6463] R. Gupta and S. Jena, *A comparative study of hadron-hadron and heavy-ion collision using the q-Weibull distribution function*, preprint (2023), 2301.10955 [hep-ph].
- [6464] R. Gupta, A. Menon, S. Jain and S. Jena, *The theoretical description of the transverse momentum spectra: A unified model*, Universe **9**, 111 (2023).
- [6465] M. Ajaz, A.A.K.H. Ismail, H.I. Alrebdy, A.H. Abdel-Aty, M.U. Mian, M.A. Khan, M. Waqas, A.M. Khubrani, H.R. Wei and A. AbdelKader, *Simulation studies of track-based analysis of charged particles in symmetric hadron-hadron collisions at 7 TeV*, Symmetry **15**, 618 (2023).
- [6466] R. Gupta and S. Jena, *Model comparison of the transverse momentum spectra of charged hadrons produced in PbPb collision at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$* , Advances in High Energy Physics, ID 5482034 (2022).
- [6467] J. Tao, W. Wu, M. Wang, H. Zheng, W. Zhang, L. Zhu and A. Bonasera, *The novel scaling of Tsallis parameters from the transverse momentum spectra of charged particles in heavy-ion collisions*, Particles **5**, 146-156 (2022).
- [6468] J.Q. Tao, H.B. He, H. Zheng, W.C. Zhang, X.Q. Liu, L.L. Zhu and A. Bonasera, *Pseudo-rapidity distributions of charged particles in asymmetric collisions using Tsallis thermodynamics*, Nuclear Science and Techniques **34**, 172 (2023).
- [6469] R. Gupta and S. Jena, *A generalized approach to study low as well as high p_T regime of transverse momentum spectra*, Proceedings of Science **390**, 579 (2021).
- [6470] R. Gupta, S. Jain and S. Jena, *Analysing the transverse momentum spectra at large p_T using Pearson statistical framework*, preprint (2021), 2103.11185 [hep-ph].
- [6471] R. Gupta, A.S. Katariya and S. Jena, *A unified formalism to study the pseudorapidity spectra in heavy-ion collision*, preprint (2021), 2103.14547 [hep-ph].
- [6472] M. Waqas, B. Hassan, A. Alnakhlani, T. Saidani, M. Ajaz, A. Al Bahir and A.A.K.H. Ismail, *Investigation of freezeout parameters and other thermodynamic quantities with changing pseudorapidity at 0.9 TeV in pp collisions*, Phys. Scr. **99**, 125306 (2024).
- [6473] R.N. Patra, B. Mohanty and T.K. Nayak, *Centrality, transverse momentum and collision energy dependence of the Tsallis parameters in relativistic heavy-ion collisions*, Eur. Phys. J. Plus **136**, 702 (2021).
- [6474] R. Sahoo and T.K. Nayak, *Possible early universe signals in proton collisions at the Large Hadron Collider*, preprint (2021).
- [6475] P.P. Yang, M.Y. Duan, F.H. Liu and R. Sahoo, *Analysis of identified particle transverse momentum spectra produced in pp, p-Pb and Pb-Pb collisions at the LHC using TP-like function*, Symmetry **14**, 1530 (2022).
- [6476] B. Sahoo, S. Deb and R. Sahoo, *Multiplicity, transverse momentum and pseudorapidity dependence of open-heavy flavored hadron production in proton+proton collisions at $\sqrt{s} = 13 \text{ TeV}$* , preprint (2022), 2208.10901 [hep-ph].
- [6477] S. Deb, *Event topology and multiplicity dependence of $K^*(892)^\pm$ meson production in proton+proton collisions with ALICE at the LHC and exploring the possibility of a thermalized medium formation in small systems*, Doctor Thesis (Department of Physics, Indian Institute of Technology Indore, 2022).
- [6478] M. Ajaz, A.K.H. Ismail, A. Ahmed, Z. Wazir, R. Shehzadi, H. Younis, G. Khan, R. Khan, S. Ali, M. Waqas, P.P. Yang and E.A. Dawi, *Centrality dependence of p_T distributions and nuclear modification factor of charged particles in Pb-Pb interactions at $\sqrt{s_{NN}} = 2.76 \text{ TeV}$* , Results in Physics **30**, 104790 (2021).
- [6479] A. Rehman, I. Khan, A. Zaman, M. Khan, A. Qudus, Naseebullah, N. Feroz and Z. Jamil, *Mass, charge and centrality dependency of freeze-out parameters in Xe + Xe collisions at 5.44 TeV*, Modern Physics Letters A, 2550063 (2025).
- [6480] M. Waqas, A. AbdelKader, M. Ajaz, A.N. Tawfik, Z. Wazir, A.A.K.H. Ismail, S.J. Luo and H.Z. Khan, *Dependence of freeze-out parameters on collision energies and cross-sections*, Universe **9**, 44 (2023).
- [6481] X.W. He, H.R. Wei and F.H. Liu, *Chemical potentials of light hadrons and quarks from yield ratios of negative to positive particles in high energy pp collisions*, J. Phys. G: Nucl. Part. Phys. **46**, 025102 (2019) (14 pages).
- [6482] S.Y.J.P. Hewage, *Transverse momentum evolution of hadron- V^0 correlations in pp collisions at $\sqrt{s} = 7 \text{ TeV}$* , Doctor Thesis (Department of Physics, University of Houston, 2015).
- [6483] Y.F. Wu and L. Li, *Measurement of anisotropic radial flow rapidity*, preprint (2014).
- [6484] K. Urmosy, T.S. Biro and G.G. Barnafoldi, *Disentangling soft and hard hadron yields in PbPb collisions at $\sqrt{s_{NN}} = 2.76 \text{ ATeV}$* , preprint, 1405.3963 [hep-ph].

- [6485] G. Biro, G.G. Barnafoldi, T.S. Biro, K. Urmosy and A. Takacs, *Systematic analysis of the non-extensive statistical approach in high energy particle collisions – Experiment vs. theory*, Entropy **19** (3), 88 (2017).
- [6486] G.S. Ramos, *Investigating notions of entropy and its production in high energy particle collisions*, Doctor Thesis (Institute of Physics, Federal University of Rio Grande do Sul, 2024).
- [6487] H.R. Wei, F.H. Liu and R.A. Lacey, *Disentangling random thermal motion of particles and collective expansion of source from transverse momentum spectra in high energy collisions*, J. Phys. G: Nucl. Part. Phys. **43**, 125102 (2016) (25 pages), doi:10.1088/0954-3899/43/12/125102
- [6488] L.L. Li and F.H. Liu, *Kinetic freeze-out properties from transverse momentum spectra of pions in high energy proton-proton collisions*, Physics **2**, 277-308 (2020), doi: 10.3390/physics2020015
- [6489] H.G. Fischer, M. Makariev, D. Varga and S. Wenig, *A comprehensive study of the inclusive production of negative pions in $p + p$ collisions for interaction energies from 3 GeV to 13 TeV covering the non-perturbative sector of the strong interaction*, preprint (2022), 2202.09137 [hep-ex].
- [6490] P.P. Yang, F.H. Liu and R. Sahoo, *A new description of transverse momentum spectra of identified particles produced in proton-proton collisions at high energies*, Advances in High Energy Physics, ID 6742578 (2020) (16 pages), doi: 10.1155/2020/6742578
- [6491] S. Deb, D. Sahu, R. Sahoo, A.K. Pradhan, *Bose-Einstein condensation of pions in proton-proton collisions at the Large Hadron Collider using non-extensive Tsallis statistics*, Eur. Phys. J. A **57**,158 (2021), doi:10050-021-00464-1
- [6492] G.S. Pradhan, D. Sahu, S. Deb and R. Sahoo, *Hadron gas in the presence of a magnetic field using non-extensive statistics: A transition from diamagnetic to paramagnetic system*, J. Phys. G: Nucl. Part. Phys. **50**, 055104 (2023).
- [6493] B.C. Li, T. Bai, Y.Y. Guo and F.H. Liu, *On J/ψ and Y transverse momentum distributions in high energy collisions*, Advances High Energy Physics, 9383540 (2017) (7 pages), doi: 10.1155/2017/9383540
- [6494] Y.H. Chen, F.H. Liu and R.A. Lacey, *Event patterns extracted from top quark-related spectra in proton-proton collisions at 8 TeV*, preprint (2016), 1611.10150 [hep-ph].
- [6495] Y.H. Chen, F.H. Liu and E.K. Sarkisyan-Grinbaum, *Event patterns from negative pion spectra in proton-proton and nucleus-nucleus collisions at SPS*, Chinese Physics C **42** (10), 104102 (2018).
- [6496] L.N. Gao and F.H. Liu, *Transverse momentum spectra of heavy baryons and mesons in forward rapidity range in small collision system at the LHC*, Indian J. Phys. (2019), doi: doi.org/10.1007/s12648-019-01577-6
- [6497] A.A. Bylinkin, N.S. Chernyavskaya and A. A. Rostovtsev, *Hydrodynamic extension of a two-component model for hadroproduction in heavy-ion collisions*, Phys. Rev. C **90**, 018201 (2014) (4 pages).
- [6498] A.A. Bylinkin and A.A. Rostovtsev, *Systematic studies of hadron production spectra in collider experiments*, preprint (2010), 1008.0332 [hep-ph].
- [6499] A.A. Bylinkin, N.S. Chernyavskaya and A.A. Rostovtsev, *Predictions on the transverse momentum spectra for charged particle production at LHC-energies from a two component model*, Eur. Phys. J. C **75**, 166 (2015) (6 pages) , doi: 10.1140/epjc/s10052-015-3392-y
- [6500] A.A. Bylinkin, N.S. Chernyavskaya and A.A. Rostovtsev, *Two component model with collective flow for hadroproduction in heavy-ion collisions*, Nuclear and Particle Physics Proceedings **273-275**, 2590-2592 (2016).
- [6501] A.A. Bylinkin and O.I. Piskounova, *Transverse momentum distributions of baryons at LHC energies*, Nuclear and Particle Physics Proceedings **273-275**, 2752-2754 (2016).
- [6502] J.L. Rosner, *Asymmetry in Λ_b and $\bar{\Lambda}_b$ production*, Phys. Rev. D **90**, 014023 (2014) (4 pages).
- [6503] A.G. Knospe (ALICE Collaboration), *Hadronic resonances in heavy-ion collisions at ALICE*, J. Phys: Conference Series **509**, 012087 (2014) (4 pages), doi:10.1088/1742-6596/509/1/012087
- [6504] J. Adam et al. (ALICE Collaboration), *Production of light nuclei and anti-nuclei in pp and Pb-Pb collisions at energies available at the CERN Large Hadron Collider*, Phys. Rev. C **93**, 024917 (2016) (20 pages).
- [6505] Alice Collaboration, *π^0 and η meson production in proton-proton collisions at $\sqrt{s} = 8$ TeV*, Eur. Phys. J. C **78**, 263 (2018).
- [6506] ALICE Collaboration, *Production of the $\rho(770)^0$ meson in pp and Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV*, Phys. Rev. C **99**, 064901 (2019).
- [6507] E. Serradilla Rodriguez, *Produccion de nucleos de deuterio y antideuterio en el experimento Alice del LHC*, Doctor Thesis (Universidad Complutense de Madrid, 2014).
- [6508] S. Papadopoulou, F. Antoniou, J.F. Esteban Muller, Y. Papaphilippou and G. Trad, *Modelling and measurements of bunch profiles at the LHC flat bottom*, Proceedings of IPAC2016, UTCTUPMW022 (Busan, Korea,19 May 2016).
- [6509] K. Garg, *$K^*(892)^\pm$ resonance with the ALICE detector at LHC*, Doctor Thesis (University of Catania, 2018).

- [6510] S. Papadopoulou, F. Antoniou, T. Argyropoulos, M. Fitterer, M. Hostettler and Y. Papaphilippou, *Modelling and measurements of bunch profiles at the LHC*, Proceedings of IPAC2017 (Copenhagen, Denmark, 2017) TUPVA044.
- [6511] L. Medina, G. Arduini and R. Tomas, CERN, *Studies on luminous region, pile-up and performance HL-LHC scenarios*, Proceedings of IPAC2017 (Copenhagen, Denmark, 2017) TUPIK089.
- [6512] LHCb Collaboration, *J/Ψ photoproduction in Pb-Pb peripheral collisions at $\sqrt{s_{NN}} = 5\text{ TeV}$* , Phys. Rev. C **105**, L032201 (2022).
- [6513] D. Quartullo, P. Arpaia, N. Biancacci, F. Giordano, I. Lamas Garcia, A. Mostacci, L. Palumbo, S. Redaelli, B. Salvant, L. Teofili and M. Migliorati, *Electromagnetic characterization of the crystal primary collimators for the HL-LHC*, Nuclear Inst. and Methods in Physics Research A (2021), in press, doi: 10.1016/j.nima.2021.165465
- [6514] LHCb Collaboration, *Precise measurement of the f_s/f_d ratio of fragmentation fractions and of B_s^0 decay branching fractions*, Phys. Rev. D **104**, 032005 (2021).
- [6515] S. Tripathy, A. Bisht, R. Sahoo, A. Khuntia and P.S. Malavika, *Event shape and multiplicity dependence of freeze-out scenario and system thermodynamics in proton+proton collisions at $\sqrt{s} = 13\text{ TeV}$ using PYTHIA8*, Advances in High Energy Physics, Article ID 8822524 (2021) (19 pages), doi: 10.1155/2021/8822524
- [6516] D. Sahu and R. Sahoo, *Characterizing high-energy pp collisions at the Large Hadron Collider using thermal properties*, preprint (2020), 2005.12176 [hep-ph].
- [6517] H. Zheng, X. Zhu, L. Zhu and A. Bonasera, *Systematic investigation of the particle spectra in Heavy-ion collisions at the Large Hadron Collider*, Modern Phys. Lett. A, 2050177 (2020) (13 pages).
- [6518] L. Massacrier (ALICE Collaboration), *Measurement of an excess in the yield of J/ψ at very low p_T in Pb-Pb collisions with the Alice detector*, Acta Physica Polonica B Proceedings Supplement **8** (4), 1025-1030 (2015).
- [6519] F.H. Liu, Y.Q. Gao and B.C. Li, *Comparing two-Boltzmann distribution and Tsallis statistics of particle transverse momentums in collisions at LHC energies*, Eur. Phys. J. A **50**, 123 (2014) (11 pages), doi: 10.1140/epja/i2014-14123-9
- [6520] E. Appelt, *Measurements of charged-particle transverse momentum spectra in PbPb collisions at $\sqrt{s_{NN}} = 2.76\text{ TeV}$ and in pPb Collisions at $\sqrt{s_{NN}} = 5.02\text{ TeV}$ with the CMS detector*, Doctor Thesis (Vanderbilt University, Nashville, Tennessee, 2014).
- [6521] ALICE Collaboration, *Measurement of the production and elliptic flow of (anti)nuclei in Xe-Xe collisions at $\sqrt{s_{NN}} = 5.44\text{ TeV}$* , Phys. Rev. C **110**, 064901 (2024).
- [6522] X.R. Gou, F.I. Shao, R.Q. Wang, H.H. Li and J. Song, *New insights into hadron production mechanism from p_T spectra in pp collisions at $\sqrt{s} = 7\text{ TeV}$* , Phys. Rev. D **96**, 094010 (2017) (12 pages).
- [6523] H.H. Li, F.I. Shao and J. Song, *Production of light-flavor and single-charmed hadrons in pp collisions at $\sqrt{s} = 5.02\text{ TeV}$ in an equal-velocity quark combination model*, Chinese Physics C **45** (11), 113105 (2021).
- [6524] F.H. Liu, Y.Q. Gao and H.R. Wei, *On descriptions of particle transverse momentum spectra in high energy collisions*, Advances in High Energy Physics 293873 (2014) (12 pages), <http://dx.doi.org/10.1155/2014/293873>
- [6525] J. Kempa, B. Pattison, E. Gladysz-Dziadus, L.W. Jones, R. Mukhamedshin, M. Tamada and Z. Wlodarczyk, *Emulsion chamber observations of Centauros, aligned events and the long-flying component*, Cent. Eur. J. Phys. **10** (4), 723-741 (2012).
- [6526] G. Wilk and Z. Wlodarczyk, *Multiplicity fluctuations and temperature fluctuations*, Nonlinear Phenomena in Complex Systems **12** (4), 334-337 (2009).
- [6527] G. Wilk and Z. Wlodarczyk, *Superstatistical cluster decay*, Phys. Lett. A **379**, 2941-2945 (2015).
- [6528] A. Lavagno, *Anomalous diffusion in non-equilibrium relativistic heavy-ion rapidity spectra*, Physica A **305**, 238 (2002).
- [6529] F. Sikler et al (CMS Collaboration), *Soft physics capabilities of CMS in p-p at 14 TeV and Pb-Pb at 5.5 TeV*, communicated at *Quark Matter 2008* (Jaipur, India).
- [6530] S.S. Padula, *HBT interferometry: Historical perspective*, Braz. J. Phys. **35** (1), 70-99 (2005).
- [6531] V. Khachatryan et al (CMS Collaboration), *Transverse-momentum and pseudorapidity distributions of charged hadrons in pp collisions at $\sqrt{s} = 0.9$ and 2.36 TeV*, J. High Energy Phys. **02**, 041 (2010) (35 pages).
- [6532] V. Khachatryan et al (CMS Collaboration), *Transverse-momentum and pseudorapidity distributions of charged hadrons in pp collisions at $\sqrt{s} = 7\text{ TeV}$* , Phys. Rev. Lett. **105**, 022002 (2010).
- [6533] V. Khachatryan et al (CMS Collaboration), *Observation of long-range, near-side angular correlations in proton-proton collisions at the LHC*, J. High Energy Phys. **09**, 091 (2010) (38 pages).
- [6534] R. Rougny et al (CMS Collaboration), *Charged hadron spectra measurement with the CMS detector in pp collisions at $\sqrt{s} = 0.9, 2.36,$ and 7 TeV*, Nucl. Phys. B - Proc. Suppl. **207-08**, 29-32 (2010).
- [6535] CMS Collaboration, *Measurement of charged pion, kaon, and proton production in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$* , Phys. Rev. D **96** (11) (2017), doi: 10.1103/PhysRevD.96.112003

- [6536] P.K. Srivastava, A. Singh, P.K. Raina and B.K. Singh, *Transverse momentum distribution of charged hadrons based on wounded quark model*, Eur. Phys. J. A **55**, 69 (2019), doi: 10.1140/epja/i2019-12741-3
- [6537] L.N. Gao and F.H. Liu, *On distributions of emission sources and speed-of-sound in proton-proton (proton-antiproton) collisions*, Advances High Energy Physics 641906 (2015) (10 pages), doi: <http://dx.doi.org/10.1155/2015/641906>
- [6538] Q. Wang and F.H. Liu, *Initial and final state temperatures of antiproton emission sources in high energy collisions*, preprint (2019), 1909.02390 [hep-ph].
- [6539] H.R. Wei, F.H. Liu and R.A. Lacey, *Extracting kinetic freeze-out temperature and radial flow velocity from transverse momentum spectra in high energy collisions*, preprint (2015), 1509.09083 [nucl-ex].
- [6540] H.L. Lao, H.R. Wei, F.H. Liu and R.A. Lacey, *Transverse momentum distributions of positively charged mesons and light fragments produced in Pb-Pb collisions at 2.76 TeV*, preprint (2016), 1601.00045 [nucl-th].
- [6541] H.L. Lao, H.R. Wei, F.H. Liu and R.A. Lacey, *An evidence of mass-dependent differential kinetic freeze-out scenario observed in Pb-Pb collisions at 2.76 TeV*, Eur. Phys. J. A **52**, 203 (2016) (8 pages), doi: 10.1140/epja/i2016-16203-2
- [6542] H.L. Lao, F.H. Liu and R.A. Lacey, *Extracting kinetic freeze-out temperature and radial flow velocity from an improved Tsallis distribution*, Eur. Phys. J. A **53**, 44 (2017) (21 pages), doi: 10.1140/epja/i2017-12238-1
- [6543] F.H. Liu and Q. Zhang, *Multi-source thermal model describing transverse momentum spectra of final-state particles in high energy collisions*, preprint (2021), 2111.13433 [hep-ph].
- [6544] P. Checchia et al (CMS Collaboration), *CMS: First Results*, QCD at Work 2010: International Workshop on Quantum Chromodynamics - Theory and Experiment Beppe Nardulli Memorial Workshop **1317**, 17-24 (2010).
- [6545] C.A. Islam, *An NJL model analysis of a magnetised nonextensive QCD medium*, preprint (2023), 2311.14420 [hep-ph].
- [6546] S. Deb, G. Sarwar and R. Sahoo and J. Alam, *Study of QCD dynamics using small systems*, Eur. Phys. J. A **57**, 195 (2021).
- [6547] S. Deb, S. Tripathy, G. Sarwar, R. Sahoo and J. Alam, *Deciphering QCD dynamics in small collision systems using event shape and final state multiplicity at the Large Hadron Collider*, Eur. Phys. J. A **56**, 252 (2020), doi: 10.1140/epja/s10050-020-00258-x
- [6548] S. Chatrchyan et al (CMS Collaboration), *Charged particle transverse momentum spectra in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV*, J. High Energy Phys. **08**, 086 (2011) (39 pages).
- [6549] CMS Collaboration, *Observation of long-range, near-side angular correlations in proton-proton collisions at the LHC*, preprint (2022).
- [6550] D. d'Enterria, R. Engel, T. Pierog, S. Ostapchenko and K. Werner, *Constraints from the first LHC data on hadronic event generators for ultra-high energy cosmic-ray physics*, Astroparticle Phys. **35** (2), 98-113 (2011).
- [6551] T.A. Trainor, *Charge-multiplicity and collision-energy dependence of pt spectra from p-p collisions at the relativistic heavy-ion collider and large hadron collider*, J. Phys. G: Nucl. Part. Phys. **44**, 075008 (2017) (41pages), doi: 10.1088/1361-6471/aa759e
- [6552] ALICE Collaboration, *Multiplicity dependence of (anti-)deuteron production in pp collisions at $\sqrt{s} = 7$ TeV*, Phys. Lett. B **794**, 50-63 (2019).
- [6553] ALICE Collaboration, *Observation of a multiplicity dependence in the pT-differential charm baryon-to-meson ratios in proton-proton collisions at $\sqrt{s} = 13$ TeV*, Phys. Lett. B **829**, 137065 (2022).
- [6554] ALICE Collaboration, *(Anti-)deuteron production in pp collisions at $\sqrt{s} = 13$ TeV*, Eur. Phys. J. C **80**, 889 (2020), doi: 10.1140/epjc/s10052-020-8256-4
- [6555] Y. Yuan, *Study of production of (anti-)deuteron observed in Au + Au collisions at $\sqrt{s_{NN}} = 14.5, 62.4$ and 200 GeV*, Advances High Energy Phys., 9305605 (2021) (10 pages), doi: 10.1155/2021/9305605
- [6556] ALICE Collaboration, *Multiplicity dependence of $K^*(892)^0$ and $\Phi(1020)$ production in pp collisions at $\sqrt{s} = 13$ TeV*, Phys. Lett. B **807**, 135501 (2020).
- [6557] ALICE Collaboration, *Evidence of rescattering effect in Pb-Pb collisions at the LHC through production of $K^*(892)^0$ and $\Phi(1020)$ mesons*, Phys. Lett. B **802**, 135225 (2020).
- [6558] Y.Q. Gao and F.H. Liu, *Comparing Tsallis and Boltzmann temperatures from relativistic heavy ion collider and large hadron collider heavy-ion data*, Indian J. Phys. **90** (3), 319-334 (2016), doi: 10.1007/s12648-015-0747-z
- [6559] D.A. Ivanishchev, D.O. Kotov, E.L. Kryshen, M.V. Malaev, V.G. Ryabov and Yu.G. Ryabov, *Feasibility of measurements of the properties of thermal photons in heavy-ion collisions at the NICA accelerator*, Physics of Particles and Nuclei **53** (2), 217-223 (2022).
- [6560] M. Galanti, *First results of the CMS experiment on QCD physics*, Internat. J. Mod. Phys. A **26** (3-4), 396-401 (2011).

- [6561] P. Czerski, *Rapidity spectra for net proton production at LHC*, Internat. J. Mod. Phys. A **26** (3-4), 638-639 (2011).
- [6562] ALICE Collaboration, *Transverse momentum spectra of charged particles in proton-proton collisions $\sqrt{s} = 900\text{ GeV}$ with ALICE at the LHC*, Phys. Lett. B **693**, 53-68 (2010).
- [6563] ALICE Collaboration, *Strange particle production in proton-proton collisions at $\sqrt{s} = 0.9\text{ TeV}$ with ALICE at the LHC*, Eur. Phys. J. C **71**, 1594 (2011) (24 pages).
- [6564] ALICE Collaboration, *Production of pions, kaons and protons in pp collisions at $\sqrt{s} = 900\text{ GeV}$ with ALICE at the LHC*, Eur. Phys. J. C **71**, 1655 (2011) (pages).
- [6565] L. Milano, *Measurement of identified charged hadron spectra with the ALICE experiment at the LHC*, J. Phys.: Conference Series **316**, 012019 (2011) (11 pages).
- [6566] ALICE Collaboration, *Multi-strange baryon production in pp collisions at $\sqrt{s} = 7\text{ TeV}$ with ALICE*, Phys. Lett. B **712**, 309-318 (2012).
- [6567] ALICE Collaboration, *Multi-strange baryon production in p-Pb collisions at $\sqrt{s} = 5.02\text{ TeV}$* , Phys. Lett. B **758**, 389-401 (2016).
- [6568] ALICE Collaboration, *Neutral pion and η meson production in proton-proton collisions at $\sqrt{s} = 0.9\text{ TeV}$ and $\sqrt{s} = 7\text{ TeV}$* , Phys. Lett. B **717**, 162-172 (2012).
- [6569] ALICE Collaboration, *Neutral pion and η meson production in p - Pb collisions at $\sqrt{s_{NN}} = 5.02\text{ TeV}$* , Eur. Phys. J. C **78**, 624 (2018).
- [6570] PHENIX Collaboration, *Φ meson production in d + Au collisions at $\sqrt{s_{NN}} = 200\text{ GeV}$* , Phys. Rev. C **92**, 044909 (2015) (14 pages).
- [6571] PHENIX Collaboration, *Measurements of $\mu\mu$ pairs from open heavy flavor and Drell-Yan in p + p collisions at $\sqrt{s} = 200\text{ GeV}$* , Phys. Rev. D **99**, 072003 (2019).
- [6572] X.H. Zhang and F.H. Liu, *On lepton spectrum in Drell-Yan process in high energy collisions*, preprint (2020), 2005.08554 [hep-ph].
- [6573] X.H. Zhang and F.H. Liu, *Statistical behavior of lepton pair spectrum in the Drell-Yan process and signal from quark-gluon plasma in high-energy collisions*, Advances in High Energy Physics 9548737 (2021) (21 pages), doi: 10.1155/2021/9548737
- [6574] G. Sarwar, M. Hasanujjaman, T. Bhattacharyya, M. Rahaman, A. Bhattacharyya and J. Alam, *Nonlinear waves in a hot, viscous and nonextensive quark gluon plasma*, preprint (2021), 2109.11166 [nucl-th].
- [6575] X.H. Zhang, F.H. Liu and K.K. Olimov, *A systematic analysis of transverse momentum spectra of J/ψ mesons in high energy collisions*, preprint (2021), 2105.14700 [hep-ph].
- [6576] X.H. Zhang, F.H. Liu, K.K. Olimov and A. Deppman, *Random statistical analysis of transverse momentum spectra of strange particles and dependence of related parameters on centrality in high energy collisions at the LHC*, Advances in High Energy Physics, ID 5949610 (2022).
- [6577] K.K. Olimov, I.A. Lebedev, A.I. Fedosimova, F.H. Liu, E. Dmitriyeva, K.A. Musaeu, K. Olimov and B.S. Yuldashev, *Correlations among parameters of the Tsallis distribution and Hagedorn function with embedded transverse flow in proton-proton collisions at $\sqrt{s} = 7$ and 13 TeV* , Eur. Phys. J. Plus **138**, 414 (2023).
- [6578] U. Tabassam, Y. Ali and K.K. Olimov, *Study of multiplicity dependence in Charmed Hadrons production in pp collisions at LHC energies*, Eur. Phys. J. Plus **138**, 367 (2023).
- [6579] U. Tabassam, M. Awais, K.K. Olimov and M. Majid, *Analysis of properties of the charged-particle jets in pp collisions at 13 TeV using non-extensive Tsallis statistics*, Eur. Phys. J. Plus **138**, 394 (2023).
- [6580] P.P. Yang, F.H. Liu and K.K. Olimov, *Rapidity and energy dependencies of temperatures and volume extracted from identified charged hadron spectra in proton-proton collisions at a Super Proton Synchrotron (SPS)*, Entropy **25**, 1571 (2023).
- [6581] M.M. Homor and A. Jakovac, *Particle yields from numerical simulations*, Phys. Rev. D **97**, 074504 (2018).
- [6582] K. Urmossy and A. Jakovac, *Scale dependence of the q and T parameters of the Tsallis distribution in the process of jet fragmentation*, preprint (2023), 2303.12475 [hep-ph].
- [6583] A. Tawfik, *Antiproton-to-proton ratios for ALICE heavy-ion collisions*, Nuclear Phys. A **859**, 63-72 (2011).
- [6584] A. Tawfik, *Phase space and dynamical fluctuations of kaon-to-pion ratios*, Progr. Theor. Phys. **126** (2), 279-292 (2011).
- [6585] A. Tawfik, *Dynamical fluctuations in baryon-meson ratios*, J. Phys. G: Nucl. Part. Phys. **40**, 055109 (2013) (15 pages).
- [6586] A.N. Tawfik and N. Ezzelarab, *Nonextensive statistics and lattice QCD thermodynamics*, preprint (2015).
- [6587] A.N. Tawfik, *Axiomatic nonextensive statistics at NICA energies*, Eur. Phys. J. A **52** (8), 253 (2016).
- [6588] A.N. Tawfik, *Baryon-to-pion ratios within generic (non)extensive statistics*, preprint (2016),

- [6589] A.N. Tawfik, *Baryon-to-pion ratios within generic (non)extensive statistics*, 38th International Conference on High Energy Physics, ICHEP 2016, Proceedings of Science, Volume Part F128556, Code 128556 (Chicago, United States; 3 to 10 August 2016).
- [6590] A.N. Tawfik, *Lattice QCD thermodynamics and RHIC-BES particle production within generic nonextensive statistics*, Physics Particles Nuclei Letters **15** (3), 199-209 (2018).
- [6591] A.N. Tawfik, H. Yassin and E.R.A. Elyazeed, *Chemical freezeout parameters within generic nonextensive statistics*, Indian J. Phys. **92** (10) 1325-1335 (2018), doi: 10.1007/s12648-018-1216-2
- [6592] A.N. Tawfik, H. Yassin and E.R.A. Elyazeed, *Extensive/nonextensive statistics for p_T distributions of various charged particles produced in $p+p$ and $A+A$ collisions in a wide range of energies*, preprint (2019), 1905.12756 [hep-ph].
- [6593] H. Yassin, E.R.A. Elyazeed and A.N. Tawfik, *Transverse momentum spectra of strange hadrons within extensive and nonextensive statistics*, Phys. Scr. **95**, 075305 (2020) (13 pages).
- [6594] A. Tawfik, E.R.A. Elyazeed, A.A. Alshehri and H. Yassin, *An appropriate statistical approach for non-equilibrium particle production*, Modern Physics Letters B 2450483 (2024).
- [6595] H. Yassin, A.N. Tawfik and E.R.A. Elyazeed, *Extensive/nonextensive statistics for p_T distributions of various charged particles produced in $p+p$ and $A+A$ collisions in a wide range of energies*, Ukrainian J. Physics **67** (6), 393-430 (2022).
- [6596] A. Ayala, M. Hentschinski, L.A. Hernandez, M. Loewe and R. Zamora, *Superstatistics and the effective QCD phase diagram*, Phys. Rev. D **98**, 114002 (2018).
- [6597] A. Ayala, M. Hentschinski, L.A. Hernandez, M. Loewe and R. Zamora, *Effects of superstatistics on the location of the effective QCD critical endpoint*, Ukr. J. Phys. **64** (8), 665 (2019), doi: 10.15407/ujpe64.8.665
- [6598] J.D. Castano-Yepes, F. Martinez Paniagua, V. Munoz-Vitelly and C.F. Ramirez-Gutierrez, *Volume effects on the QCD critical end point from thermal fluctuations within the super statistics framework*, Phys. Rev. D **106**, 116019 (2022).
- [6599] C. Ozel, H. Albeladi and P. Linker, *On justification of superstatistics in terms of homotopy theory*, preprint (2024).
- [6600] C. Ozel, H. Albeladi, P. Linker and M.T. Yilmaz, *Generalized entropies obtained from extensivity principle*, preprint (2025).
- [6601] F. Martinez Paniagua, *Efectos del volumen y las fluctuaciones termicas en el diagrama de fases de la QCD mediante la aproximacion super estadistica*, Thesis (Universidad Autonoma de Queretaro, Facultad de Ingenieria, Ingenieria Fisica, 2023).
- [6602] S. Rath and S. Dash, *Nonextensive effects on the viscous properties of hot and magnetized QCD matter*, Eur. Phys. J. A **60**, 29 (2024).
- [6603] ALICE Collaboration, *Production of $K(892)^0$ and $\Phi(1020)$ in pp collisions at $\sqrt{s} = 7$ TeV*, Eur. Phys. J. C **72**, 2183 (2012) (17 pages).
- [6604] ALICE Collaboration, *$K^*(892)^0$ and $\Phi(1020)$ production in p -Pb collisions at $\sqrt{s}_{NN} = 8.16$ TeV*, Phys. Rev. C **107**, 055201 (2023).
- [6605] L.S. Moriggi, G.M. Peccini and M.V.T. Machado, *Investigating the inclusive transverse spectra in high-energy pp collisions in the context of geometric scaling framework*, Phys. Rev. D **102**, 034016 (2020).
- [6606] L.S. Moriggi, G.S. Ramos and M.V.T. Machado, *Multiplicity dependence of the p_T -spectra for charged particles and its relationship with partonic entropy*, Phys. Rev. D **110**, 034005 (2024).
- [6607] L.S. Moriggi and M.V.T. Machado, *Precise determination of Pomeron intercept via a scaling entropy analysis*, Phys. Rev. D **111**, 014017 (2025).
- [6608] N. Sharma and A. Kalweit, *Light nuclei and anti-nuclei production in pp and Pb-Pb collisions with Alice*, Acta Physica Polonica B Proceedings Supplement **5** (2) (2012).
- [6609] ALICE Collaboration, *Production of light nuclei and anti-nuclei in pp and Pb-Pb collisions at LHC energies*, preprint (2015), 1506.08951 [nucl-ex].
- [6610] K.J. Sun, C.M. Ko and B. Donigus, *Suppression of light nuclei production in collisions of small systems at the Large Hadron Collider*, Phys. Lett. B **792**, 132-137 (2019).
- [6611] F. Barile and ALICE Collaboration, *Identified charged hadron production in pp and Pb-Pb collisions with the ALICE experiment at the LHC*, AIP Conf. Proc. **1492**, 323-326 (2012).
- [6612] ALICE Collaboration, *Measurement of electrons from semileptonic heavy-flavor hadron decays in pp collisions at $\sqrt{s} = 7$ TeV*, Phys. Rev. D **86**, 112007 (2012) (26 pages).
- [6613] S. Sharma, M. Kaur, and S. Kaur, *Tsallis nonextensive entropy and the multiplicity distributions in high energy leptonic collisions*, Internat. J. Modern Phys. E **25**, 06 (2016), doi: 10.1142/S0218301316500415

- [6614] S. Sharma, M. Kaur and S. Thakur, *Statistical hadronization and multiplicities in high-energy hadron-nucleus collisions*, Internat. J. Modern Phys. E **26**, 1750006 (2017) (11 pages).
- [6615] S. Sharma, S. Thakur and M. Kaur, *Statistical hadronisation in high energy particle collisions*, XXII DAE High Energy Physics Symposium 771-773, Springer Proceedings in Physics **203** (2018).
- [6616] S. Sharma, M. Kaur and S. Thakur, *Multiplicity spectra in e^+e^- and $p\bar{p}$ collisions in terms of Tsallis and Weibull distributions*, Internat. J. Modern Phys. E **27** (11), 1850101 (2018) (18 pages).
- [6617] S. Sharma and M. Kaur, *Multiplicity spectra in pp collisions at high energies in terms of Gamma and Tsallis distributions*, Phys. Rev. D **98**, 034008 (2018).
- [6618] R. Aggarwal and M. Kaur, *Charged particle production in pp collisions at $\sqrt{s} = 8.7$ and 2.76 TeV at the LHC- A case study*, Int. J. Mod. Phys. E **30** (1), 2150005 (2021) (27 pages).
- [6619] R. Aggarwal and M. Kaur, *Statistical scrutiny of particle spectra in ep collisions*, Physics **3**, 757-780 (2021), doi: 10.3390physics3030047
- [6620] R. Aggarwal and M. Kaur, *Comparative study of charged multiplicities and moments in pp collisions at $\sqrt{s} = 7$ TeV in the forward region at the LHC*, Phys. Rev. D **102**, 054005 (2020).
- [6621] L. Vermunt, *Hadronisation of heavy quarks - Production measurements of heavy-flavour hadrons from small to large collision systems*, Doctor Thesis (Utrecht, 2022).
- [6622] K. Shen, G.G. Barnafoldi and T.S. Biro, *Hadronization within non-extensive approach and the evolution of the parameters*, preprint (2019), 1905.05736 [hep-ph].
- [6623] E. Fragiaco (ALICE Collaboration), *Hadronic resonances from ALICE in pp collisions*, EPJ Web of Conferences **36**, 00009 (2012), DOI: 10.1051/epjconf/20123600009
- [6624] F. Bellini (ALICE Collaboration), *Hadronic resonances in pp , p -Pb and Pb-Pb in ALICE*, EPJ Web of Conferences **97**, 00004 (2015) (8 pages), doi: 10.1051/epjconf/20159700004
- [6625] S. Singh (ALICE Collaboration), *Strange hadron and resonance production in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV with the ALICE experiment at LHC*, Nuclear Phys. A **904-905**, 539c-542c (2013).
- [6626] Alice Collaboration, *$\Sigma(1385)^\pm$ resonance production in Pb-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV*, Eur. Phys. J. C **83**, 351 (2023).
- [6627] R. Lea (ALICE Collaboration), *(Multi-)Strange hadron and light (anti-)nuclei production with ALICE at the LHC*, communicated at the *XIth Conference on Quark Confinement and Hadron Spectrum*, AIP Conf. Proc. **1701**, 080009 (2016) (7 pages), doi: 10.1063/1.4938698
- [6628] L. Barioglio, *Anti- and hyper-nuclei production at the LHC with ALICE*, Proceedings **10**, 47 (2019), doi: 10.3390/proceedings2019010047
- [6629] J. Song, X.R. Gou, F.I. Shao and Z.T. Liang, *Quark number scaling of hadronic p_T spectra and constituent quark degree of freedom in p -Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV*, Phys. Lett. B **774**, 516-521 (2017).
- [6630] J. Song, F.I. Shao and Z.T. Liang, *Quark number scaling of p_T spectra for Ω and Φ in relativistic heavy-ion collisions*, Phys. Rev. C **102**, 014911 (2020).
- [6631] K. Saraswat, P. Shukla, V. Kumar and V. Singh, *Strange hadron production in pp , pPb and $PbPb$ collisions at LHC energies*, Eur. Phys. J. A **53**, 84 (2017).
- [6632] K. Saraswat, P. Shukla and V. Singh, *Transverse momentum spectra of hadrons in pp and AA collisions at RHIC and LHC energies*, preprint (2017), 1706.04860 [hep-ph].
- [6633] L.L. Li and F.H. Liu, *Excitation functions of related parameters from transverse spectra contributed by a new treatment in AA collisions*, preprint (2020), 2006.15333 [hep-ph].
- [6634] K. Saraswat, P. Shukla and V. Singh, *Transverse momentum spectra of hadrons in high energy pp and heavy ion collisions*, J. Phys. Commun. **2**, 035003 (2018), doi: 10.1088/2399-6528/aab00f
- [6635] A. Badala and H. Oeschler, *Hadronic resonance production in pp and Pb-Pb collisions at LHC with the ALICE experiment*, J. Phys.: Conference Series **455**, 012003 (2013) (8 pages), doi:10.1088/1742-6596/455/1/012003
- [6636] A. Badala (ALICE Collaboration), *Hadronic resonance production measured by the ALICE detector at LHC energies*, EPJ Web of Conferences **95**, 04002 (2015) (7 pages), doi: 10.1051/epjconf/20159504002
- [6637] M. Venaruzzo, *Resonance results in 7 TeV pp collisions with the ALICE detector at the LHC*, Nuclear Phys. B (Proc. Suppl.) **234**, 317-320 (2013).
- [6638] L. Massacrier (ALICE Collaboration), *Measurement of an excess in the yield of J/ψ at very low- p_T in Pb-Pb collisions with the ALICE detector*, preprint (2015), 1510.08315 [nucl-ex].
- [6639] J. Adam et al (ALICE Collaboration), *Measurement of an excess in the yield of J/ψ at very low p_T in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV*, Pys. Rev. Lett. **116**, 222301 (2016).
- [6640] M. Praszalowicz, *Geometrical scaling for identified particles*, Phys. Lett. B **727**, 461-467 (2013).
- [6641] M. Praszalowicz, *Geometrical scaling and its breaking in high energy collisions*, preprint (2014), 1405.2671 [hep-ph].

- [6642] A.G. Knospe (ALICE Collaboration), *Hadronic resonances at ALICE*, Hot Quarks 2012, J.Physics: Conference Series **446**, 012056 (2013) (4 pages), doi:10.1088/1742-6596/446/1/012056
- [6643] B. Abelev et al (ALICE Collaboration), *K_S^0 and Λ production in Pb – Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV*, Phys. Rev. Lett. **111**, 222301 (2013) (10 pages).
- [6644] S. Schuchmann, *Modification of K_S^0 and Λ ($\bar{\Lambda}$) transverse momentum spectra in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV with ALICE*, Doctor Thesis (Goethe University Frankfurt, Germany, Springer, 2017).
- [6645] F.H. Liu, T. Tian, H. Zhao and B.C. Li, *Extracting chemical potentials of quarks from ratios of negatively/positively charged particles in high-energy collisions*, Eur. Phys. J. A **50**, 62 (2014) (8 pages), doi: 10.1140/epja/i2014-14062-5
- [6646] F.H. Liu, Y.Q. Gao, T. Tian and B.C. Li, *Unified description of transverse momentum spectrums contributed by soft and hard processes in high-energy nuclear collisions*, Eur. Phys. J. A **50**, 94 (2014) (9 pages), doi: 10.1140/epja/i2014-14094-9
- [6647] F.H. Liu, Y.Q. Gao, T. Tian and B.C. Li, *Transverse momentum and pseudorapidity distributions of charged particles and spatial shapes of interacting events in Pb-Pb collisions at 2.76 TeV*, Advances in High-Energy Physics, 725739 (2014) (14 pages), doi: <http://dx.doi.org/10.1155/2014/725739>
- [6648] L.N. Gao and E.Q. Wang, *Transverse momentum and pseudorapidity spectrum of the top quark, lepton, and b jet in proton-proton collisions at LHC*, Advances in High Energy Physics, 6660669 (2021) (20 pages), doi: 10.1155/2021/6660669
- [6649] Z.L. Guo, B.C. Li and H.W. Dong, *Transverse momentum and pseudorapidity dependence of particle production in Xe-Xe collision at $\sqrt{s_{NN}} = 5.44$ TeV*, Adv. High Energy Physics, 9734320 (2020) (5 pages), doi: doi.org/10.1155/2020/9734320
- [6650] E.Q. Wang, Y.Q. Ma, L.N. Gao and S.H. Fan, *Elliptic flow of identified particles in Pb-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV*, Advances in High Energy Physics, 9386130 (2020) (8 pages).
- [6651] L.N. Gao and E.Q. Wang, *On transverse momenta and (pseudo)rapidity spectrum of the top quark in proton-proton collisions at 13 TeV*, preprint (2020), arxiv 2007.12445
- [6652] L.N. Gao and E.Q. Wang, *The transverse momentum distribution of J/ψ mesons produced in pp collisions at the LHC*, Eur. Phys. J. Plus **139**, 129 (2024).
- [6653] J.R. Alvarado Garcia, D. Rosales Herrera, P. Fierro, J. Ramirez, A. Fernandez Tellez and C. Pajares, *Soft and hard scales of the transverse momentum distribution in the Color String Percolation Model*, J. Phys. G: Nuclear and Particle Physics **50** (12) (2023).
- [6654] F.H. Liu and B.Y. Cui, *Pseudorapidity distribution of charged particles and spatial structure pictures of interacting system in central d-Au collisions at RHIC energy*, Indian J. Phys. **90** (5), 595-601 (2015), doi: 10.1007/s12648-015-0763-z
- [6655] D. Thakur, S. Tripathy, P. Garg, R. Sahoo and J. Cleymans, *Indication of a differential freeze-out in proton-proton and heavy-ion collisions at RHIC and LHC energies*, Advances High Energy Physics, ID 4149352, (2016) (13 pages), doi: <http://dx.doi.org/10.1155/2016/4149352>
- [6656] G.S. Pradhan, D. Sahu, R. Rath, R. Sahoo and Jean Cleymans, *Role of chemical potential at kinetic freeze-out using Tsallis non-extensive statistics in proton-proton collisions at the Large Hadron Collider*, Eur. Phys. J. A **60**, 52 (2024).
- [6657] D. Sahu, S. Tripathy, R. Sahoo and A.R. Dash, *Multiplicity dependence of shear viscosity, isothermal compressibility, multiplicity fluctuation and speed of sound in pp collisions at $\sqrt{s} = 7$ TeV*, Eur. Phys. J. A **56**, 187 (2020), doi: 10.1140/epja/s10050-020-00197-7
- [6658] J.Q. Hui and Z.J. Jiang, *A description of transverse momentum distributions in p + p collisions at RHIC and LHC energies*, Advances in High Energy Physics, 8372416 (2019) (9 pages), doi: doi.org/10.1155/2019/8372416
- [6659] J.Q. Hui, Z.J. Jiang and D.F. Xu, *A description of transverse momentum distributions in Au + Au collisions at $\sqrt{s_{NN}} = 62.4$ and 130 GeV*, Chinese J. Phys. **56**, 2639-2645 (2018).
- [6660] A. Khuntia, H. Sharma, S.K. Tiwari, R. Sahoo and J. Cleymans, *Radial flow and differential freeze-out in proton-proton collisions at $\sqrt{s} = 7$ TeV at the LHC*, European Phys. J. A **55** (1), art. 3 (2019).
- [6661] J. Cleymans and M.W. Paradza, *Determination of the chemical potential in the Tsallis distribution at LHC energies*, preprint (2020), 2010.05565 [hep-ph].
- [6662] J. Cleymans and M.W. Paradza, *Tsallis statistics in high energy physics: Chemical and thermal freeze-outs*, Physics **2**, 654-664 (2020), doi: 10.3390/physics2040038
- [6663] S.K. Tiwari, S. Tripathy, R. Sahoo and N. Kakati, *Dissipative properties and isothermal compressibility of hot and dense hadron gas using non-extensive statistics*, Eur. Phys. J. C **78**, 938 (2018), doi: 10.1140/epjc/s10052-018-6411-y

- [6664] S. Dash and D.P. Mahapatra, *pT spectra in pp and AA collisions at RHIC and LHC energies using the Tsallis-Weibull approach*, Eur. Phys. J. A **54**, 55 (2018), doi: 10.1140/epja/i2018-12487-4
- [6665] A. Khuntia, G. Sahu, R. Sahoo, D.P. Mahapatra and N. Barik, *Non-extensive statistics in free-electron metals and thermal effective mass*, Physica A **523**, 852-857 (2019),
- [6666] J.Q. Hui, Z.J. Jiang and D.F. Xu, *A description of the transverse momentum distributions of charged particles produced in heavy ion collisions at RHIC and LHC energies*, Advances High Energy Physics, 7682325 (2018).
- [6667] K.K. Olimov, S.Z. Kanokova, K. Olimov, K.G. Gulamov, B.S. Yuldashev, S.L. Lutpullaev and F.Y. Umarov, *Average transverse expansion velocities and global freeze-out temperatures in central Cu + Cu, Au + Au, and Pb + Pb collisions at high energies at RHIC and LHC*, Mod. Phys. Lett. A, 2050115 (2020) (25 pages).
- [6668] K.K. Olimov, S.Z. Kanokova, A.K. Olimov, K.I. Umarov, B.J. Tukhtaev, K.G. Gulamov, B.S. Yuldashev, S.L. Lutpullaev, N.S. Saidkhanov, K. Olimov and T.K. Sadykov, *Combined analysis of midrapidity transverse momentum spectra of the charged pions and kaons, protons and antiprotons in p + p and Pb + Pb collisions at $\sqrt{s} = 2.76$ and 5.02 TeV at the LHC*, Mod. Phys. Lett. A, 2050237 (2020) (26 pages), doi: 10.1142/S0217732320502375
- [6669] K.K. Olimov, I.A. Lebedev, A.I. Fedosimova, F.H. Liu, A. Sanetullaev, A. Tokhirov, S.A. Khudoyberdieva, A.N. Kakhorova and B.S. Yuldashev, *Combined analysis of midrapidity transverse momentum distributions of the charged pions and kaons, protons and antiprotons in p + Pb collisions at $\sqrt{s_{nn}} = 5.02$ TeV at the LHC*, Eur. Phys. J. Plus **139**, 457 (2024).
- [6670] K.K. Olimov, A. Iqbal and S. Masood, *Systematic analysis of midrapidity transverse momentum spectra of identified charged particles in p + p collisions at $\sqrt{s} = 2.76, 5.02$ and 7 TeV at the LHC*, Internat. J. Mod. Phys. A **35** (27), 2050167 (2020), doi: 10.1142/S0217751X20501675
- [6671] K.K. Olimov and S.Z. Kanokova, *Analysis of invariant p_T spectra of hadrons in the central collisions of heavy ions within the modified Siemens-Rasmussen equation*, Scientific Bulletin of Namangan State University **2** (3), 8 (2020).
- [6672] L.L. Li, F.H. Liu and K.K. Olimov, *Excitation functions of Tsallis-like parameters in high-energy nucleus-nucleus collisions*, Entropy **23**, 478 (2021), doi: 10.3390/e23040478
- [6673] Q. Wang, F.H. Liu and K.K. Olimov, *Initial and final-state temperatures of emission source from differential cross-section in squared momentum transfer in high energy collisions*, preprint (2021), 2104.14271 [hep-ph].
- [6674] Y. Huang and B. Shizgal, *Time evolution of electron distributions to bimodal steady states for electrons dilutely dispersed in the inert gases Ar, Kr, and Xe with deep Ramsauer Townsend minima in the momentum transfer cross section*, Phys. Scr. (2023), in press.
- [6675] A. Khuntia, S. Tripathy, R. Sahoo and J. Cleymans, *Multiplicity dependence of non-extensive parameters for strange and multi-strange particles in proton-proton collisions at $\sqrt{s} = 7$ TeV at the LHC*, Eur. Phys. J. A **53**, 103 (2017), doi: 10.1140/epja/i2017-12291-8
- [6676] H. Yassin and E.R.A. Elyazeed, *Transverse momentum p_T spectra of strange particles production in different collisions at $\sqrt{s_{NN}} = 2.76, 5.02, \text{ and } 7$ TeV*, Acta Physica Polonica B **50** (1), 37-54 (2019).
- [6677] N. Kakati, S.K. Tiwari, S. Tripathy and R. Sahoo, *Dissipative properties and isothermal compressibility of hot and dense hadron gas using non-extensive statistics*, preprint (2018), 1709.06352 [hep-ph].
- [6678] H.Q. Ding, T.T. Dai, L. Cheng, W.N. Zhang and E.K. Wang, *Distribution of low- p_T $Y(1S)$ in hadron gas*, Acta Phys. Sin. **72** (19), 192501 (2023) [In Chinese].
- [6679] A.S. Parvan, O.V. Teryaev and J. Cleymans, *Systematic comparison of Tsallis statistics for charged pions produced in pp collisions*, Eur. Phys. J. A **53**, 102 (2017), doi: 10.1140/epja/i2017-12301-y
- [6680] S. Mitra and V. Chandra, *Transport coefficients of a hot QCD medium and their relative significance in heavy-ion collisions*, preprint (2017), 1702.05728 [nucl-th].
- [6681] S. Mitra, *Thermodynamics and relativistic kinetic theory for q-generalized Bose-Einstein and Fermi-Dirac systems*, Eur. Phys. J. C **78**, 66 (2018), doi: 10.1140/epjc/s10052-018-5536-3
- [6682] S. Sharma, M. Kaur and S. Thakur, *Modified Tsallis and Weibull distributions for multiplicities in e^+e^- collisions*, Phys. Rev. D **95**, 114002 (2017).
- [6683] J. Cleymans, *On the use of the Tsallis distribution at LHC energies*, J. Physics Conf. Series **779**, 012079 (2017) (4 pages), doi:10.1088/1742-6596/779/1/012079 [International Conference on Recent Trends in Physics 2016 (ICRTP2016) Journal of Physics: Conference Series 755 (2016) 011001].
- [6684] CMS and TOTEM Collaborations, *Measurement of pseudorapidity distributions of charged particles in proton-proton collisions at $\sqrt{s_{NN}} = 8$ TeV by the CMS and TOTEM experiments*, Eur. Phys. J. C **74**, 3053 (2014) (26 pages), doi: 10.1140/epjc/s10052-014-3053-6
- [6685] L.L. Wang, *Centrality dependence of charged-particle pseudorapidity density distributions in Cu-Cu collisions at high energies*, Indian J. Phys. **90** (11), 1285-1292 (2016), doi: 10.1007/s12648-016-0880-3

- [6686] B.C. Li, G.X. Zhang and Y.Y. Guo, *Transverse momentum spectra of K_S^0 and K^{*0} at midrapidity in $d+Au$, $Cu+Cu$ and $p-p$ collisions at $\sqrt{s_{NN}} = 200$ GeV*, Advances in High Energy Physics 684950 (2015) (8 pages), <http://dx.doi.org/10.1155/2015/684950>
- [6687] ALICE Collaboration, *$K^*(892)^0$ and $\phi(1020)$ production at midrapidity in pp collisions at $\sqrt{s} = 8$ TeV*, Phys. Rev. C **102**, 024912 (2020).
- [6688] The ALICE Collaboration, *Production of $\Sigma(1385)^\pm$ and $\Xi(1530)^0$ in proton-proton collisions at $\sqrt{s_{NN}} = 7$ TeV*, Eur. Phys. J. C (2015) **75**, 1 (2015), doi: 10.1140/epjc/s10052-014-3191-x
- [6689] ALICE Collaboration *Production of $\Sigma(1385)^\pm$ and $\Xi(1530)^0$ in $p - Pb$ collisions at $\sqrt{s_{NN}} = 5.02$ TeV*, preprint (2017), 1701.07797 [nucl-ex].
- [6690] ALICE Collaboration, *Charged jet cross sections and properties in proton-proton collisions at $\sqrt{s_{NN}} = 7$ TeV*, Phys. Rev. D **91**, 112012 (2015) (33 pages).
- [6691] F. Bellini (ALICE Collaboration), *Hadronic resonance production measured by ALICE at the LHC*, Nuclear Physics A **931**, 846-850 (2014).
- [6692] F.H. Liu, H.R. Wei and R.A. Lacey, *Transverse momentum and pseudorapidity distributions of final-state particles and spatial structure pictures of an interacting system in $p - Pb$ collisions at $\sqrt{s_{NN}} = 5.02$ TeV*, Eur. Phys. J. A **51**, 43 (2015) (13 pages), doi: 10.1140/epja/i2015-15043-x
- [6693] H.R. Wei, F.H. Liu and R.A. Lacey, *Kinetic freeze-out temperature and flow velocity extracted from transverse momentum spectra of final-state light flavor particles produced in collisions at RHIC and LHC*, Eur. Phys. J. A **52**, 102 (2016) (23 pages), doi: 10.1140/epja/i2016-16102-6
- [6694] ALICE Collaboration, *Production of light-flavor hadrons in pp collisions at $\sqrt{s} = 7$ and $\sqrt{s} = 13$ TeV*, Eur. Phys. J. C **81**, 256 (2021), doi: 10.1140/epjc/s10052-020-08690-5
- [6695] T.V. Acconcia et al, *A very high momentum particle identification detector*, preprint (2013), 1309.5880 [nucl-ex].
- [6696] T.S. Biro, G.G. Barnafoldi, P. Van and K. Urmosy, *Statistical power-law spectra due to reservoir fluctuations*, preprint (2014), 1404.1256 [hep-ph].
- [6697] T.S. Biro, P. Van, G.G. Barnafoldi and K. Urmosy, *Statistical power law due to reservoir fluctuations and the universal thermostat independence principle*, Entropy **16**, 6497-6514 (2014), doi:10.3390/e16126497
- [6698] T.S. Biro and Z. Neda, *A unified approach to equilibrium statistics in closed systems with random dynamics*, preprint (2016), 1606.05737 [cond-mat.stat-mech].
- [6699] T.S. Biro and Z. Neda, *Dynamical stationarity as a result of sustained random growth*, preprint (2016), 1611.06698 [cond-mat.stat-mech].
- [6700] T.S. Biro and Z. Neda, *Unidirectional random growth with resetting*, Physica A **499**, 335-361 (2018).
- [6701] T.S. Biro and Z. Neda, *Equilibrium distributions in entropy driven balanced processes*, Physica A **474**, 355-362 (2017).
- [6702] T.S. Biro, A. Telcs and Z. Neda, *Entropic distance for nonlinear master equation*, Universe **4**, 10 (2018), doi: 10.3390/universe4010010
- [6703] T.S. Biro, Z. Neda and A. Telcs, *Entropic divergence and entropy related to nonlinear master equations*, Entropy **21**, 993 (2019), doi:10.3390/e21100993
- [6704] F. Barile et al (ALICE Collaboration), *Light-flavour hadron production in pp and $Pb-Pb$ collisions in the ALICE experiment at the LHC*, EPJ Web Conferences **60**, 13012 (2013) (5 pages), doi: 10.1051/epj-conf/20136013012
- [6705] Alice Collaboration, *Production of light-flavor hadrons in pp collisions at $\sqrt{s} = 7$ and $\sqrt{s} = 13$ TeV*, Eur. Phys. J. C **81**, 256 (2021).
- [6706] B. Abelev et al, (ALICE Collaboration), *KS and 0 production in $PbPb$ Collisions at $\sqrt{s_{NN}} = 2.76$ TeV*, Phys. Rev. Lett. **111**, 222301 (2013) (10 pages).
- [6707] Yu. V. Kharlov (ALICE Collaboration), *Physics with the ALICE experiment*, Physics of Atomic Nuclei **76** (12), 1497-1506 (2013) [Elementary Particles and Fields-Experiment].
- [6708] ALICE Collaboration, *$K^*(892)^0$ and $\Phi(1020)$ production in $Pb-Pb$ collisions at $\sqrt{s_{NN}} = 2.76$ TeV*, Phys. Rev. C **91**, 024609 (2015) (26 pages).
- [6709] ALICE Collaboration, *$K^*(892)^0$ and $\Phi(1020)$ production in $Pb-Pb$ collisions at $\sqrt{s_{NN}} = 5.02$ TeV*, Phys. Rev. C **106**, 034907 (2022).
- [6710] R. Lea (ALICE Collaboration), *(Multi-)strange hadron and light (anti-)nuclei production with ALICE at the LHC*, AIP Conf. Proc. **1701**, 080009 (2016), doi: <http://dx.doi.org/10.1063/1.4938698>
- [6711] ATLAS Collaboration, *Charged-particle multiplicities in pp interactions measured with the ATLAS detector at the LHC*, New J. Physics **13**, 053033 (2011) (68 pages).

- [6712] M.S. Kayl, *Measurement of the charged particle density with the ATLAS detector: First data at $\sqrt{s} = 0.9, 2.36$ and 7 TeV*, Doctor Thesis (University of Amsterdam, 2016).
- [6713] H.I. Alrebdi, M. Ajaz, M. Waqas, M.A. Ahmad, Maryam, A.M. Quraishi, J.H. Baker, S. Jagnandan and A. Jagnandan, *Comparative analysis of charged particle distributions in pp collisions at $\sqrt{s} = 0.9$ TeV using Monte Carlo models and fitting functions*, Chinese Journal of Physics (2024), in press.
- [6714] H.I. Alrebdi, M. Ajaz, M. Badshah, M. Waqas and N.A.M. Alsaif, *Investigating the bulk properties of charged particles in different η bins using a modified Tsallis model*, preprint (2024), 2410.09110 [nucl-th].
- [6715] I. Khan, M Waqas, M. Ajaz, J.B. Slimane and H.I. Alrebdi, *Insights into freeze-out parameters of the system produced in various colliding systems through Tsallis and modified Hagedorn models*, Physica Scripta **100** (5), 100 055304 (2025).
- [6716] Y.H. Chen, F.H. Liu, S. Fakhraddin, M.A. Rahim and M.Y. Duan, *Event patterns (particle scatter plots) extracted from charged particle spectra in pp and Pb-Pb collisions at 2.76 TeV*, J. Phys. G: Nucl. Part. Phys. **44**, 025103 (2017) (27 pages), doi:10.1088/1361-6471/aa51f1
- [6717] CMS Collaboration, *Strange particle production in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV*, J. High Energy Phys. **05**, 064 (2011) (40 pages).
- [6718] CMS Collaboration, *Study of the production of charged pions, kaons, and protons in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV*, Eur. Phys. J. C **74**, 2847 (2014) (27 pages), doi: 10.1140/epjc/s10052-014-2847-x
- [6719] ALICE Collaboration, *Production of charged pions, kaons, and (anti-)protons in Pb-Pb and inelastic pp collisions at $\sqrt{s_{NN}} = 5.02$ TeV*, Phys. Rev. C **101**, 044907 (2020).
- [6720] ALICE Collaboration, *Production of pions, kaons, and protons as a function of the relative transverse activity classifier in pp collisions at $\sqrt{s_{NN}} = 13$ TeV*, JHEP06, 027 (2023).
- [6721] E. Willsher, *Hadrochemistry of particle production in small Systems with ALICE at the LHC*, The XVIII International Conference on Strangeness in Quark Matter (SQM 2019), 233-237 (Springer, 2020).
- [6722] V.M. Ronjin (SVD-2 Collaboration), *Investigation of neutral-kaon production in pC, pSi and pPb collisions at 70 GeV/c*, Physics of Atomic Nuclei **77** (5), 602-612 (2014) [Original Russian text published in Yadernaya Fizika **77** (5), 637-647 (2014)].
- [6723] Y. Wang, L. Yang, X. Du, N. Liu, L. Qiao and W. Zhang, *Universal scaling of the pion, kaon and proton p_T spectra in Pb-Pb collisions at 2.76 TeV*, Nuclear Physics A **976**, 46-60 (2018).
- [6724] A. Deppman, *Self-consistency in non-extensive thermodynamics of highly excited hadronic states*, Physica A **391**, 6380-6385 (2012).
- [6725] A. Deppman, *Corrigendum to "Self-consistency in non-extensive thermodynamics of highly excited hadronic states" [Physica A 391 (2012) 6380-6385]*, Physica A **400**, 207-208 (2014).
- [6726] I. Sena and A. Deppman, *Systematic analysis of transverse momentum distribution and non-extensive thermodynamics theory*, preprint (2012), 1208.2952 [hep-ph].
- [6727] I. Sena and A. Deppman, *Systematic analysis of p_T -distributions in p + p collisions*, Eur. Phys. J. A **49**, 17 (2013).
- [6728] L. Marques, E. Andrade-II and A. Deppman, *Nonextensivity of hadronic systems*, Phys. Rev. D **87**, 114022 (2013) (6 pages).
- [6729] A. Deppman, *Fractal Structure of Hadrons: Experimental and Theoretical Signatures*, Universe **3**, 62 (2017) (11 pages), doi:10.3390/universe3030062
- [6730] A. Deppman, *Fractal structure, power-law distribution and hadron spectrum*, Proceedings of Science **336**, Article 072 (2018).
- [6731] A. Deppman, *Thermofractals, non-additive entropy, and q-calculus*, Physics **3**, 290-301 (2021).
- [6732] A. Deppman, E. Megias and D.P. Menezes, *Tsallis statistics, fractals and QCD*, preprint (2020), 2011.09134 [hep-ph].
- [6733] A. Deppman, E. Megias and D.P. Menezes, *Gauge fields renormalization groups and thermofractals*, preprint (2022), 2203.02408 [nucl-th].
- [6734] J.O. Costa, I. Aguiar, J.L. Barauna, E. Megias, A. Deppman, T.N. da Silva and D.P. Menezes, *Non-extensive statistics in Au-Au collisions*, Phys. Lett. B **854**, 138727 (2024).
- [6735] J.O. Costa, *Estatística nao-extensiva em colisoes de ions pesados*, Thesis (Universidade Federal de Santa Catarina, Centro de Ciencias Fisicas e Matematicas, Florianopolis, 2024).
- [6736] A. Deppman, A.K. Golmankhaneh, E. Megias and R. Pasechnik, *From the Boltzmann equation with non-local correlations to a standard non-linear Fokker-Planck equation*, Phys. Lett. B **839**, 137752 (2023).
- [6737] E. Megias, A. Deppman, R. Pasechnik and C. Tsallis, *Comparative study of the heavy-quark dynamics with the Fokker-Planck Equation and the Plastino-Plastino Equation*, Phys. Lett. B **845**, 138136 (2023).

- [6738] A. Deppman, E. Megias and R. Pasechnik, *Fractal derivatives, fractional derivatives and q-deformed calculus*, Entropy **25** (7), 1008 (2023).
- [6739] R.P. Baptista, L.Q. Rocha, D.P. Menezes, L.A. Trevisan, C. Tsallis and A. Deppman, *Evidence of fractal structures in hadrons*, European Physical Journal A **60**, 93 (2024).
- [6740] R. Baptista, A. Deppman, M. Tokarev, L.A. Trevisan and I. Zborovsky, *Derivation of the z-scaling through the thermofractal approach*, preprint (2023).
- [6741] L.Q. Rocha, E. Megias, L.A. Trevisan, K.K. Olimov, F. Liu and A. Deppman, *Nonextensive statistics in high energy collisions*, Physics **4**, 659-671 (2022).
- [6742] X.H. Zhang, F.H. Liu, K.K. Olimov and A. Deppman, *Random statistical analysis of transverse momentum spectra of strange particles and dependence of related parameters on centrality in high energy collisions at the LHC*, Advances in High Energy Physics, ID 5949610 (2022).
- [6743] E. Megias, V.S. Timoteo, A. Gammal and A. Deppman, *Bose-Einstein condensation and non-extensive statistics for finite systems*, Physica A **585**, 126440 (2021).
- [6744] E. Megias, M.J. Teixeira, V.S. Timoteo and A. Deppman, *Non-linear Klein-Gordon equation and the Bose-Einstein condensation*, Eur. Phys. J. Plus **137**, 325 (2022).
- [6745] L. Marques, J. Cleymans and A. Deppman, *Description of high-energy pp collisions using Tsallis thermodynamics: Transverse momentum and rapidity distributions*, Phys. Rev. D **91**, 054025 (2015) (11 pages).
- [6746] ALICE Collaboration, *Multiplicity and rapidity dependence of $K^*(892)^0$ and $\Phi(1020)$ production in p-Pb collisions at $\sqrt{s_{NN}} = 5.02\text{TeV}$* , Eur. Phys. J. C **83**, 540 (2023).
- [6747] A. Deppman, *Thermodynamics with fractal structure, Tsallis statistics, and hadrons*, Phys. Rev. D **93**, 054001 (2016) (10 pages).
- [6748] A. Deppman, E. Megias and D.P. Menezes, *Fractal structure in Yang-Mills fields and non extensivity*, preprint (2019), 1905.06382 [hep-th].
- [6749] A. Deppman, E. Megias and D.P. Menezes, *Fractal structure of Yang-Mills fields*, Phys. Scr. **95**, 094006 (2020).
- [6750] A. Deppman, E. Megias and D.P. Menezes, *Fractal structures of Yang-Mills fields and non extensive statistics: applications to high energy physics*, Physics **2**, 455-480 (2020), doi: 10.3390/physics2030026
- [6751] A. Deppman and E. Megias, *Fractal structure in gauge fields*, Physics **1**, 103-110 (2019), doi: 10.3390/physics1010011
- [6752] A. Deppman, E. Megias and D.P. Menezes, *Fractals, non-extensive statistics, and QCD*, Phys. Rev. D **101**, 034019 (2020).
- [6753] K. Kyan and A. Monnai, *QCD equation of state with Tsallis statistics for heavy-ion collisions*, Phys. Rev. D **106**, 054004 (2022).
- [6754] A.M. Diab, *Non-extensive effects on the QCD equation of state and fluctuations of conserved charges within Polyakov quark meson model*, J. Phys. G: Nucl. Part. Phys. **51** 065004 (2024).
- [6755] A. Deppman, *Fractal aspects of QCD*, communicated at the 9th International Conference on New Frontiers in Physics (4 to 12 September 2020, Crete).
- [6756] A. Deppman, L. Marques and J. Cleymans, *Longitudinal properties of high energy collisions*, International Workshop on Discovery Physics at the LHC (Kruger2014), J. Physics: Conference Series **623**, 012009 (2015) (8 pages), doi:10.1088/1742-6596/623/1/012009
- [6757] E. Megias, J.A.S. Lima and A. Deppman, *Transport equation for small systems and nonadditive entropy*, Mathematics **10**, 1625 (2022).
- [6758] A. Deppman, *Properties of hadronic systems according to the nonextensive self-consistent thermodynamics*, J. Phys. G: Nucl. Part. Phys. **41**, 055108 (2014) (10 pages), doi:10.1088/0954-3899/41/5/055108
- [6759] E. Megias, D.P. Menezes and A. Deppman, *Nonextensive thermodynamics for hadrons with finite chemical potentials*, Physica A **421**, 15-24 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2014.11.005>
- [6760] E. Megias, D.P. Menezes and A. Deppman, *Nonextensive thermodynamics with finite chemical potentials and proton-neutron stars*, EPJ Web of Conferences **80**, 00040 (2014) (6 pages), doi: 10.1051/epjconf/20148000040
- [6761] A. Deppman, E. Megias and D.P. Menezes, *Nonextensive thermodynamics with finite chemical potential, hadronic matter and proton-neutron stars*, J. Physics: Conference Series **607**, 012007 (2015) (12 pages), doi:10.1088/1742-6596/607/1/012007
- [6762] D.P. Menezes, A. Deppman, E. Megias and L.B. Castro, *Non extensive thermodynamics and neutron star properties*, Eur. Phys. J. A **51**, 155 (2015) (12 pages), doi: 10.1140/epja/i2015-15155-3
- [6763] A. Deppman and E. Megias, *Fractal aspects of hadrons*, EPJ Web Conferences **141**, 01011 (2017), doi: 10.1051/epjconf/201714101011

- [6764] A. Deppman and E. Megias, *Tsallis statistics and QCD thermodynamics*, EPJ Web of Conferences **270**, 00033 (2022).
- [6765] P.H.G. Cardoso, T.N. da Silva, A. Deppman and D.P. Menezes, *Quark matter revisited with non-extensive MIT bag model*, Eur. Phys. J. A **53**, 191 (2017), doi: 10.1140/epja/i2017-12388-0
- [6766] M.A.M. Astorga and G. Herrera-Corral, *Pressure distribution inside nucleons in a Tsallis-MIT bag model*, Entropy **26**, 183 (2024).
- [6767] V. Fernandez, G. Herrera-Corral, M.A.M. Astorga and J.M. Saenz, *Masses of hadrons, tetraquarks, and pentaquarks through a Tsallis-entropy approach in the MIT bag model*, Entropy **27**, 681 (2025).
- [6768] C. Barboza Mendoza and G. Herrera-Corral, *Quark matter description in a Tsallis entropy approach*, Eur. Phys. J. A **55**, 146 (2019), doi: 10.1140/epja/i2019-12834-y
- [6769] D. Singh and A. Kumar, *Thermodynamic properties and phase diagram of quark matter within non-extensive Polyakov chiral SU(3) quark mean field model*, preprint (2024), 2402.09203 [hep-ph].
- [6770] F.H. Liu, S. Fakhreddin, R.A. Lacey, R. Sahoo, E.K. Sarkisyan-Grinbaum and B.K. Singh, *Properties of chemical and kinetic freeze-outs in high-energy nuclear collisions*, Advances High Energy Physics, Editorial (3 pages), 9184574 (2018).
- [6771] A. Deppman, *Renormalization group equation for Tsallis statistics*, Advances in High Energy Physics, 9141249 (2018).
- [6772] E. Megias, A. Deppman, T. Frederico and D.P. Menezes, *Fractal structure of hadrons and non-extensive statistics*, EPJ Web of Conferences **192**, 00046 (2018).
- [6773] A. Deppman, T. Frederico, E. Megias and D.P. Menezes, *Fractal structure and non-extensive statistics*, Entropy **20**, 633 (2018), doi: 10.3390/e20090633
- [6774] E. Andrade II, A. Deppman, E. Megias, D.P. Menezes and T.N. da Silva, *Bag-type model with fractal structure*, Phys. Rev. D **101**, 054022 (2020).
- [6775] E. Megias, E. Andrade II, A. Deppman, A. Gammal, D.P. Menezes, T.N. da Silva and V.S. Timoteo, *Tsallis statistics and thermofractals: applications to high energy and hadron physics*, Internat. J. Mod. Phys. A (2023), doi: 10.1142/S0217751X2341004X
- [6776] A.A. Bylinkin, A.A. Rostovtsev, *Anomalous behavior of pion production in high energy particle collisions*, Eur. Phys. J. C **72**, 1961 (2012).
- [6777] D.A. Fagundes, M.J. Menon and P.V.R.G. Silva, *Preliminary results on the empirical applicability of the Tsallis distribution in elastic hadron scattering*, XII HADRON PHYSICS, AIP Conference Proceedings **1520**, 300-302 (2013), 10.1063/1.4795979 2013
- [6778] J. Cleymans and D. Worku, *The Tsallis distribution and transverse momentum distributions in high-energy physics*, preprint (2011), 1106.3405 [hep-ph].
- [6779] E.S.A. El-Dahshan and M.Y. El-Bakry, *Modeling of transverse momentum spectra for charged particles in proton-proton collisions based on soft computing approaches*, J. Computational Theoretical Transport **46** (6-7), 410-426 (2017), doi: 10.1080/23324309.2017.1405272
- [6780] L. McLerran and M. Praszalowicz, *Saturation and scaling of multiplicity, mean p_T and p_T distributions from $200 \text{ GeV} \leq \sqrt{s} \leq 7 \text{ TeV}$* , Acta Physica Polonica B **41**, 1917-1926 (2010).
- [6781] A. Adare et al (PHENIX Collaboration), *Measurement of neutral mesons in $p+p$ collisions at $\sqrt{s} = 200 \text{ GeV}$ and scaling properties of hadron production*, Phys. Rev. D **83**, 052004 (2011) (26 pages).
- [6782] G. Malfattore, *Studio della produzione del mesone $K^*(892)^\pm$ in collisioni pp a $\sqrt{s} = 7 \text{ TeV}$* , Thesis (Universita degli Studi di Trieste, 2018).
- [6783] PHENIX Collaboration, *Nuclear modification factors of Φ mesons in $d + Au$, $Cu + Cu$, and $Au + Au$ collisions at $\sqrt{s} = 200 \text{ GeV}$* , Phys. Rev. C **83**, 024909 (2011) (10 pages).
- [6784] PHENIX Collaboration *Identified charged hadron production in $p + p$ collisions at $\sqrt{s} = 200$ and 62.4 GeV* , Phys. Rev. C **83**, 064903 (2011) (29 pages).
- [6785] PHENIX Collaboration, *Production of ω mesons in $p+p$, $d+Au$, $Cu+Cu$, and $Au+Au$ collisions at $\sqrt{s_{NN}} = 200 \text{ GeV}$* , Phys. Rev. C **84**, 044902 (2011) (11 pages).
- [6786] V. Baublis, D. Ivanishchev, A. Khanzadeev, B. Komkov, D. Kotov, V. Riabov, Yu. Riabov, V. Samsonov and E. Vznuzdaev (PNPI participants of the PHENIX Collaboration), *Experiment PHENIX at RHIC*, preprint (2014).
- [6787] B.C. Li, Y.Z. Wang and F.H. Liu, *Formulation of transverse mass distributions in $Au - Au$ collisions at $\sqrt{s_{NN}} = 200 \text{ GeV/nucleon}$* , Phys. Lett. B **725**, 352-356 (2013), doi: <http://dx.doi.org/10.1016/j.physletb.2013.07.043>
- [6788] B.C. Li, Y.Z. Wang and F.H. Liu, *Formulation of transverse mass distributions in $Au-Au$ collisions at $\sqrt{s_{NN}} = 200 \text{ GeV/nucleon}$* , preprint (2014), 1402.6023 [hep-ph].

- [6789] E.W. Sangaline, *Ups and downs with a bit of strange: A STAR analysis of $\pi/K/p$ spectra at high p_T in Au+Au collisions at $\sqrt{s_{NN}} = 7.7, 11.5, 19.6, 27.0, 39.0,$ and 62.4 GeV and its physics implications*, Doctor Thesis (University of California, Davis, 2014).
- [6790] M. Waqas, G.X. Peng, F.H. Liu, M. Ajaz, A.A.K.H. Ismail, *Investigation of the freeze-out parameters in B-B, O-O, Ca-Ca and Au-Au collisions at 39 GeV*, preprint (2022), 2209.03817 [nucl-th].
- [6791] M. Shao, L. Yi, Z.B. Tang, H.F. Chen, C. Li and Z.B. Xu, *Examination of the species and beam energy dependence of particle spectra using Tsallis statistics*, J. Phys. G **37** (8), 085104 (2010).
- [6792] Z.B. Tang, L. Yi, L.J. Ruan, M. Shao, C. Li, H.F. Chen, B. Mohanty and Z.B. Xu, *The statistical origin of constituent-quark scaling in the QGP hadronization*, Chin. Phys. Lett. **30** (3), 031201 (2013) (4 pages).
- [6793] M. Wussow and N. Grau, *Determination of the quark content of scalar mesons using hydrodynamical flow in heavy ion collisions*, Phys. Rev. C **84**, 054902 (2011) (6 pages).
- [6794] T. Wibig, *The non-extensivity parameter of a thermodynamical model of hadronic interactions at LHC energies*, J. Phys. G: Nucl. Part. Phys. **37**, 115009 (2010) (4 pages)
- [6795] G. Wilk and Z. Wlodarczyk, *Equivalence of volume and temperature fluctuations in power-law ensembles*, J. Phys. G: Nucl. Part. Phys. **38**, 065101 (2011) (9 pages).
- [6796] G. Wilk, Z. Wlodarczyk and W. Wolak, *Power-law ensembles: fluctuations of volume or temperature?*, preprint (2010), 1011.5488 [hep-ph].
- [6797] A. Lavagno, D. Pigato and P. Quarati, *Nonextensive statistical effects in the hadron to quark-gluon phase transition*, J. Phys. G: Nucl. Part. Phys. **37**, 115102 (2010) (16 pages).
- [6798] P. Asadi and V. Vaidya, *1+1D hadrons minimize their biparton Renyi free energy*, Phys. Rev. D **108**, 014036 (2023).
- [6799] A.G. Shalaby, *Extensive and non-extensive thermodynamics*, Acta Physica Polonica B **47** (5), 1301-1311 (2016).
- [6800] A.G. Shalaby, V.K. Oikonomou and G.G.L. Nashed, *Non-extensive thermodynamics effects in the cosmology of $f(T)$ gravity*, Symmetry **13**, 75 (2021), doi: 10.3390/sym13010075
- [6801] G.G.L. Nashed and A.T. Shafeek, *Non-flat and non-extensive thermodynamic effects of Moller tetradic theory of gravitation on cosmology*, preprint (2022), 2204.09496 [gr-qc].
- [6802] E. Tarek, M.M. Ahmed and A.G. Shalaby, *The magnetic field effect on thermodynamics of hot QCD matter using extensive and non-extensive statistics*, preprint (2021),
- [6803] E. Tarek, M.M. Ahmed and A.G. Shalaby, *Weak and strong magnetic field effect on the nonextensive thermodynamics*, Acta Physica Polonica B **54**, 4-A2 (2023).
- [6804] S. Rath and S. Dash, *Impact of non-extensivity on the transport coefficients of a magnetized hot and dense QCD matter*, preprint (2023), 2303.03071 [hep-ph].
- [6805] S. Rath and S. Dash, *Exploring the nonextensive effect on the Knudsen number of a hot and dense QCD medium at finite magnetic field*, preprint (2024).
- [6806] G. Wolschin, *Anomalous net-baryon-rapidity spectra at RHIC*, Phys. Lett. B **569**, 67 (2003).
- [6807] G. Wolschin, *Diffusion and local deconfinement in relativistic systems*, Phys. Rev. C **69**, 024906 (2004).
- [6808] R. Kuiper and G. Wolschin, *From RHIC to LHC: a relativistic diffusion approach*, Annalen der Physik **16**, 67-77 (2007).
- [6809] R. Kuiper and G. Wolschin, *Hadron production in heavy relativistic systems*, Europhys. Lett. **78**, 22001 (2007).
- [6810] G. Wolschin, *From RHIC to LHC: A relativistic diffusion approach*, Nucl. Phys. A **787**, 68C-73C (2007).
- [6811] A. Simon and G. Wolschin, *Nonlinear diffusion in relativistic heavy-ion collisions?*, preprint (2017), 1711.11324 [nucl-th].
- [6812] A. Simon and G. Wolschin, *Examining nonextensive statistics in relativistic heavy-ion collisions*, Phys. Rev. C **97**, 044913 (2018).
- [6813] G. Wolschin, *Testing nonextensive statistics in relativistic heavy-ion collisions*, EPJ Web of Conferences **206**, 04002 (2019), doi: 10.1051/epjconf/201920604002
- [6814] H. Zheng and L. Zhu, *Can Tsallis distribution fit all the particle spectra produced at RHIC and LHC?*, preprint (2015),
- [6815] B. De, S. Bhattacharyya, G. Sau and S.K. Biswas, *Non-extensive thermodynamics, heavy ion collisions and particle production at RHIC energies*, Internat. J. Mod. Phys. E - Nuclear Physics **16**, 1687-1700 (2007).
- [6816] B. De, *Probing initial and final-state distributions for Pb + Pb collisions at 2.76 TeV: Tsallis-Boltzmann vs. q-Weibull formalism*, Internat. J. Engineering Sciences and Research Technology **7** (5), 218-232(2018).

- [6817] T. Mukherjee, A.K. Singh and D. Senapati, *Performance evaluation of wireless communication systems over Weibull/q-Lognormal shadowed fading Using Tsallis' entropy framework*, Wireless Personal Communications (2019), doi: 10.1007/s11277-019-06190-8
- [6818] T. Mukherjee and D. Senapati, *An adaptive q-lognormal model towards the computation of average channel capacity in slow fading channels*, preprint (2021).
- [6819] *A study on detecting selfish nodes in wireless LAN using Tsallis-entropy analysis*, J. Korean Institute of Intelligent Systems **22**, (1), 12-21 (2012).
- [6820] H. Li and F. Xiao, *A method for combining conflicting evidences with improved distance function and Tsallis entropy*, Internat. J. Intelligent Systems (2020), doi: 10.1002/int.22273
- [6821] Y.H. Chen, G.X. Zhang, and F.H. Liu, *On productions of net-baryons in central Au-Au collisions at RHIC energies*, Advances High Energy Physics, 614090 (2015) (9 pages), doi: <http://dx.doi.org/10.1155/2015/614090>
- [6822] J. Chen, J. Deng, Z. Tang, Z. Xu and L. Yi, *Nonequilibrium kinetic freeze-out properties in relativistic heavy ion collisions from energies employed at the RHIC beam energy scan to those available at the LHC*, Phys. Rev. C **104**, 034901 (2021).
- [6823] B. De, *Non-extensive statistics and a systematic study of meson-spectra at LHC energy $\sqrt{s(NN)} = 2.76\text{TeV}$* , preprint (2014), 1408.5811 [nucl-th].
- [6824] B. De, *Non-extensive statistics and understanding particle production and kinetic freeze-out process from pT-spectra at 2.76 TeV*, Eur. Phys. J. A **50**, 138 (2014) (11 pages), doi: 10.1140/epja/i2014-14138-2
- [6825] B. De, *A systematic study of transverse spectra of jets at LHC energies*, Internat. J. Engineering Sciences & Research Technology **7** (3), 600-609 (2018).
- [6826] B. De, *Analysing spectra at LHC energy 2.76TeV in the light of non-extensive statistics*, Open Access International Journal of Science & Engineering **3** (2), 49-53 (2018).
- [6827] B. De, G. Sau, S.K. Biswas, S. Bhattacharyya and P. Guptaroy, *Analyzing nonextensivity of η -spectra in relativistic heavy ion collisions at $\sqrt{s(NN)} = 200\text{GeV}$* , Internat. J. Mod. Phys. A **25**(6), 1239-1251 (2010).
- [6828] B. De, *Non-extensive statistics and a systematic study of meson-spectra at LHC $\sqrt{s(NN)} = 2.76\text{TeV}$* , Eur. Phys. J. A **50**, 70 (2014) (13 pages), doi: 10.1140/epja/i2014-14070-5
- [6829] B. De, *Systematic study of K^{*0} and ϕ -meson spectra with Tsallis non-extensive statistics*, IJSRST **4** (2), 1485-1490 (2018).
- [6830] F.H. Liu, T. Tian and X.J. Wen, *Transverse mass and rapidity distributions and space dispersion plots of (net-)protons in Pb-Pb collisions at SPS energies*, Eur. Phys. J. A **50** 50 (2014) (13 pages), doi: 10.1140/epja/i2014-14050-9
- [6831] G. Wolschin, *Diffusion in relativistic systems*, Progress in Particles and Nuclear Physics **59**, 374-382 (2007).
- [6832] G. Wolschin, *Particle production and nonlinear diffusion in relativistic systems*, Annalen Physik **17**, 462-476 (2008).
- [6833] D. Rohrscheid and G. Wolschin, *Charged-hadron production in the three-sources RDM at LHC energies*, EPJ Web of Conferences **70**, 00074 (2014) (13 pages), <http://dx.doi.org/10.1051/epjconf/20147000074>
- [6834] G. Wolschin, *Beyond the thermal model in relativistic heavy-ion collisions*, Physical Review C **94** (2), 024911 (2016).
- [6835] F.I.M. Pereira, R. Silva and J.S. Alcaniz, *Nonextensive effects on the phase structure of quantum hadrodynamics*, Phys. Lett. A **373**, 4214-4218 (2009).
- [6836] A.P. Santos, F.I.M. Pereira, R. Silva and J.S. Alcaniz, *Consistent nonadditive approach and nuclear equation of state*, J. Phys. G: Nucl. Part. Phys. **41**, 055105 (2014) (13 pages), doi:10.1088/0954-3899/41/5/055105
- [6837] G. Lambiase, *Constraints on q-parameter of non extensive statistics by MSW mechanism of neutrino oscillations*, preprint (2002).
- [6838] A. Ghoshal and G. Lambiase, *Constraints on Tsallis cosmology from big bang nucleosynthesis and dark matter freeze-out*, preprint (2021), 2104.11296 [astro-ph.CO].
- [6839] M. Coraddu, M. Lissia, G. Mezzorani and P. Quarati, *Super-Kamiokande hep neutrino best fit: A possible signal of nonmaxwellian solar plasma*, Physica A **326**, 473-481 (2003).
- [6840] A. Lavagno, M. Lissia, G. Mezzorani and P. Quarati, *On the use of non-extensive distributions in the solar plasma*, Communication at 5th Topical Workshop at the Gran Sasso Laboratory: "Solar Neutrinos: Where are the Oscillations?" (MACRO Collaboration, 2002).
- [6841] A. Haubold, H.J. Haubold and D. Kumar, *Solar neutrino records: Gauss or non-Gauss is the question*, preprint (2012), 1202.1549 [physics.gen-ph].
- [6842] A. Haubold, H.J. Haubold and D. Kumar, *Heliosheath: Diffusion entropy analysis and nonextensivity q-triplet*, preprint (2012), 1202.3417 [physics.gen-ph].

- [6843] N.P. Acharya, S. Basnet and R. Khanal, *Bohm sheath criterion and dust charging for active magnetized plasma in the presence of q -nonextensive electron distribution*, AIP Advances **13**, 105209 (2023).
- [6844] N.P. Acharya, S. Basnet, A.P. Misra and R. Khanal, *Dust-ion-acoustic damped solitary waves and shocks in laboratory and Saturn's E-ring magnetized nonthermal dusty plasmas with anisotropic ion pressure and dust charge fluctuation*, Phys. Plasmas **31**, 093701 (2024).
- [6845] W.M. Alberico, P. Czerski, A. Lavagno, M. Nardi and V. Soma, *Signals of non-extensive statistical mechanics in high energy nuclear collisions*, Physica A **387**, 467-475 (2007).
- [6846] A. Lavagno and D. Pigato, *Nonextensive statistical effects in protoneutron stars*, Eur. Phys. J. A **47**, 52 (2011) (9 pages).
- [6847] A. Lavagno and D. Pigato, *Power-law quantum distributions and nonextensive statistical effects in protoneutron stars*, communicated at IC-MSQUARE 2012 (Budapest, 3-7 September 2012).
- [6848] G. Gervino, A. Lavagno and D. Pigato, *Power-law quantum distributions in protoneutron stars*, J. Phys. Conference Series **442**, 012065 (2013) (5 pages) doi:10.1088/1742-6596/442/1/012065
- [6849] G. Gervino, A. Lavagno and D. Pigato, *Power-law distributions in protoneutron stars*, J. Phys.: Conference Series **665**, 012071 (2016) (4 pages), doi:10.1088/1742-6596/665/1/012071
- [6850] G. Gervino, A. Lavagno and D. Pigato, *Nonextensive statistical effects in the quark-gluon plasma formation at relativistic heavy-ion collisions energies*, Cen. Eur. J. Phys. **10** (3), 594-601 (2012).
- [6851] G. Gervino, A. Lavagno and D. Pigato, *Nonlinear statistical effects in relativistic mean field theory*, J. Phys.: Conference Series **306**, 012070 (2011) (9 pages).
- [6852] A. Lavagno and D. Pigato, *Nonextensive statistical effects and strangeness production in hot and dense nuclear matter*, J. Phys. G: Nucl. Part. Phys. **39**, 125106 (2012) (16 pages).
- [6853] A. Lavagno, G. Gervino and D. Pigato, *Nonlinear nuclear equation of state and thermodynamical instabilities in warm and dense nuclear matter*, J. Physics: Conference Series **482**, 012024 (2014) (8 pages), doi:10.1088/1742-6596/482/1/012024
- [6854] D. Pigato, *Nonlinear relativistic equation of states and phase transitions in nuclear matter at finite temperature and baryon density*, Doctor Thesis (Politecnico di Torino, 2012) (146 pages).
- [6855] A. Lavagno and D. Pigato, *Nonextensive nuclear liquid-gas phase transition*, Physica A **392**, 5164-5171 (2013).
- [6856] T.S. Biro, G. Purcsel and B. Muller, *How low is the thermodynamic limit?*, preprint (2003) [hep-ph/0311301].
- [6857] R.K. Saxena, A.M. Mathai and H.J. Haubold, *Astrophysical thermonuclear functions for Boltzmann-Gibbs statistics and Tsallis statistics*, Physica A **344**, 649 (2004).
- [6858] H.J. Haubold, A.M. Mathai and R.K. Saxena, *Statistical mechanics: Understanding nature through reaction and diffusion*, Lecture Notes, Third SERC School (Pala, India, 2005).
- [6859] A.M. Mathai and R.K. Saxena and H.J. Haubold, *A certain class of Laplace transforms with applications to reaction and reaction-diffusion equations*, Astrophys. Space Sci. **305**, 283-288 (2006).
- [6860] S.R. Naik and H.J. Haubold, *On the q -Laplace transform and related special functions*, Axioms **5**, 24 (2016) (16 pages), doi: 10.3390/axioms5030024
- [6861] S.L.E.F. da Silva, J.M. de Araujo and G. Corso, *Full-waveform inversion based on q -Laplace distribution*, Pure Appl. Geophys. (2021), in press, doi: 10.1007/s00024-021-02839-3
- [6862] R.K. Saxena, A.M. Mathai and H.J. Haubold, *Fractional reaction-diffusion equations*, Astrophys. Space Sci. **305**, 289-296 (2006).
- [6863] A.M. Mathai and H.J. Haubold, *Pathway parameter and thermonuclear functions*, preprint (2007), 0708.2231 [cond-mat.stat-mech].
- [6864] A.M. Mathai and H.J. Haubold, *On entropic, distributional, and differential pathways*, Bull. Astr. Soc. India **35**, 669-680 (2007).
- [6865] A.M. Mathai and H.J. Haubold, *A versatile integral in physics and astronomy and Fox's H -function*, Axioms **8**, 122 (2019), doi: 10.3390/axioms8040122
- [6866] A.M. Mathai and H.J. Haubold, *Stochastic processes via the pathway model*, Entropy **17**, 2642-2654 (2015), doi: 10.3390/e17052642
- [6867] H.J. Haubold and D. Kumar, *Extension of thermonuclear functions through the pathway model including Maxwell-Boltzmann and Tsallis distribution*, Astroparticle Physics **29**, 70-76 (2008).
- [6868] D. Kumar and H.J. Haubold, *On extended thermonuclear functions through pathway model*, Advances in Space Research **45**, 698-708 (2010).
- [6869] H.J. Haubold and D. Kumar, *Fusion yield: Guderley model and Tsallis statistics*, J. Plasma Phys. 1-14 (Cambridge University Press, 2010), DOI:10.1017/S0022377810000590

- [6870] H.J. Haubold, A.A. Kabeer and D. Kumar, *Analytic forms of thermonuclear functions*, Physica A **630**, 129249 (2023).
- [6871] H.J. Haubold, A.M. Mathai and S. Thomas, *An entropic pathway to multivariate Gaussian density*, preprint (2007), 0709.3820 [cond-mat.stat-mech].
- [6872] A.M. Mathai and H.J. Haubold, *Mittag-Leffler functions to pathway model to Tsallis statistics*, Integral Transforms and Special Functions **21** (11), 867-875 (2010).
- [6873] H.J. Haubold, *Special functions and pathways for problems in astrophysics: An essay in honor of A.M. Mathai*, Proceedings of the 8th Annual Conf. SSFA, **8**, 3-23 (2007), 0905.3910 [astro-ph.SR].
- [6874] A.M. Mathai, *Mittag-Leffler functions*, in *Introduction to Fractional Calculus*, CMSS Module 10, Second Printing, Chapter 2, 19-46 (2015).
- [6875] A.M. Mathai and H.J. Haubold, *An Introduction to Fractional Calculus*, (Nova Science Publishers, New York, 2017).
- [6876] N.S. Paul and S.C. Sudheeran, *Pathway model and its applications*, Newsletter **12** (2), Centre for Mathematical Sciences (India, 2010).
- [6877] K.K. Jose and S.R. Naik, *A class of asymmetric pathway distributions and an entropy interpretation*, Physica A **387**, 6943-6951 (2008).
- [6878] K.K. Jose and S.R. Naik, *On the q -Weibull distribution and its applications*, Comm. in Statistics - Theory and Methods **38**, 912-926 (2009).
- [6879] S.B. Provost, A. Saboor, G.M. Cordeiro, M. Mansoor, *On the q -generalized extreme value distribution*, REVSTAT-Statistical Journal **16** (1), 45-70 (2018).
- [6880] K. Muralidharan, D. Kumar and S.R. Naik, *The q -pathway or Tsallis process and its applications*, preprint (2011).
- [6881] K. Muralidharan, D. Kumar and S.R. Naik, *A non-homogeneous Poisson process through pathway model*, J. Indian Statistical Association **52** (2), 247-266 (2014).
- [6882] S.R. Naik, *Pathways - Introduction*, preprint (2014).
- [6883] E.P. Borges, E.M. de Assis and S.A.B. Vieira de Melo, *Full description of failure rate curve through generalized q -Weibull model*, preprint (2010).
- [6884] E.M. Assis, E.P. Borges and S.A.B. Vieira de Melo, *Generalized q -Weibull model and the bathtub curve*, Internat. J. Quality and Reliability Management **30** (7), 720-736 (2013).
- [6885] M. Xu and H. Mao, *q -Weibull distributions: Perspectives and applications in reliability engineering*, IEEE Transactions on Reliability (2024).
- [6886] M.Z. Arshad, M.Z. Iqbal, A. Anees, Z. Ahmad and O.S. Balogun, *A new bathtub shaped failure rate model: Properties, and applications to engineering sector*, Pak. J. Statist. **37** (1), 57-80 (2021).
- [6887] M.R. Irshad, S. Aswathy, R. Maya, A.I. Al-Omari and G. Alomani, *A flexible model for bounded data with bathtub shaped hazard rate function and applications*, AIMS Mathematics **9** (9), 24810-24831 (2024).
- [6888] J.V.S. Novo, *Análise de confiabilidade de sistemas de máquinas colhedoras de cana-de-acucar usando o modelo q -Weibull*, Master Thesis (Engenharia Industrial, Universidade Federal da Bahia, 2019).
- [6889] E.M. Assis, G.A.C. Lima, A. Prestes, F. Marinho and L.A.N. Costa, *q -Weibull applied to Brazilian hydropower equipment*, IEEE (2018).
- [6890] E.M. Assis, E.P. Borges, S.A.B. Vieira de Melo and L. Schnitman, *Modeling failure rate of a robotic welding station using generalized q -distributions*, Internat. J. of Quality and Reliability Management **32** (2), 156-166 (2015), doi: 10.1108/IJQRM-11-2012-0151
- [6891] X. Jia, S. Nadarajah and B. Guo, *Inference on q -Weibull parameters*, Stat. Papers (2017) (19 pages), doi: 10.1007/s00362-017-0951-3
- [6892] S. Kayal, *On generalized dynamic survival and failure entropies of order (α, β)* , Statistics and Probability Letters **96**, 123-132 (2015).
- [6893] S. Kayal, *Generalized residual entropy and upper record values*, J. Probability Statistics 640426 (2015).
- [6894] S. Kayal, *Some results on a generalized residual entropy based on order statistics*, Statistica, anno LXXIV (4), 383-402 (2014).
- [6895] S. Kayal, *On generalized cumulative entropies*, Probability in the Engineering and Informational Sciences **30** (4), 640-662 (2016).
- [6896] S. Kayal and M.R. Tripathy, *A quantile-based Tsallis- α divergence*, Physica A **492**, 496-505 (2018).
- [6897] I. Sartori, E.M. de Assis, A.L. da Silva, R.L.F.V. de Melo, E.P. Borges, S.A.B. Vieira de Melo, *Reliability modeling of a natural gas recovery plant using q -Weibull distribution*, Eds. R.M. de Brito Alves, C.A.O. do Nascimento and E. Chalbaud Biscaia Jr., 10th International Symposium on Process Systems Engineering, Part A **27**, 1797-1802 (2009).

- [6898] A.S. Hassan, N. Alsadat, C. Chesneau and A.W. Shawki, *A novel weighted family of probability distributions with applications to world natural gas, oil, and gold reserves*, *Mathematical Biosciences and Engineering* **20** (11), 19871-19911 (2023).
- [6899] A. Drago, A. Lavagno and P. Quarati, *Nonextensive statistical effects on the relativistic nuclear equation of state*, *Physica A* **344**, 472 (2004).
- [6900] A. Bernui, C. Tsallis and T. Villela, *Temperature fluctuations of the cosmic microwave background radiation: A case of nonextensivity?*, *Phys. Lett. A* **356**, 426-430 (2006).
- [6901] A. Bernui, C. Tsallis and T. Villela, *Deviation from Gaussianity in the cosmic microwave background temperature fluctuations*, *Europhys. Lett.* **78**, 19001 (2007) (6 pages).
- [6902] L.F. Burlaga and A.F. Vinas, *Multi-scale probability distributions of solar wind speed fluctuations at 1 AU described by a generalized Tsallis distributions*, *Geophys. Res. Lett.* **31**, L16807 (2004).
- [6903] L.F. Burlaga and A.F. Vinas, *Multiscale structure of the magnetic field and speed at 1 AU during the declining phase of solar cycle 23 described by a generalized Tsallis PDF*, *J. Geophys. Res. - Space Phys.* **109**, A12107 (2004).
- [6904] T. Nieves-Chinchilla and A.F. Vinas, *Solar wind electron distribution functions inside magnetic clouds*, *J. Geophys. Res.* **113**, A02105 (2008) (16 pages).
- [6905] T. Nieves-Chinchilla and A. F.-Vinas, *Kappa-like distributions functions inside magnetic clouds*, *Geofisica Internacional* **47**, 245-249 (2008).
- [6906] A.F. Vinas, P.S. Moya, R. Navarro and J.A. Araneda, *The role of higher-order modes on the electromagnetic whistler-cyclotron wave fluctuations of thermal and non-thermal plasmas*, *Phys. Plasmas* **21**, 012902 (2014) (10 pages); doi: 10.1063/1.4861865
- [6907] A.F. Vinas, P.S. Moya, R.E. Navarro, J.A. Valdivia, J.A. Araneda and V. Munoz, *Electromagnetic fluctuations of the whistler-cyclotron and firehose instabilities in a Maxwellian and Tsallis-kappa-like plasma*, *J. Geophys. Research A: Space Physics* **120** (5), 3307-3317 (2015).
- [6908] M. Bilal, A. ur Rehman, M. Ahmad, M.A. Shahzad, M. Sarfraz and S. Mahmood, *Linear analysis of whistler mode instability in anisotropic q- nonextensive distributed plasmas: a numerical approach*, *Phys. Scr.* **98**, 095607 (2023).
- [6909] A. Kaur, *Solitary waves in four component dusty plasma using kappa distribution of electrons and ions*, Master Thesis (Punjab Agricultural University, 2017).
- [6910] P. Astfalk and F. Jenko, *Parallel and oblique firehose instability thresholds for bi-kappa distributed protons*, *J. Geophys. Research - Space Phys.* **121** (4), 2842-2852 (2016).
- [6911] R.E.Navarro,V. Munoz, J. Araneda, A.F. Vinas, P.S. Moya and J.A. Valdivia, *Magnetic Alfvén-cyclotron fluctuations of anisotropic nonthermal plasmas*, *J. Geophys. Res.: Space Physics* 2382-2396 (2015), doi: 10.1002/2014JA020550
- [6912] J. Du and Y. Song, *Solar wind speed theory and the nonextensivity of solar corona*, *Proceedings of the Third UN/ESA/NASA Workshop on the International Heliophysical Year 2007 and Basic Space Science, Astrophysics and Space Science Proceedings*, eds. H.J. Haubold and A.M. Mathai, (Springer-Verlag, Berlin, 2009), pages 93-102.
- [6913] E.G. Pavlos, O.E. Malandraki, O.V. Khabarova, L.P. Karakatsanis, G.P. Pavlos and G. Livadiotis, *Non-extensive statistical analysis of energetic particle flux enhancements caused by the interplanetary coronal mass ejection-heliospheric current sheet interaction*, *Entropy* **21**, 648 (2019), doi: 10.3390/e21070648
- [6914] A. Valamontes, *How DLSFH explains the results of "Non-Extensive Statistical Analysis of Energetic Particle Flux Enhancements Caused by the Interplanetary Coronal Mass Ejection-Heliospheric Current Sheet Interaction" paper*, preprint (2024).
- [6915] K. Parisi, *Nonlinear analysis of time series and applications to biomedical signals*, Thesis (University of Thrace, Greece, 2018) [In Greek].
- [6916] Yu.A. Antonov, V.I. Zakharov and N.A. Sukhareva, *Entropy functionals and information difference of satellite-monitoring time series*, *Cosmic Research* **61** (6), 522-533 (2023).
- [6917] A.F. Vinas, R.L. Mace and R.F. Benson, *Dispersion characteristics for plasma resonances of Maxwellian and Kappa distribution plasmas and their comparisons to the IMAGE/RPI observations*, *J. Geophys. Research* **110**, A06202 (2005).
- [6918] R.F. Abdul and R.L. Mace, *One-dimensional particle-in-cell simulations of electrostatic Bernstein waves in plasmas with kappa velocity distributions*, *Phys. Plasmas* **22**, 102107 (2015) (15 pages).
- [6919] J. Włodarczyk and B. Kierdaszuk, *Kinetics of triplet excitation transport in disordered organic solids*, *Chem. Phys.* **297**, 139 (2004).

- [6920] G.P. Beretta, J.C. Keck, M. Janbozorgi and H. Metghalchi, *The Rate-Controlled Constrained-Equilibrium Approach to Far-From-Local-Equilibrium Thermodynamics*, *Entropy* **14**, 92-130 (2012), doi:10.3390/e14020092
- [6921] L.F. Burlaga and A.F.-Vinas, *Triangle for the entropic index q of non-extensive statistical mechanics observed by Voyager 1 in the distant heliosphere*, *Physica A* **356**, 375 (2005).
- [6922] D.J. Zamora, F. Abaca, B.S. Zossi and A.G. Elias, *Evidence of nonlinear signatures in solar wind proton density at the L1 Lagrange point*, preprint (2025), 2504.11265 [physics.space-ph].
- [6923] L.F. Burlaga and A.F.-Vinas, *Tsallis distribution functions in the solar wind: Magnetic field and velocity observations*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 259-266 (New York, 2007).
- [6924] L.F. Burlaga, *Tsallis statistics for models and observations of the heliospheric magnetic field*, Invited lecture at ASTRONUM 2008, 3rd International Conference on Numerical Modeling of Space Plasma Flows, St. John, US Virgin Islands, June 8-13 2008; Numerical Modeling of Space Plasma Flows: ASTRONUM-2008 **406**, 181-188 (2009).
- [6925] L.F. Burlaga, N.F. Ness and M.H. Acuna, *Multiscale structure of magnetic fields in the heliosheath*, *J. Geophysical Res.-Space Physics* **111**, A09112 (2006).
- [6926] J.D. Richardson, L.F. Burlaga, H. Elliott, W.S. Kurth, Y.D. Liu and R. von Steiger, *Observations of the outer heliosphere, heliosheath, and interstellar medium*, *Space Science Reviews* **218**, 35 (2022), doi: 10.1007/s11214-022-00899-y
- [6927] L.F. Burlaga, N.F. Ness and M.H. Acuna, *Multiscale structure of magnetic fields in the heliosheath*, *J. Geophysical Res.-Space Physics* **111**, A09112 (2006).
- [6928] L.F. Burlaga, A.F. Vinas, N.F. Ness and M.H. Acuna, *Tsallis statistics of the magnetic field in the heliosheath*, *Astrophys. J.* **644**, L83-L86 (2006).
- [6929] L.F. Burlaga and N.F. Ness, *Compressible "turbulence" observed in the heliosheath by Voyager 2*, *Astrophys. J.* **703**, 311-324 (2009).
- [6930] L.F. Burlaga and N.F. Ness, *Sectors and large-scale magnetic field strength fluctuations in the heliosheath near 110 AU: Voyager 1, 2009*, *Astrophys. J.* **725**, 1306-1316 (2010).
- [6931] L.F. Burlaga and N.F. Ness, *Magnetic field strength fluctuations in the heliosheath: Voyager 1 observations during 2009*, *Astrophys. J.* **744** (1), 51 (2012).
- [6932] L.F. Burlaga and N.F. Ness, *Transition from the sector zone to the unipolar zone in the heliosheath: Voyager 2 magnetic field observations*, *Astrophys. J.* **737** (1), 35 (2011).
- [6933] L. F. Burlaga and N. F. Ness, *Magnetic field strength fluctuations and the q -triplet in the heliosheath: Voyager 2 observations from 91.0 to 94.2 AU at latitude 30° S*, *Astrophys. J.*, **765**, 35 (2013) (10 pages).
- [6934] L.F. Burlaga, N.F. Ness and J.D. Richardson, *Heliosheath magnetic field and plasma observed by Voyager 2 during 2015 near solar maximum*, *Astrophys. J.* **861**, 9 (2018), doi: 10.3847/1538-4357/aac6b8
- [6935] L. Burlaga, *Voyager observations of the magnetic field in the heliosheath and the local interstellar medium*, *J. Phys.: Conference Series* **642**, 012003 (2015) (18 pages), doi:10.1088/1742-6596/642/1/012003
- [6936] L.F. Burlaga, N.F. Ness, J.D. Richardson, R.B. Decker and S.M. Krimigis, *Heliosheath magnetic field and plasma observed by Voyager 2 during 2012 in the rising phase of solar cycle 24*, *Astrophys. J.* **818**, 147 (2016) (16 pages), doi:10.3847/0004-637X/818/2/147
- [6937] L.F. Burlaga, D.B. Berdichevsky, L.K. Jian, A. Koval, N.F. Ness, J. Park, J.D. Richardson and A. Szabo, *Magnetic fields observed by Voyager 2 in the heliosheath*, *Astrophys. Journal* **906**, 119 (2021) (16 pages).
- [6938] L.F. Burlaga, W.S. Kurth, D.A. Gurnett, D.B. Berdichevsky, L.K. Jian, N.F. Ness, J. Park and A. Szabo, *Magnetic field and plasma density observations of a pressure front by Voyager 1 during 2020 in the very local interstellar medium*, *Astrophys. Journal* **911**, 61 (2021), doi: 10.3847/1538-4357/abeb6a
- [6939] L.F. Burlaga, A. F-Vinas and C. Wang, *Tsallis distributions of magnetic field strength variations in the heliosphere: 5 to 90 AU*, *J. Geophysical Res.-Space Physics* **112**, A07206 (2007).
- [6940] L.F. Burlaga, N.F. Ness, M.H. Acuna, *Magnetic fields in the heliosheath and distant heliosphere: Voyager 1 and 2 observations during 2005 and 2006*, *Astrophys. J.* **668**, 1246-1258 (2007).
- [6941] L.F. Burlaga, N.F. Ness and M.H. Acuna, *Magnetic field strength fluctuations and temperature in the heliosheath*, *Astrophys. J.* **691**, L82-L86 (2009).
- [6942] L.F. Burlaga, N.F. Ness and J.D. Richardson, *Transition from the unipolar region to the sector zone: Voyager 2, 2013 and 2014*, *Astrophys. J.* **841**, 47 (2017) (13 pages).
- [6943] M.J.A. Bolzan, R.R. Rosa, F.M. Ramos, P.R. Fagundes and Y. Sahai, *Generalized thermostatistics and wavelet analysis of solar wind and proton density variability*, *J. Atmospheric and solar-terrestrial physics* (2005), in press.

- [6944] J.K. Chen, H.Y. Li, S.Y. Yang and B.Q. Kou, *A new method for extracting transient signal feature in transmission system based on Tsallis wavelet entropy*, Materials Science and information Technology, ed. C.S. Zhang, Parts 1-8, (433-440), 2417-2422 (2012).
- [6945] L.F. Burlaga and A.F. Vinas, *Tsallis distributions of the large-scale magnetic field strength fluctuations in the solar wind from 7 to 87 AU*, J. Geophys. Res. - Space Phys. **110**, A07110 (2005).
- [6946] J.D. Richardson and L.F. Burlaga, *The solar wind in the outer heliosphere and heliosheath*, Space Sci. Rev. **176**, 217-235 (2013), doi: 10.1007/s11214-011-9825-5
- [6947] L.F. Burlaga, N.F. Ness, D.B. Berdichevsky, L.K. Jian, J. Park, P. Mostafavi and J.D. Richardson, *A magnetic pressure front upstream of the heliopause and the heliosheath magnetic fields and plasma, Observed during 2017*, The Astrophysical Journal **877**, 31 (2019) (9 pages).
- [6948] L.F. Burlaga, D.B. Berdichevsky, L.K. Jian, J. Park, A. Szabo and N.F. Ness, *Intermittency in the magnetic hump in the VLISM*, Astrophysical Journal, **964**, 41 (2024) (14 pages).
- [6949] L.F. Burlaga, J. Park, D.B. Berdichevsky, L.K. Jian and A. Szabo, *The solar magnetic hump, heliopause, and the very local interstellar medium*, Astrophysical Journal Letters **971**, L17 (2024).
- [6950] F. Fraternali, N.V. Pogorelov and L.F. Burlaga, *Signatures of intermittency and fine-scale turbulence in the very local interstellar medium*, Astrophys. J. Lett. **897**, L28 (2020) (7 pages).
- [6951] F. Fraternali, L. Adhikari, H. Fichtner, T.K. Kim, J. Kleimann, S. Oughton, N.V. Pogorelov, V. Roytershteyn, C.W. Smith, A.V. Usmanov, G.P. Zank and L. Zhao, *Turbulence in the outer heliosphere*, Space Science Reviews **218**, 50 (2022).
- [6952] M. Kornbleuth, T.Y. Chen, J.F. Drake, B. Lavraud, A.T. Michael, P. Mostafavi, M. Opher, J.D. Richardson, J.M. Sokol and B. Zieger, *The importance of understanding the solar magnetic field in the heliosphere using the interstellar probe*, communicated at Heliophysics 2024 Decadal Survey (2023).
- [6953] L.F. Burlaga, N.F. Ness, D.B. Berdichevsky, L.K. Jian, J. Park and A. Szabo, *Intermittency and q-Gaussian distributions in the magnetic field of the very local interstellar medium (VLISM) observed by Voyager 1 and Voyager 2*, Astrophys. J. Lett. **901**, L2 (2020), doi: 10.3847/2041-8213/abb199
- [6954] G. Livadiotis and D.J. McComas, *Near-equilibrium heliosphere - far-equilibrium heliosheath*, eds. G.P. Zank, J. Borovsky, R. Bruno, J. Cirtain, S. Cranmer, H. Elliott, J. Giacalone and W. Gonzalez, G. Li, E. Marsch, E. Moebius, N. Pogorelov, J. Spann and O. Verkhoglyadova, Proceedings of the Thirteenth International Solar Wind Conference (Solar Wind 13), AIP Conference Proceedings **1539**, 344-347 (2013), 10.1063/1.4811057
- [6955] G. Livadiotis, L. Assas, B. Dennis, S. Elaydi and E. Kwessi, *Kappa function as a unifying framework for discrete population modeling*, Natural Resource Modeling (2015), in press.
- [6956] J. Ramirez-Pacheco, D. Torres-Roman, J. Argaez-Xool, L. Rizo-Dominguez, J. Trejo-Sanchez and F. Manzano-Pinzon, *Wavelet q-Fisher information for scaling signal analysis*, Entropy **14**, 1478-1500 (2012).
- [6957] J. Cho and A. Lazarian, *Simulations of electron magnetohydrodynamic turbulence*, Astrophys. J. **701**, 236-252 (2009).
- [6958] A. Esquivel and A. Lazarian, *Tsallis statistics as a tool for studying interstellar turbulence*, Astrophys. J. **710**, 125-132 (2010).
- [6959] B.M. Tofflemire, B. Burkhart and A. Lazarian, *Interstellar sonic and Alfvénic Mach numbers and the Tsallis distribution*, The Astrophysical Journal **736**, 60 (2011) (19 pages).
- [6960] B. Burkhart, V. Ossenkopf, A. Lazarian and J. Stutzki, *The effects of radiative transfer on the probability distribution functions of molecular magnetohydrodynamic turbulence*, Astrophys. J. **771**, 122 (2013) (13 pages).
- [6961] B. Burkhart, D.C. Collins and A. Lazarian, *Observational diagnostics of self-gravitating MHD turbulence in giant molecular clouds*, Astrophys. J. **808**, 48 (2015) (18 pages), doi:10.1088/0004-637X/808/1/48
- [6962] D.F. Gonzalez-Casanova, A. Lazarian and J. Cho, *Effects of the magnetic field direction on the Tsallis statistic*, preprint (2018).
- [6963] J. Du, *Test of nonextensive statistical mechanics by solar sound speeds*, Europhys. Lett. **75**, 861-867 (2006).
- [6964] J. Du, *The role of nonextensivity in the equilibrium of a star*, preprint (2006) [astro-ph/0602098].
- [6965] G. Wilk and Z. Włodarczyk, *Nonextensivity in the spectrum of cosmic rays - a possible physical explanation*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 273-274 (New York, 2007).
- [6966] M. Nakatsutsumi, J.R. Davies, R. Kodama, J.S. Green, K.L. Lancaster, K.U. Akli, F.N. Beg, S.N. Chen, D. Clark, R.R. Freeman, C.D. Gregory, H. Habara, R. Heathcote, D.S. Hey, K. Highbarger, P. Jaanimagi, M.H. Key, K. Krushelnick, T. Ma, A. MacPhee, A.J. MacKinnon, H. Nakamura, R.B. Stephens, M. Storm, M. Tampo, W. Theobald, L. Van Woerkom, R.L. Weber, M.S. Wei, N.C. Woolsey and P.A. Norreys, *Space and*

- time resolved measurements of the heating of solids to ten million kelvin by a petawatt laser*, New J. Phys. **10**, 043046 (2008) (13 pages).
- [6967] G. Wilk and Z. Wlodarczyk, *Power laws in elementary and heavy-ion collisions - A story of fluctuations and nonextensivity?*, preprint (2008).
- [6968] G. Wilk, Z. Wlodarczyk and W. Wolak, *Composition of fluctuations of different observables*, Acta Physica Polonica B **42** (6),1277-1285 (2011).
- [6969] G. Wilk and Z. Wlodarczyk, *Some intriguing aspects of multiparticle production processes*, International J. Modern Physics A **33** (10), 1830008 (2018).
- [6970] M. Rybczynski, G. Wilk and Z. Wlodarczyk, *Relaxation and correlation times of nonequilibrium multiparticle systems*, preprint (2021),
- [6971] W.M. Alberico and A. Lavagno, *Non-extensive statistical effects in high-energy collisions*, in *Statistical Power-Law Tails in High Energy Phenomena*, ed. T.Biro, Eur. Phys. J. A **40**, 313-323 (2009).
- [6972] J.M. Conroy and H.G. Miller, *Color superconductivity and Tsallis statistics*, Phys. Rev. D **78**, 054010 (2008) (5 pages).
- [6973] J.M. Conroy and H.G. Miller, *Determining the Tsallis parameter via maximum entropy*, Phys.Rev. E **91**, 052112 (2015) (3 pages).
- [6974] C. Beck, *Superstatistics in high-energy physics: Application to cosmic ray energy spectra and e+e- annihilation*, Eur. Phys. J. A **40**, 267-273 (2009).
- [6975] A. Lavagno, P. Quarati and A.M. Scarfone, *Nonextensive relativistic nuclear and subnuclear equation of state*, Braz. J. Phys. **39**, 457-463 (2009).
- [6976] M. Coraddu, M. Lissia, P. Quarati and A.M. Scarfone, *Nuclear problems in astrophysical q-plasmas and environments*, Braz. J. Phys. **39**, 380-387 (2009).
- [6977] D.B. de Freitas and J.R. de Medeiros, *Nonextensivity in the solar magnetic activity during the increasing phase of solar Cycle 23*, Europhys. Lett. **88**, 19001 (2009).
- [6978] D.B. de Freitas and J.R. De Medeiros, *Nonextensivity in the solar neighborhood*, EPL **97** (1), 19001 (2012) (5 pages).
- [6979] D.B. de Freitas and J.R. De Medeiros, *A non-extensive approach to the stellar rotational evolution I. F- and G- type stars*, MNRAS **433**, 1789-1795 (2013).
- [6980] M.A. Moret, *Self-affinity and nonextensivity of sunspots*, Phys. Lett. A **378**, 494-496 (2014), doi: <http://dx.doi.org/10.1016/j.physleta.2013.12.030>
- [6981] L.F.G. Batista, T.M. Santiago, P.C.F. da Silva Filho, C.V. Silva and D.B. Freitas, *Hemispheric asymmetry in the sunspot cycle as a nonextensive phenomenon*, Solar Physics **298** (7) (2023).
- [6982] J. Du, Y. Song, L. Guo, Z. Liu and L. Liu, *Solar wind speed theory and the nonextensivity of solar corona*, Proceedings of the Third UN/ESA/NASA Workshop on the International Heliophysical Year 2007 and Basic Space Science, Astrophysics and Space Science Proceedings, eds. H.J. Haubold and A.M. Mathai, DOI 10.1007/978-3-642-03325-4 (Springer, Berlin, 2010).
- [6983] E. Lee, D.R. Williams and G. Lapenta, *Spectroscopic indication of suprathermal ions in the solar corona*, preprint (2013), 1305.2939 [astro-ph.SR].
- [6984] J. Dudik, E. Dzifcakova, N. Meyer-Vernet, G. Del Zanna, P.R. Young, A. Giunta, B. Sylwester, J. Sylwester, M. Oka, H.E. Mason, C. Vocks, L. Matteini, S. Krucker, D.R. Williams and S. Mackovjak, *Non-equilibrium processes in the solar corona, transition region, flares, and solar wind*, Solar Phys. **292**, 100 (2017) (72 pages), doi: 10.1007/s11207-017-1125-0
- [6985] G. Wilk and Z. Wlodarczyk, *Nonextensive thermal sources of cosmic rays*, Cent. Eur. J. Phys. **8** (5), 726-736 (2010).
- [6986] G. Wilk and Z. Wlodarczyk, *Consequences of temperature fluctuations in observables measured in high energy collisions*, Eur. Phys. J. A **48**, 161 (2012) (13 pages).
- [6987] H.J. Haubold, A.M. Mathai and R.K. Saxena, *Analysis of solar neutrino data from SuperKamiokande I and II: Back to the solar neutrino problem*, Publ. Astron. Soc. Japan 1-6 (2012, Astronomical Society of Japan), 1209.1520 [astro-ph.SR].
- [6988] H.J. Haubold, A.M. Mathai and R.K. Saxena, *Analysis of solar neutrino data from Super-Kamiokande I and II*, Entropy **16**, 1414-1425 (2014), doi:10.3390/e16031414
- [6989] A.M. Mathai, R.K. Saxena and H.J. Haubold, *Back to the solar neutrino problem*, COSPAR Space Research Today 112-117 (December 2012).
- [6990] A.M. Mathai and H.J. Haubold, *On a generalized entropy measure leading to the pathway model with a preliminary application to solar neutrino data*, Entropy **15**, 4011-4025 (2013), doi:10.3390/e15104011

- [6991] F. Alouani-Bibi and J.A. le Roux, *Transport of cosmic-ray protons in intermittent heliospheric turbulence: Model and simulations*, *Astrophys. J.* **781**, 93 (2014) (12 pages), doi:10.1088/0004-637X/781/2/93
- [6992] L.D. Hanratti, *Λ and K^0_S production in $Pb^?Pb$ and pp collisions with ALICE at the LHC*, Doctor Thesis (University of Birmingham, School of Physics and Astronomy, June 2014).
- [6993] B. De, *Non-extensive statistics and understanding particle production and kinetic freeze-out process from p_T -spectra at 2.76 TeV*, preprint (2014), 1409.3079 [nucl-th].
- [6994] K. Unnikrishnan and P. Richards, *How does solar eclipse influence the complex behavior of midlatitude ionosphere? Two case studies*, *J. Geophys. Research A: Space Physics* **119** (2), 1157-1171 (2014).
- [6995] M.S. Soumya, and K. Unnikrishnan, *A study on variations of complexity quantifiers over mid-latitude ionosphere during quiet/storm time periods*, *AIP Conference Proceedings* **2379**, 020006 (2021).
- [6996] M. Praszalowicz and A. Francuz, *Geometrical scaling in inelastic inclusive particle production at the LHC*, *Phys. Rev. D* **92**, 074036 (2015) (9 pages).
- [6997] L.N. Gao and F.H. Liu, *Comparing Erlang distribution and Schwinger mechanism on transverse momentum spectra in high energy collisions*, *Advances High Energy Phys.*, 1505823 (2016) (15 pages), doi: <http://dx.doi.org/10.1155/2016/1505823>
- [6998] L.N. Gao, F.H. Liu and R.A. Lacey, *Excitation functions of parameters in Erlang distribution, Schwinger mechanism, and Tsallis statistics in RHIC BES program*, *Eur. Phys. J. A* **52** (5), 137 (2016) (18 pages).
- [6999] M.L. Knichel, *Transverse momentum distributions of primary charged particles in pp , p -Pb and Pb -Pb collisions measured with ALICE at the LHC*, Doctor Thesis (Institut für Kernphysik, Darmstadt Technische Universität, 2005).
- [7000] W. Saleh and A.G. Shalaby, *Non-extensive transverse momentum distribution for identified particles at $\sqrt{s_{NN}} = 7.7, 11.5, 19.6, 27, 39$ GeV*, *Internat. J. Modern Physics E* **30** (8), 2150073 (2021), doi: 10.1142/S0218301321500737
- [7001] S. Schumann, *Modification of K^0_S and Λ (Anti Λ) transverse momentum spectra in Pb - Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV with ALICE*, Springer Thesis 71-116 (2016).
- [7002] M. Abrahao, W.G. Dantas, R.M. de Almeida, D.R. Gratieri and T.J.P. Penna, *On the impact of Tsallis statistics on cosmic ray showers*, *Advances High Energy Phys.*, ID 4676024 (2016) (7 pages), doi: 10.1155/2016/4676024
- [7003] A. Deppman and E. Megias, *Fractal aspects of hadrons*, preprint (2016), 1610.09928v1 [hep-ph].
- [7004] R.A. Bertens, *Path length dependence of jet quenching measured with ALICE at the LHC*, Doctor Thesis (Utrecht University, 2016).
- [7005] T. Bhattacharyya, E. Megias and A. Deppman, *Jet quenching of the heavy quarks in the quark-gluon plasma and the nonadditive statistics*, *Phys. Lett. B* **856**, 138907 (2024).
- [7006] K.M. Shen, T. S. Biro and E.K. Wang, *Different non-extensive models for heavy-ion collisions*, *Physica A* **492**, 2353-2360 (2018).
- [7007] M.W. Winkler, *Cosmic ray antiprotons at high energies*, *J. Cosmology Astroparticle Phys.* (2) 048 (2017) (24 pages), doi: 10.1088/1475-7516/2017/02/048
- [7008] T.S. Biro and A. Peshier, *Limiting temperature from a parton gas with power-law tailed distribution*, *Phys. Lett. B* **632**, 247-251 (2006).
- [7009] A. Takacs and G.G. Barnafoldi, *Non-extensive motivated parton fragmentation functions*, preprint (2018), 811.01974 [hep-ph].
- [7010] A.N. Mishra, G.G. Barnafoldi and G. Paic, *Quantifying the underlying event: Investigating angular dependence of multiplicity classes and transverse-momentum spectra in high-energy pp collisions at LHC energies*, *J. Phys. G: Nucl. Part. Phys.* **50**, 095004 (2023). preprint (2021), 2108.13938 [hep-ph].
- [7011] T.S. Biro and G. Purcsel, *Equilibration of two power-law tailed distributions in a parton cascade model*, *Phys. Lett. A* **372**, 1174-1179 (2008).
- [7012] T.S. Biro and G. Purcsel, *Quark matter and non-extensive thermodynamics*, *Acta Physica Hungarica A - Heavy Ions Physics* **22**, 223 (2005).
- [7013] T.S. Biro, K. Urmosy and G.G. Barnafoldi, *Pion and kaon spectra from distributed mass quark matter*, *J. Phys. G: Nucl. Part. Phys.* **35**, 044012 (2008) (6 pages).
- [7014] T.S. Biro, G. G. Barnafoldi and P. Van, *Derivation of Tsallis entropy and the quark-gluon-plasma temperature*, *Eur. Phys. J. A* (2013), in press, 1208.2533v2 [hep-ph].
- [7015] T.S. Biro, G. G. Barnafoldi and P. Van, *Quark-gluon plasma connected to finite heat bath*, *Eur. Phys. J. A* **49**, 110 (2013) (5 pages), doi: 10.1140/epja/i2013-13110-0
- [7016] P. Van, G.G. Barnafoldi, T.S. Biro and K. Urmosy, *Nonadditive thermostatics and thermodynamics*, *J. Phys.: Conf. Series* **394**, 012002 (2012) (11 pages).

- [7017] G.G. Barnafoldi, K. Urmossy and T.S. Biro, *Tsallis-Pareto like distributions in hadron-hadron collisions*, J. Phys., Conf. Series **270**, 012008 (2011) (4 pages).
- [7018] L.L. Li, M. Waqas, M. Ajaz, A.M. Khubrani, H. Yao and M.A. Khan, *Analyses of pp, Cu-Cu, Au-Au and Pb-Pb collisions by Tsallis-Pareto type function at RHIC and LHC energies*, Entropy **24**, 1219 (2022).
- [7019] T.S. Biro, *Thermodynamics of composition rules*, communicated at SQM2009 - International Conference on Strangeness of Quark Matter (27 Sept - 2 Oct 2009, Buzios, Rio de Janeiro, Brazil).
- [7020] T.S. Biro, K. Urmossy and Z. Schram, *Thermodynamics of composition rules*, J. Phys. G: Nucl. Part. Phys. **37**, 094027 (2010) (7 pages).
- [7021] T.S. Biro and K. Urmossy, *From quark combinatorics to spectral coalescence*, Eur. Phys. J. Special Topics **155**, 1-12 (2008).
- [7022] T.S. Biro, G. Purcsel and K. Urmossy, *Non-extensive approach to quark matter*, in *Statistical Power-Law Tails in High Energy Phenomena*, Eur. Phys. J. A **40**, 325-340 (2009).
- [7023] T.S. Biro and K. Urmossy, *Transverse hadron spectra from a stringy quark matter*, J. Phys. G: Nucl. Part. Phys. **36**, 064044 (2009)(7 pages).
- [7024] L. Zhu and H. Zheng, *Systematic analysis of Hadron spectra produced at RHIC and LHC with Tsallis distribution*, Communication at the 14th Joint European Thermodynamics Conference (Budapest, May 21-25, 2017).
- [7025] K. Urmossy and T.S. Biro, *Cooper-Frye formula and non-extensive coalescence at RHIC energy*, Phys. Lett. B **689**, 14-17 (2010).
- [7026] ALICE Collaboration, *Enhanced deuteron coalescence probability in jets*, Phys. Rev. Lett. **131**, 042301 (2023).
- [7027] T.S. Biro, K. Urmossy, P. Van, G.G. Barnafoldi and Z. Schram, *Non-extensive statistical model for strange and non-strange hadron spectra at RHIC and LHC energies*, Acta Physica Polonica B **43** (4), 811-820 (2012).
- [7028] T.S. Biro, G. Gyorgyi, A. Jakovac and G. Purcsel, *A non-conventional description of quark matter*, J. Phys. G: Nucl. Part. Phys. **31**, S759-S763 (2005).
- [7029] H.J. Pirner, B.Z. Kopeliovich and K. Reygers, *Strangeness enhancement due to string fluctuations*, Phys. Rev. D **101**, 114010 (2020).
- [7030] Alice Collaboration, *Investigating strangeness enhancement with multiplicity in pp collisions using angular correlations*, JHEP **09**, 204 (204).
- [7031] J. Cleymans, *The thermal model at the Large Hadron Collider*, Acta Physica Polonica B **43** (4), 563-570 (2012).
- [7032] T.S. Biro and K. Urmossy, *Pions and kaons from stringy quark matter*, preprint (2008), 0812.2985 [hep-ph].
- [7033] K. Urmossy, G.G. Barnafoldi and T.S. Biro, *Microcanonical jet-fragmentation in proton-proton collisions at LHC energy*, preprint (2012), 1204.1508 [hep-ph].
- [7034] H. Zheng, L. Zhu and A. Bonasera, *Systematic analysis of hadron spectra in p + p collisions using Tsallis distribution*, preprint (2015), 1506.03156 [nucl-th].
- [7035] Y. Gao, H. Zheng, L.L. Zhu and A. Bonasera, *Description of charged particle pseudorapidity distributions in Pb + Pb collisions with Tsallis thermodynamics*, preprint (2017), 1706.03693 [nucl-th].
- [7036] K.M. Shen, *Analysis on hadron spectra in heavy-ion collisions with a new non-extensive approach*, J. Phys. G: Nucl. Part. Phys. **46**, 105101 (2019).
- [7037] H. Zheng and L. Zhu, *Can Tsallis distribution fit all the particle spectra produced at RHIC and LHC?*, Advances High Energy Phys. 180491 (2015) (9 pages), doi: <http://dx.doi.org/10.1155/2015/180491>
- [7038] T.S. Biro and V.G. Czinner, *A q-parameter bound for particle spectra based on black hole thermodynamics with Renyi-entropy*, Phys. Lett. B **726**, 861-865 (2013).
- [7039] V.G. Czinner, *Black hole entropy and the zeroth law of thermodynamics*, Internat. J. Mod. Phys. D **24** (9), 1542015 (2015) (10 pages), doi: 10.1142/S0218271815420158
- [7040] J. Cleymans, G. Hamar, P. Levai and S. Wheaton, *Near-thermal equilibrium with Tsallis distributions in heavy ion collisions*, J. Phys. G **36**, 064018 (2009).
- [7041] J. Cleymans, *Is strangeness chemically equilibrated?*, preprint (2010), 1001.3002 [hep-ph].
- [7042] J. Cleymans, *Recent developments around chemical equilibrium*, J. Phys. G: Nucl. Part. Phys. **37**, 094015 (2010) (7 pages).
- [7043] T. Bhattacharyya, J. Cleymans, A. Khuntia, P. Pareek and R. Sahoo, *Radial flow in non-extensive thermodynamics and study of particle spectra at LHC in the limit of small (q - 1)*, Eur. Phys. J. A **52**, 30 (2016) (11 pages), doi: 10.1140/epja/i2016-16030-5
- [7044] P. Pareek, *Measurement of neutral pion and eta mesons in proton-proton collisions with ALICE at the Large Hadron Collider*, Doctor Thesis (Indian Institute of Technology, Indore, 2018).

- [7045] A. Khuntia, P. Sahoo, P. Garg, R. Sahoo and J. Cleymans, *Speed of sound in hadronic matter using non-extensive statistics*, Proceedings DAE-BRNS Symp. on Nucl. Phys. **60**, 744-745 (2015).
- [7046] A. Khuntia, P. Sahoo, P. Garg, R. Sahoo and J. Cleymans, *Speed of sound in hadronic matter using non-extensive Tsallis statistics*, Eur. Phys. J. A (2016) **52**, 292 (2016) (5 pages), doi: 10.1140/epja/i2016-16292-9
- [7047] S. Jain, R. Gupta and S. Jena, *Study of isothermal compressibility and speed of sound in the hadronic matter formed in heavy-ion collision using unified formalism*, Universe **9**, 170 (2023).
- [7048] T. Bhattacharyya, J. Cleymans and S. Mogliacci, *Analytic results for the Tsallis thermodynamic variables*, Phys. Rev. D **94**, 094026 (2016) (9 pages).
- [7049] T. Bhattacharyya, J. Cleymans, P. Garg, P. Kumar, S. Mogliacci, R. Sahoo and S. Tripathy, *Applications of the Tsallis statistics in high energy collisions*, communicated at *International Workshop on Discovery Physics at the LHC*, J. Physics: Conf. Series **878**, 012016 (2017) (8 pages), doi: 10.1088/1742-6596/878/1/012016
- [7050] T. Bhattacharyya, J. Cleymans, L. Marques, S. Mogliacci and M.W. Paradza, *On the precise determination of the Tsallis parameters in proton-proton collisions at LHC energies*, J. Phys. G: Nucl. Part. Phys. **45**, (2018) (14 pages), doi: 10.1088/1361-6471/aaea0
- [7051] M.D. Azmi, T. Bhattacharyya, J. Cleymans and M. Paradza, *Energy density at kinetic freeze-out in Pb-Pb collisions at the LHC using the Tsallis distribution*, J. Phys. G: Nuclear and Particle Physics **47** (4), 045001 (2020).
- [7052] T. Bhattacharyya, J. Cleymans, S. Mogliacci, A.S. Parvan, A.S. Sorin and O.V. Teryaev, *Non extensivity of the QCD p_T -spectra*, Eur. Phys. J. A **54**, 222 (2018), doi: 10.1140/epja/i2018-12647-6
- [7053] T. Bhattacharyya, J. Cleymans, A. Khuntia, P. Pareek and R. Sahoo, *Small $(q - 1)$ expansion of the Tsallis distribution and study of particle spectra at LHC*, Proceedings of South Africa Institute of Physics 463-468 (2016).
- [7054] R.P. Scharenberg, B.K. Srivastava, A.S. Hirsch and C. Pajares, *Hot dense matter: Deconfinement and clustering of color sources in nuclear collisions*, Universe **4**, 96 (2018), doi: 10.3390/universe4090096
- [7055] P.K. Khandai and P. Shukla, *A thermal approach to RHIC and LHC*, Proceedings of the DAE-BRNS Symp. on Nucl. Phys. **60**, 788-789 (2015).
- [7056] X. Yin, L. Zhu and H. Zheng, *A new two-component model for hadron production in heavy-ion collisions*, Advances High Energy Physics, 6708581 (2017) (10 pages).
- [7057] S. Grigoryan, *A three component model for hadron p_T -spectra in pp and Pb-Pb collisions at the LHC*, preprint (2021), 2109.07888 [hep-ph].
- [7058] S. Grigoryan, *A three component model for hadron p_T -spectra in pp and Pb-Pb collisions at the LHC*, Eur. Phys. J. A **57**, 328 (2021).
- [7059] N. Jacazio, *Light flavor hadron production as a function of the charged-particle multiplicity at the LHC*, Il Nuovo Cimento **40 C**, 7 (2017), doi: 10.1393/ncc/i2017-17007-8
- [7060] Alice Collaboration, *Enhanced production of multi-strange hadrons in high-multiplicity proton-proton collisions*, Nature Physics 535-539 (2017), doi: 10.1038/NPHYS4111
- [7061] M. Puccio, *Production of (anti-)(hyper-)nuclei at LHC energies with ALICE*, EPJ Web of Conferences **171**, 14009 (2018), doi: 10.1051/epjconf/201817114009
- [7062] M. Puccio, *Study of the production of nuclei and anti-nuclei at the LHC with the ALICE experiment*, Doctor Thesis (Dipartimento di Fisica, Universita di Torino, 2017).
- [7063] F. Bock, *Measurement of direct photons and neutral mesons in small collisions systems with the ALICE experiment at the LHC*, Doctor Thesis (Combined Faculties for the Natural Sciences and for Mathematics of Ruperto-Carola University of Heidelberg, Germany, 2017).
- [7064] ALICE Collaboration, *Production of deuterons, tritons, ^3He nuclei and their anti-nuclei in pp collisions at $\sqrt{s} = 0.9, 2.76$ and 7 TeV*, Phys. Rev. C **97**, 024615 (2018).
- [7065] H.B. Qiu, *Evidence for M-theory based on fractal nearly tri-bimaximal neutrino mixing*, preprint (2017), 1712.07689 [hep-ph].
- [7066] S.D. Campos and V.A. Okorokov, *Hollowness effect and entropy in high energy elastic scattering*, preprint (2018), 1807.02061v1 [hep-ph].
- [7067] B. Donigus for the ALICE Collaboration, *Highlights of the production of (anti-)(hyper-)nuclei and exotica with ALICE at the LHC*, International Workshop on Discovery Physics at the LHC (Kruger, 2018), Journal of Physics: Conf. Series **1271**, 012001 (2019), doi: 10.1088/1742-6596/1271/1/012001
- [7068] A. Borissov, *Production of Σ^0 hyperons at LHC with ALICE*, EPJ Web of Conferences **222**, 02002 (2019).
- [7069] Alice Collaboration, *Production of Σ hyperons and search of Σ hypernuclei at LHC with ALICE*, Physics of Atomic Nuclei **86** (6), 1336-1340 (2023).

- [7070] Alice Collaboration, *Rapidity dependence of antideuteron coalescence in pp collisions at $\sqrt{s} = 13$ TeV with ALICE*, Phys. Lett. B **860**, 139191 (2025).
- [7071] Alice Collaboration, *Measurement of ω meson production in pp collisions at $\sqrt{s} = 13$ TeV*, JHEP 04, 067 (2025).
- [7072] P. Jund, S.G. Kim and C. Tsallis, *Crossover from extensive to nonextensive behavior driven by long-range interactions*, Phys. Rev. B **52**, 50 (1995).
- [7073] P.P. Yang, M.Y. Duan and F.H. Liu, *Dependence of related parameters on centrality and mass in a new treatment for transverse momentum spectra in high energy collisions*, Eur. Phys. J. A **57**, 63 (2021).
- [7074] P.G. Ortega and E. Ruiz Arriola, *Is $X(3872)$ a bound state?*, Chinese Physics C **43** (12),124107 (2019).
- [7075] A.A.E. Shafiq and P. Davoudifar, *Imitating hadron production with PHIT*, preprint (2020), doi: 10.21203/rs.3.rs-130021/v1
- [7076] Y. Su, X. Chen, Y. Sun and Y. Zhang *Non-extensive statistical distributions of charmed meson production in Pb-Pb and pp(\bar{p}) collisions*, Nuclear Science and Techniques **32**, 108 (2021).
- [7077] Alice Collaboration, *Production of $K^*(892)^0$ and $\Phi(1020)$ in pp and Pb-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV*, Phys. Rev. C **106**, 034907 (2022).
- [7078] Alice Collaboration, *Enhanced deuteron coalescence probability in jets*, Phys. Rev. Lett. **131**, 042301 (2023).
- [7079] Alice Collaboration, *System size dependence of hadronic rescattering effect at LHC energies*, preprint (2023), 2308.16115 [nucl-ex].
- [7080] L. Gyulai, G. Biro, R. Vertesi and G.G. Barnafoldi, *How far can we see back in time in high-energy collisions using charm hadrons?*, Journal of Physics G: Nuclear and Particle Physics **51**, 085103 (2024).
- [7081] P. Braun-Munzinger, K. Redlich, N. Sharma and J. Stachel, *Emergence of new systematics for open charm production in high energy collisions*, JHEP **04**, 058 (2025).
- [7082] N. Makhaldiani, *New physics, semi-inclusive distributions, and statistical potentials*, Physics of Particles and Nuclei **55**, 1075-1079 (2024).
- [7083] I.M. Laczowski, H. Mukai, P.R.G. Fernandes, R.S. Mendes and L.R. Evangelista, *Anomalous decay in short time response of ternary mixtures with ferrofluid*, Braz. J. Phys. **42**, 14-19 (2012).
- [7084] L.M. Varela, J. Carrete, R. Munoz-Sola, J.R. Rodriguez and J. Gallego, *Nonextensive statistical mechanics of ionic solutions*, Phys. Lett. A **370**, 405-412 (2007).
- [7085] O. Kruglova, F.M. Mulder, G.J. Kearley, S.J. Picken, J.A. Stride, I. Paraschiv and H. Zuilhof, *Dispersive kinetics in discotic liquid crystals*, Phys. Rev. E **82**, 051703 (2010) (8 pages).
- [7086] Y. Zheng, *The nonextensive parameter as a stability criterion of convection in a fluid*, EPL **101**, 29002 (2013) (5 pages).
- [7087] Y. Zheng and J. Du, *The stationary state and gravitational temperature in a pure self-gravitating system*, Physica A **420**, 41-48 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2014.10.086>
- [7088] J.R. Grigera, *Extensive and non-extensive thermodynamics. A molecular dynamic test*, Phys. Lett. A **217**, 47 (1996).
- [7089] S.E. Curilef, *Alguns aspectos fundamentais da mecanica estatistica nao extensiva e aplicacoes*, PhD Thesis (Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro-Brazil, 1997).
- [7090] S. Curilef and C. Tsallis, *Critical temperature and nonextensivity in long-range-interacting Lennard-Jones-like fluids*, Phys. Lett. A **264**, 270 (1999).
- [7091] A. Tabernerero, S.A.B. Vieira de Melo, R. Mammucari, E.M. Martin del Valle and N.R. Foster, *Modelling solubility of solid active principle ingredients in sc-CO₂ with and without cosolvents: A comparative assessment of semiempirical models based on Chrastil's equation and its modifications*, J. Supercritical Fluids **93**, 91-102 (2014), doi: <http://dx.doi.org/doi:10.1016/j.supflu.2013.11.017>
- [7092] N. Barrantes Melgar, *Curvas caloricas em duas e tres dimensoes para sistemas tipo Lennard-Jones incluindo forcas de longo alcance*, Master Thesis (Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro, 2013).
- [7093] S. Curilef, *A long-range ferromagnetic spin model with periodic boundary conditions*, Phys. Lett. A **299**, 366 (2002).
- [7094] S. Curilef, *Mean field, long-range ferromagnets and periodic boundary conditions*, Physica A **340**, 201 (2004).
- [7095] S. Curilef, *On exact summations in long-range interactions*, Physica A **344**, 456 (2004).
- [7096] M. Abdel-Aty, *Linear entropy of a driven central spin interacting with an antiferromagnetic environment*, Natural Science **6**, 532-539 (2014), doi: <http://dx.doi.org/10.4236/ns.2014.67052>
- [7097] B.P. Vollmayr-Lee and E. Luijten, *A Kac-potential treatment of nonintegrable interactions*, Phys. Rev. E **63**, 031108 (2001).
- [7098] C. Tsallis, *Comment on "A Kac-potential treatment of nonintegrable interactions" by Vollmayr-Lee and Luijten*, preprint (2001) [cond-mat/0011022].

- [7099] S. Curilef, *Nonextensive microscopic behavior of long-range interacting particles in periodic media*, Int. J. Mod. Phys. C **11**, 629 (2000).
- [7100] C. Dariva, J.V. Oliveira and J.C. Pinto, *Experimental design for model discrimination of thermodynamic models*, Fluid Phase Equilibria **146**, 35 (1998).
- [7101] M. Schwaab, F.M. Silva, C.A. Queipo, A.G. Barreto Jr., M. Nele and J.C. Pinto, *A new approach for sequential experimental design for model discrimination*, Chem. Eng. Sc. **61**, 5791-5806 (2006).
- [7102] B.J. Costa Cabral, *Fluids of strongly interacting dipoles: Monte Carlo sampling using Tsallis statistics*, Physica A **295**, 234 (2001) [Proc. IUPAP Workshop on New Trends on Fractal Aspects of Complex Systems (16-20 October 2000, Maceio-AL, Brazil), ed. M.L. Lyra (Elsevier, Amsterdam, 2001)].
- [7103] V. Garcia-Morales, J. Cervera and J. Pellicer, *Coupling theory for counterion distributions based in Tsallis statistics*, preprint (2003) [cond-mat/0311546].
- [7104] Z. Zhu, H. Wang, D. Peng and J. Dou, *Modelling the hindered settling velocity of a falling particle in a particle-fluid mixture by the Tsallis entropy theory*, Entropy **21**, 55 (2019), doi: 10.3390/e21010055
- [7105] M.T. Yeganeh and M.M. Heidari, *Estimation of one-dimensional velocity distribution by measuring velocity at two points*, Flow Measurement and Instrumentation **73**, 101737 (2020), doi: doi.org/10.1016/j.flowmeasinst.2020.101737
- [7106] L.E. Guerrero and J.A. Gonzalez, *Long-range interacting solitons: Pattern formation and nonextensive thermostatics*, Physica A **257**, 390 (1998).
- [7107] B.A. Mello, J.A. Gonzalez, L.E. Guerrero and E. Lopez-Atencio, *Topological defects with long-range interactions*, Phys. Lett. A **244**, 277 (1998).
- [7108] N. Ito and Z. Yoshida, *Statistical mechanics of magnetohydrodynamics*, Phys. Rev. E **53**, 5200 (1996).
- [7109] C. Tsallis and A.M.C. Souza, *Nonlinear inverse bremsstrahlung absorption and nonextensive thermostatics*, Phys. Lett. A **235**, 444 (1997).
- [7110] J.A.S. Lima, R. Silva Jr. and J. Santos, *Plasma oscillations and nonextensive statistics*, Phys. Rev. E **61**, 3260 (2000).
- [7111] X.C. Chen and X.Q. Li, *Comment on "Plasma oscillations and nonextensive statistics"*, Phys. Rev. E **86**, 068401 (2012) (5 pages).
- [7112] J.F. Nieves and J.D. Verges, *Simplified calculations of plasma oscillations with non-extensive statistics*, Eur. Phys. J. D **74**, 194 (2020), doi: 10.1140/ep_jd/e2020-10241-2
- [7113] M. Aramaki, Y. Sakawa and T. Shoji, *Characterization of cooled ion cloud in torus ion trap*, communicated at "Frontiers in Plasma Science" (26-28 July 2000, National Institute for Fusion Science, Toki, Gifu, Japan).
- [7114] M. Notzold, S.Z. Hassan, J. Tauch, E. Endres, R. Wester and M. Weidemuller, *Thermometry in a multipole ion trap*, Appl. Sci. **10**, 5264 (2020), doi: 10.3390/app10155264
- [7115] S. Abe, *Tsallis' nonextensive statistical mechanics and pure-electron plasma*, J. Plasma and Fusion Res. **78**, 36 (2002) [In Japanese].
- [7116] M.P. Leubner, *Fundamental issues on kappa-distributions in space plasmas and interplanetary proton distributions*, Phys. Plasmas **11**, 1308 (2004).
- [7117] Z. Liu, L. Liu and J. Du, *A nonextensive approach for the instability of current-driven ion-acoustic waves in space plasmas*, Phys. Plasmas **16**, 072111 (2009) (5 pages).
- [7118] A. Cabo, S. Curilef, A. Gonzalez, N.G. Cabo-Bizet and C.A. Vera, *A statistical physics of stationary and metastable states: description of the plasma column experimental data*, preprint (2009), 0908.1833 [cond-mat.stat-mech].
- [7119] M.P. Leubner and Z. Voros, *A nonextensive entropy approach to solar wind intermittency*, Astrophys. J. **618**, 547 (2005).
- [7120] M.P. Leubner and Z. Voros, *A nonextensive entropy path to probability distributions in solar wind turbulence*, Nonlinear Processes in geophysics **12**, 171-180 (2005).
- [7121] M. Leitner, Z. Voros and M.P. Leubner, *Introducing log-kappa distributions for solar wind analysis*, J. Geophys. Res.-Space Phys. **114**, A12104 (2009).
- [7122] M. Leitner, C.J. Farrugia and Z. Voros, *Change of solar wind quasi-invariant in solar cycle 23-Analysis of PDFs*, J. Atmospheric Solar-Terrestrial Phys. **73**, 290-293 (2011).
- [7123] M. Leitner, M.P. Leubner and Z. Voros, *Creating kappa-like distributions from a Galton board*, Physica A **390**, 1248-1257 (2010).
- [7124] M.P. Leubner, Z. Voros and W. Baumjohann, *Nonextensive entropy approach to space plasma fluctuations and turbulence*, Advances in Geosciences **2**, Chapter 04 (2006) in press [astro-ph/0605572].
- [7125] X.Y. Li, C. Wang and T.L. Zhang, *Tsallis distribution of the interplanetary magnetic field at 0.72 AU: Venus Express observation*, Geophys. Res. Lett. **36**, L11103 (2009).

- [7126] D. Jiulin, *Nonextensivity in nonequilibrium plasma systems with Coulombian long-range interactions*, Phys. Lett. A **329**, 262 (2004).
- [7127] S.I. Kononenko, V.M. Balebanov, V.P. Zhurenko, O.V. Kalantar'yan, V.I. Karas, V.T. Kolesnik, V.I. Muratov, V.E. Novikov, I.F. Potapenko and R.Z. Sagdeev, *Nonequilibrium electron distribution functions in a semiconductor plasma irradiated with fast ions*, Plasma Phys. Reports **30**, 671 (2004).
- [7128] H. Yu and J.L. Du, *The nonextensive parameter for nonequilibrium electron gas in an electromagnetic field*, Annals of Physics **350**, 302-309 (2014).
- [7129] B.G. Adewi, I. Aremua and L. Gouba, *Thermodynamics for an electron gas in a uniform magnetic field in nonextensive statistics*, preprint (2025), 2504.20072 [cond-mat.stat-mech].
- [7130] V. Munoz, *Longitudinal oscillations in nonextensive relativistic plasma*, preprint (2004) [physics/0410204].
- [7131] V. Munoz, *A nonextensive statistics approach for Langmuir waves in relativistic plasmas*, Nonlinear Processes Geophys. **13**, 237-241 (2006).
- [7132] B. Gong and X.Y. Dong, *Langmuir wave in a dusty plasma with nonextensive electrons*, Phys. Plasmas **24**, 043704 (2017) (5 pages), doi:10.1063/1.4979269
- [7133] L. Liang, X. Liu and W. Gao, *Modulational instability by strong Langmuir waves in q-plasma*, AIP Advances **8**, 075002 (2018), doi: 10.1063/1.5035141
- [7134] F.E.M. Silveira and M.H. Benetti, *Map of suprathermal onto nonextensive parameters describing Langmuir waves*, Fundamental Plasma Physics (2022), in press, doi: 10.1016/j.fpp.2022.100006
- [7135] D. Xiao, X. Chen, S. Liu, H. Chen and Y. Xiong, *Development of the Langmuir probe under q-distribution for NCST*, AIP Advances **14**, 015238 (2024).
- [7136] M.R. Hossen, *Nonlinear dynamics in a strongly coupled cryogenic complex plasma in the presence of polarization force and effective dust temperature*, AIP Advances **14**, 015335 (2024).
- [7137] J.H. Misguich, *An overview of the Tsallis generalized Boltzmann entropy and power-law distributions: Towards a statistical foundation for Levy flights and superdiffusion*, preprint (2000) PHY/NTT-2000.003, Commissariat a l' Energie Atomique (Cadarache-France).
- [7138] P. Brault, A. Caillard, A.L. Thomann, J. Mathias, C. Charles, R.W. Boswell, S. Escribano, J. Durand and T. Sauvage, *Plasma sputtering deposition of platinum into porous fuel cell electrodes*, J. Phys. D **37**, 3419 (2004).
- [7139] F. Valentini, *Nonlinear Landau damping in nonextensive statistics*, Physics of Plasmas **12**, 072106 (2005).
- [7140] N. Kabalan, M. Ahmad and A. Asad, *Landau damping of dust acoustic solitary waves in nonextensive dusty plasma*, Baghdad Science Journal **21**, 1378-1390 (2023).
- [7141] J. Goswami and S.S. Kausik, *Investigating the effects of coupling in strongly coupled dusty plasma: A comparative study of coupling parameter representations*, IEEE Transactions on Plasma Science **99**, 1-11 (2024).
- [7142] R.A. Lopez, R.E. Navarro, S.I. Pons and J.A. Araneda, *Landau damping in Kaniadakis and Tsallis distributed electron plasmas*, Physics Plasmas **24**, 102119 (2017), doi: 10.1063/1.5004688
- [7143] F. Valentini and R. D'Agosta, *Electrostatic Landau pole for kappa-velocity distributions*, Physics of Plasmas **14**, 092111 (2007) (9 pages).
- [7144] S.Q. Liu and X.C. Chen, *Landau damping of longitudinal oscillation in ultra-relativistic plasmas with nonextensive distribution*, Chin. Phys. B **20** (6), 065201 (2011) (6 pages).
- [7145] S.Q. Liu and X.C. Chen, *Dispersion relation of transverse oscillation in relativistic plasmas with non-extensive distribution*, J. Plasma Phys. **77** (5), 653-662 (2011).
- [7146] H.B. Qiu, H.Y. Song and S.B. Liu, *Dispersion relation of dust electrostatic oscillations in a nonextensive plasma*, Phys. Scr. **90**, 105602 (2015) (7 pages), doi:10.1088/0031-8949/90/10/105602
- [7147] S.Q. Liu, H.B. Qiu and X.Q. Li, *Landau damping of dust acoustic waves in the plasma with nonextensive distribution*, Physica A **391**, 5795-5801(2012).
- [7148] W.F. El-Taibany, N.A. Zedan and R.M. Taha, *Landau damping of dust acoustic waves in the presence of hybrid nonthermal nonextensive electrons*, Astrophys. Space Sci. **363**, 129 (2018), doi: 10.1007/s10509-018-3348-4
- [7149] H.B. Qiu, H.Y. Song, S.B. Liu and Z. Yang, *Landau damping of longitudinal oscillation in ultra-relativistic plasmas by analytic function of nonextensive distribution*, Astrophys. Space Sci. **352**, 547-557 (2014), in press, doi: 10.1007/s10509-014-1917-8
- [7150] H.B. Qiu, H.Y. Song, and S.B. Liu, *Collisionless damping of geodesic acoustic mode in plasma with nonextensive distribution*, Phys. Plasmas **21**, 062310 (2014) (5 pages).
- [7151] G.S. Ni, Y. Liu and S.Q. Liu, *Collisionless damping of geodesic acoustic mode in a multi-ion plasma with superthermal ions*, Contrib. Plasma Phys. **55** (8), 578-585 (2015), doi: 10.1002/ctpp.201500036

- [7152] V. Zhdankin, *Nonthermal particle acceleration from maximum entropy in collisionless plasmas*, preprint (2022), 2203.13054 [astro-ph.HE].
- [7153] S.Q. Liu and H.B. Qiu, *Dust acoustic instability with non-extensive distribution*, J. Plasma Physics **79** (1), 105-111 (2013).
- [7154] P.H. Yoon, T. Rhee and C.-M. Ryu, *Self-consistent generation of superthermal electrons by beam-plasma interaction*, Phys. Rev. Lett. **95**, 215003 (2005) (4 pages).
- [7155] P.H. Yoon, *Turbulent equilibrium, and superhalo solar wind electron distribution, and nonextensive entropy*, International Astrophysics Forum 2011, Frontiers in Space Environment Research (Alpbach, June 20-24, 2011).
- [7156] P.H. Yoon, *Weakly turbulent nonlinear wave-particle Interactions in space and astrophysical plasmas*, communicated at 18th Annual International Astrophysics Conference (2019); URSI AP-RASC, (New Delhi, India, 09-15 March 2019).
- [7157] P.H. Yoon, *Classical Kinetic Theory of Weakly Turbulent Nonlinear Plasma Processes*, (Cambridge University Press, 2019).
- [7158] P.H. Yoon, *Non-equilibrium statistical mechanical approach to the formation of non-Maxwellian electron distribution in space*, Eur. Phys. J. Special Topics **229**, 819-840 (2020).
- [7159] P.H. Yoon, *Non-equilibrium statistical mechanics of electron kappa distribution*, in *Kappa Distributions*, 235-277 (Springer, 2021).
- [7160] H. Fichtner, K. Scherer, M. Lazar, H.J. Fahr and Z. Voros, *Kappa distributions and entropy*, in *Kappa Distributions* 299-306 (Springer, 2021).
- [7161] R. K. Paul, *Investigation on the feasibility of fusion in a compressed beam of ions subject to an electrostatic field*, J. Plasma Phys. **1**, 1-18 (2014), doi:10.1017/S0022377814000373
- [7162] S. Bouzat and R. Farengo, *Effects of varying the step particle distribution on a probabilistic transport model*, Phys. Plasmas **12**, 122303 (2005).
- [7163] S. Bouzat and R. Farengo, *Probabilistic transport model with two critical mechanisms for magnetically confined plasmas*, Phys. Rev. Lett. **97**, 205008 (2006) (4 pages).
- [7164] I.D. Dubinova and A.E. Dubinov, *The theory of ion-sound solitons in plasma with electrons featuring the Tsallis distribution*, Technical Phys. Lett. **32**, 575-578 (2006).
- [7165] P.H. Yoon, T. Rhee and C.M. Ryu, *Self-consistent formation of electron kappa distribution:1. Theory*, J. Geophysical Res. - Space Physics **111**, A09106 (2006).
- [7166] P.H. Yoon, *Asymptotic equilibrium between Langmuir turbulence and suprathermal electrons*, Phys. Plasmas **18**, 122303 (2011) (8 pages).
- [7167] P.H. Yoon, *Asymptotic equilibrium between Langmuir turbulence and suprathermal electrons in three dimensions*, Phys. Plasmas **19**, 012304 (2012) (5 pages).
- [7168] S. Kim, P.H. Yoon, G.S. Choe and L. Wang, *Asymptotic theory of solar wind electrons*, Astrophys. J. **806**, 32 (2015) (14 pages), doi:10.1088/0004-637X/806/1/32
- [7169] P.H. Yoon, R.P. Lin, D.E. Larson and S.D. Bale, *Solar wind electrons and Langmuir turbulence*, in *Physics of the heliosphere: A 10 year retrospective*, AIP Conference Proceedings **1436**, eds. J. Heerikhuisen, G. Li G, N. Pogorelov and G. Zank, 80-85 (2012).
- [7170] C.-M. Ryu, T. Rhee, T. Umeda, P.H. Yoon and Y. Omura, *Turbulent acceleration of superthermal electrons*, Phys. Plasmas **14**, 100701 (2007) (4 pages).
- [7171] P.H. Yoon, L.F. Ziebell, R. Gaelzer, R.P. Lin and L. Wang, *Langmuir turbulence and suprathermal electrons*, Space. Sci. Rev. **173**, 459-489 (2012).
- [7172] P.H. Yoon, L.F. Ziebell, R. Gaelzer, L.H. Wang and R.P. Lin, *Solar wind electron acceleration via Langmuir turbulence*, Terrestrial Atmospheric and Oceanic Sciences **24** (2), 175-182 (2013).
- [7173] P.H. Yoon, *Electron kappa distribution and quasi-thermal noise*, J. Geophysical Research, Space Physics (2014), in press, doi: 10.1002/2014JA020353
- [7174] S.F. Tigik, L.T. Petruzzellis, L.F. Ziebell, P.H. Yoon and R. Gaelzer, *Weakly turbulent plasma processes in the presence of inverse power-law velocity tail population*, Phys. Plasmas **24**, 112902 (2017).
- [7175] P.H. Yoon, *Thermodynamic, non-extensive, or turbulent quasi-equilibrium for the space plasma environment*, Entropy **21**, 820; (2019), doi:10.3390/e21090820
- [7176] P.H. Yoon, *Two-fluid approach to weak plasma turbulence*, Plasma Phys. Control. Fusion (2021), in press, doi: 10.1088/1361-6587/ac2e40
- [7177] P.H. Yoon, R.A. Lopez, C.S. Salem, J.W. Bonnell and S. Kim, *Non-thermal solar-wind electron velocity distribution function*, Entropy **26**, 310 (2024).

- [7178] J.-C. Pain, D. Teychenne and F. Gilleron, *Self-consistent modeling of hot plasmas within non-extensive Tsallis thermostatistics*, Eur. Phys. J. D **65**, 441-445 (2011).
- [7179] L. Guo and J. Du, *The κ parameter and κ -distribution in κ -deformed statistics for the systems in an external field*, Phys. Lett. A **362**, 368-370 (2007).
- [7180] T. Cattaert, M.A. Hellberg and L. Mace, *Oblique propagation of electromagnetic waves in a kappa-Maxwellian plasma*, Physics of Plasmas **14**, 082111 (2007) (12 pages).
- [7181] L. Liu and J. Du, *Ion acoustic waves in the plasma with the power-law q -distribution in nonextensive statistics*, Physica A **387**, 4821-4827 (2008).
- [7182] A.M. Scarfone, P. Quarati, G. Mezzorani and M. Lissia, *Analytical predictions of non-Gaussian distribution parameters for stellar plasmas*, Astrophysics and Space Science **315**, 353-359 (2008).
- [7183] R.G. DeVoe, *Power-law distributions for a trapped ion interacting with a classical buffer gas*, Phys. Rev. Lett. **102**, 063001 (2009) (4 pages).
- [7184] F. Huang, Y. Chen, G. Shi, Z. Hu, H. Peng, J. Zheng and M.Y. Yu, *Lower-hybrid drift instability in a thin current sheet with κ velocity distribution*, Phys. Plasmas **16**, 042107 (2009) (6 pages).
- [7185] M. Aramaki, S. Kameyama, Y. Sakawa, T. Shoji and A. Kono, *Observation of String Ion Cloud in a Linear RF Trap*, Non-neutral plasma physics **VII** 1114, 19-24 (2009).
- [7186] Z.P. Liu, L.Y. Liu and J.L. Du, *A nonextensive approach for the instability of current-driven ion-acoustic waves in space plasma*, preprint (2009), 0907.1966 [physics.plasm-ph].
- [7187] X. Ji and J.L. Du, *Diffusion and heat conductivity in the weakly ionized plasma with power-law q -distributions in nonextensive statistics*, Physica A **523**, 292-300 (2019), doi: 10.1016/j.physa.2019.01.046
- [7188] T. Wada, *A nonlinear drift which leads to κ -generalized distributions*, Eur. Phys. J. B **73**, 287-291 (2010).
- [7189] A. Sultana, I. Kourakis, N.S. Saini and M.A. Hellberg, *Oblique electrostatic excitations in a magnetized plasma in the presence of excess superthermal electrons*, Phys. Plasmas **17**, 032310 (2010) (10 pages).
- [7190] B. Kaur and N.S. Saini, *Dust ion-acoustic shock waves in a multicomponent magnetorotating plasma*, Zeitschrift fur Naturforschung A **73** (3), 215-223 (2018).
- [7191] S. Sultana, G. Sarri and I. Kourakis, *Electrostatic shock dynamics in superthermal plasmas*, Phys. Plasmas **19**, 012310 (2012) (10 pages).
- [7192] N.Y. Tanisha, I. Tasnim, S. Sultana, M. Salahuddin and A.A. Mamun, *Electrostatic shock structures in a multi-species nonthermal dusty plasma*, Astrophys. Space Sci. **353**, 137-144 (2014), doi: 10.1007/s10509-014-2006-8
- [7193] S.A. Ema, M. Ferdousi, S. Sultana, and A.A. Mamun, *Dust-ion-acoustic shock waves in nonextensive dusty multi-ion plasmas*, Eur. Phys. J. Plus **130**, 46 (2015) (10 pages), doi: 10.1140/epjp/i2015-15046-0
- [7194] S. Sultana, C. Ranjit, S. Chattopadhyay and E. Gudekli, *Cosmology of the interacting Tsallis holographic dark energy in $f(R, T)$ gravity framework*, International Journal of Modern Physics D (2024).
- [7195] M. Amina, S.A. Ema and A.A. Mamun, *Small-amplitude shock waves and double layers in dusty plasmas with opposite polarity charged dust grains*, Plasma Phys. Reports (2017) (9 pages), doi: 10.1134/S1063780X17060022
- [7196] M. Amina, S.A. Ema and A.A. Mamun, *Nonplanar electrostatic shock waves in an opposite polarity dust plasma with nonextensive electrons and ions*, Pramana - J. Phys. (2017) **88**, 81 (2017) (7 pages), doi: 10.1007/s12043-017-1409-9
- [7197] A. Rafat, M.M. Rahman, M.S. Alam, and A.A. Mamun, *Cylindrical and spherical electron-acoustic shock waves in electron-positron-ion plasmas with nonextensive electrons and positrons*, Commun. Theor. Phys. **63** (2), 243-248 (2015).
- [7198] M.N. Islam, M.G. Hafez and M.S. Alam, *An unmagnetized strongly coupled plasma: Heavy ion acoustic shock wave excitations*, Phys. Scr. **96**, 125610 (2021), doi: 10.1088/1402-4896/ac22cf
- [7199] M.N. Islam, M.G. Hafez and U.K. Deb, *Burgers equation with cubic and quartic nonlinearity: dynamics of heavy ion-acoustic coherent structures in unmagnetized strongly coupled plasma*, Physica Scripta **100** (4), 045249 (2025).
- [7200] M.M. Rahman, A. Rafat, M.S. Alam and A.A. Mamun, *Nonlinear propagation of electron-acoustic waves in a nonextensive electron-positron-ion plasma*, J. Korean Physical Society **66** (6), 941-946 (2015).
- [7201] A. Rafat, M.M. Rahman, M.S. Alam and A.A. Mamun, *Effects of nonextensivity on the electron-acoustic solitary structures in a magnetized electron-positron-ion plasma*, Plasma Physics Reports **42** (8), 792-798 (2016).
- [7202] S.A. Ema, M.R. Hossen and A.A. Mamun, *Linear and nonlinear heavy ion-acoustic waves in a strongly coupled plasma*, Phys. Plasmas **22**, 092108 (2015) (7 pages), doi: 10.1063/1.4930265
- [7203] S.A. Ema, M.R. Hossen and A.A. Mamun, *Nonlinear ion modes in a strongly coupled plasma in the presence of nonthermal ion fluids and polarization force*, Plasma Physics Reports **42** (4), 362-368 (2016).

- [7204] M. Mobarak Hossen, M.S. Alam, S. Sultana and A.A. Mamun, *Oblique propagation of low frequency nonlinear waves in an electron depleted magnetized plasma with positive and negative dust*, Phys. Plasmas **23**, 023703 (2016) (8 pages).
- [7205] M. Mobarak Hossen, M.S. Alam, S. Sultana and A.A. Mamun, *Low frequency nonlinear waves in electron depleted magnetized nonthermal plasmas*, Eur. Phys. J. D **70**, 252 (2016), doi: 10.1140/epjd/e2016-70328-9
- [7206] S.A. Ema, M.R. Hossen and A.A. Mamun, *Nonplanar shocks and solitons in a strongly coupled adiabatic plasma: the roles of heavy ion dynamics and nonextensivity*, Contrib. Plasma Phys. **55** (8), 596-605 (2015), doi: 10.1002/ctpp.201500029
- [7207] M.M. Hossen, L. Nahar, M.S. Alam, S. Sultana and A.A. Mamun, *Electrostatic shock waves in a non-thermal dusty plasma with oppositely charged dust*, High Energy Density Physics **24**, 9-14 (2017), doi: 10.1016/j.hedp.2017.05.011
- [7208] T.I. Rajib, N.K. Tamanna, N.A. Chowdhury, A. Mannan, S. Sultana and A. A. Mamun, *Dust-ion-acoustic rogue waves in presence of non-extensive non-thermal electrons*, Phys. Plasmas **26**, 123701 (2019), doi: 10.1063/1.5127256
- [7209] T. Yeashna, R.K. Shikha, N.A. Chowdhury, A. Mannan, S. Sultana and A.A. Mamun, *Ion-acoustic shock waves in magnetized pair-ion plasma*, Eur. Phys. J. D **75**, 135 (2021), doi: 10.1140/epjd/s10053-021-00139-y
- [7210] N.S. Saini and I. Kourakis, *Electron beam-plasma interaction and ion-acoustic solitary waves in plasmas with a superthermal electron component*, Plasma Phys. Control. Fusion **52**, 075009 (2010) (19 pages).
- [7211] M. Ghorbanalilu, E. Abdollahzadeh and S.H.E. Rahbari, *Particle-in-cell simulation of two stream instability in the non-extensive statistics*, Laser and Particle Beams **32**, 399-407 (2014), doi:10.1017/S0263034614000275
- [7212] M. Ghorbanalilu and E. Abdollahzadeh, *Extension of temperature anisotropy Weibel instability to non-Maxwellian plasmas by 2D PIC simulation*, Laser and Particle Beams **36** (1), 1-7 (2017), doi: 10.1017/S0263034617000842
- [7213] A. Esmaili, M. Ikram, A. Mushtaq and A. A. Abid, *A two-dimensional Weibel instability simulation using the non-extensive distribution function*, AIP Advances **10**, 115120 (2020), doi: 10.1063/5.0028596
- [7214] G. Williams, I. Kourakis, F. Verheest and M.A. Hellberg, *Re-examining the model for ion acoustic solitons*, Phys. Rev. E **88**, 023103 (2013) (8 pages).
- [7215] C.P. Olivier, F. Verheest and S.K. Maharaj, *A small-amplitude study of solitons near critical plasma compositions*, J. Plasma Phys. **82**, 905820605 (2016) (21 pages), doi: 10.1017/S0022377816001082
- [7216] A.A. Abid, M.Z. Khan, S.L. Yap, H. Tercas and S. Mahmood, *Dust charging processes with a Cairns-Tsallis distribution function with negative ions*, Phys. Plasmas **23**, 013706 (2016) (6 pages).
- [7217] D.N. Gao, Z.Z. Li and Y.J. Jia, *Dust ion acoustic waves with Cairns-Tsallis electrons in the framework of KP-type equation*, Waves in Random and Complex Media (2023), doi: 10.1080/17455030.2023.2199890
- [7218] S.A. Almutlak, M. Khalid and S.A. El-Tantawy, *Nonplanar ion-acoustic solitary and cnoidal waves in a non-Maxwellian plasma: Study on nonplanar (modified) Kawahara equation*, Journal of Low Frequency Noise, Vibration and Active Control (2023).
- [7219] D.N. Gao, Z.Z. Li and J.H. Chen, *Effect of Cairns-Tsallis distribution on ion acoustic waves in interstellar medium*, Chinese Journal of Physics **87**, 70-81 (2024).
- [7220] D.N. Gao, *Dust ion acoustic waves with Cairns-Tsallis electrons in the framework of damped Zakharov-Kuznetsov equation in the presence of external periodic force*, Eur. Phys. J. Spec. Top. (2023), doi: 10.1140/epjs/s11734-023-00952-z
- [7221] S. Singla and N.S. Saini, *Higher-order dust kinetic Alfvén wave solitons and quasi-periodic waves in a polarized dusty plasma*, Waves in random and complex media (2023), doi: 10.1080/17455030.2023.2238067
- [7222] B. Sahu and R. Maity, *Evolution of ion-acoustic shock waves in magnetized plasma with hybrid Cairns-Tsallis distributed electrons*, Zeitschrift fur Naturforschung A (2022).
- [7223] M. Bilal, A. ur- Rehman, S. Mahmood, M.A. Shahzad, M. Sarfraz, *Landau damping of ion-acoustic waves with simultaneous effects of non-extensivity and non-thermality in the presence of hybrid Cairns-Tsallis distributed electrons*, Contributions to Plasma Physics (2022), doi: 10.1002/ctpp.202200102
- [7224] S. Rostampooran and S. Saviz, *Investigation of electromagnetic soliton in the Cairns-Tsallis model for plasma*, J. Theor. Appl. Phys. (2017) (10 pages), doi: 10.1007/s40094-017-0241-4
- [7225] B.M. Raffah, A.A. Abid, Y. Al-Hadeethi and H.H. Smailly, *Influence of Xenon-Fluorine-Sulfur Hexafluoride and Argon-Fluorine-Sulfur Hexafluoride streaming on dust surface potential (DSP) 6 that has Cairn-Tsallis distributed plasmas*, Appl.Sci. **12**,11212 (2022).
- [7226] M. Shamir, G. Murtaza, *Influence of Cairns-Tsallis distribution on double layers in magnetoplasma*, Eur. Phys. J. Plus **135**, 394 (2020), doi: doi.org/10.1140/epjp/s13360-020-00391-y

- [7227] J. Ou and Z. Men, *Formation of the radio frequency sheath of plasma with Cairns-Tsallis electron velocity distribution*, Phys. Plasmas **27**, 083517 (2020), doi: 10.1063/5.0015346
- [7228] Z.H. Wang, Y. Sang and X. Zhang, *Power-law distribution and scale-invariant structure from the first CHIME/FRB fast radio burst catalog*, Research in Astronomy and Astrophysics **23**, 025002 (2023).
- [7229] C.Y. Gao and J.J. Wei, *A comparative analysis of scale-invariant phenomena in repeating fast radio bursts and glitching pulsars*, The Astrophysical Journal **968**, 40 (2024).
- [7230] Y. Sang and H.N. Lin, *Quantifying the randomness and scale invariance of the repeating fast radio bursts*, preprint (2024).
- [7231] M. Mirzaei and S.M. Motevalli, *The effects of parameters of Cairns-Tsallis distribution on the properties of ion-acoustic soliton waves in plasma*, Chinese Journal of Physics (2022), doi: 10.1016/j.cjph.2021.10.048
- [7232] H. Wang and J. Du, *The ion acoustic solitary waves in the four-component complex plasma with a Cairns-Tsallis distribution*, Chinese Journal Physics **77**, 521-533 (2022).
- [7233] B. Ma and J. Du, *The collision frequencies of charged particles in the complex plasmas with the non-Maxwellian velocity distributions*, Indian J. Phys. (2022), doi: 10.1007/s12648-022-02465-2
- [7234] A. Elbendary, *Landau damping of acoustic waves at the effect of variable dust size and charge of plasma dust grains*, Arab J. Nucl. Sci. Appl. **52** (3), 86-89 (2019)
- [7235] A. Shafiq, S.A. Shan and H. Saleem, *Effect of non-Maxwellian electrons on shear flow modified ion acoustic solitons*, Phys. Plasmas **24**, 042112 (2017) (6 pages).
- [7236] S.A. Shan and H. Saleem, *Electrostatic instabilities and nonlinear structures associated with field-aligned plasma flows and Cairns-Tsallis electrons in the ionosphere*, Astrophys. Space Sci. **362**, 145 (2017) (8 pages), doi: 10.1007/s10509-017-3122-z
- [7237] S.A. Shan and Q. Haque, *Schamel equation in an inhomogeneous magnetized sheared flow plasma with q-nonextensive trapped electrons*, Chinese Phys. B **27**, 025203 (2018).
- [7238] U.N. Ghosh, *Interaction of Schamel type solitary waves in an electronegative plasma with trapped non-extensive electrons*, Indian J. Phys. (2021), doi: 10.1007/s12648-021-02131-z
- [7239] U.N. Ghosh, S. Nasipuri and P. Chatterjee, *Dust ion-acoustic singular solitons interaction with non-extensive electrons*, Indian J. Phys. (2022).
- [7240] S.U. Khan, M. Adnan, A. Qamar and S. Mahmood, *Small amplitude two dimensional electrostatic excitations in a magnetized dusty plasma with q-distributed electrons*, Astrophys. Space Sci. **361**, 213 (2016) (11 pages), doi: 10.1007/s10509-016-2798-9
- [7241] F. Verheest, G.S. Lakhina and M.A. Hellberg, *No electrostatic supersolitons in two-component plasmas*, Phys. Plasmas **21**, 062303 (2014) (7 pages).
- [7242] O. Bouzit, L.A. Gougam and M. Tribeche, *Solitons and freak waves in a mixed nonextensive high energy-tail electron distribution*, Phys. Plasmas **21**, 062101 (2014) (4 pages).
- [7243] K. Mebrouk, O. Bouzit, L.A.I.T. Gougam and M. Tribeche, *Nonextensive approach to the effect of electron trapping in the presence of quantizing magnetic field on the propagation of ion acoustic waves*, Physica A **578**, 126130 (2021).
- [7244] S.A. El-Tantawy, A.M. Wazwaz and R. Schlickeiser, *Solitons collision and freak waves in a plasma with Cairns-Tsallis particle distributions*, Plasma Phys. Control. Fusion **57**, 125012 (2015) (12 pages), doi:10.1088/0741-3335/57/12/125012
- [7245] M. Mehdipoor, *Characteristics of nonlinear ion-acoustic waves in collisional plasmas with ionization effects*, Waves in Random and Complex Media (2020), doi: 10.1080/17455030.2020.1859165
- [7246] W.F. El-Taibany, N.M. El-Siragy, E.E. Behery, A.A. Elbendary and R.M. Taha, *The effects of variable dust size and charge on dust acoustic waves propagating in a hybrid Cairns-Tsallis complex plasma*, Indian J. Phys. **92** (5), 661-668 (2018), doi: 10.1007/s12648-017-1150-8
- [7247] E.M. El-Bayoumi, M. Abd-Elzaher, K.S. Nisar, M. Mahmoud and A. Atteya, *Variable-sized dust grains and hybrid Cairns-Tsallis-distributed electron effects on collision dynamics of dust acoustic waves in Saturn's dusty plasma*, Brazilian Journal of Physics **55**, 25 (2025).
- [7248] W.F. El-Taibany, N.M. El-Siragy, E.E. Behery, A.A. El-Bendary, and R.M. Taha, *Dust acoustic waves in a dusty plasma containing hybrid Cairns-Tsallis-distributed electrons and variable size dust grains*, Chinese J. Physics **58**, 151-158 (2019), doi: 10.1016/j.cjph.2018.12.009
- [7249] H. Wang and J. Du, *The ion acoustic solitary waves in the four component plasma with the two-temperature electrons following the Cairns-Tsallis distribution*, preprint (2021), arxiv 2107.03931
- [7250] W.F. El-Taibany, S.K. El-Labany, E.E. Behery and A.M. Abdelghany, *Nonlinear dust acoustic waves in a self-gravitating and opposite-polarity complex plasma medium*, Eur. Phys. J. Plus **134**, 457 (2019), doi: 10.1140/epjp/i2019-12827-3

- [7251] E.E. Behery, S.K. El-Labany, M.M. Selim, T.H. Khalil and M.A. Eissa, *Investigation of dust ion acoustic shock waves in dusty plasma using cellular neural network*, Phys. Scr. **96**, 095606 (2021).
- [7252] E.F. El-Shamy and M. M. Selim, *Simulating overtaking interactions of dust-acoustic N-shock waves in oppositely charged dusty plasmas with Q-distributed electrons*, Radiation Effects and Defects in Solids (2024).
- [7253] S.K. El-Labany, E.E. Behery, H.N. Abd El-Razek and L.A. Abdelrazek, *Shock waves in magnetized electronegative plasma with nonextensive electrons*, Eur. Phys. J. D **74**, 104 (2020), doi: 10.1140/ep_jd/e2020-10086-7
- [7254] R.M. Taha, *A study of acoustic wave structures propagating in dusty plasma*, Master Thesis (Tanta University, Department of Physics, 2018).
- [7255] O. Bouzit, L.A. Gougam, and M. Tribeche, *Screening and sheath formation in a nonequilibrium mixed Cairns-Tsallis electron distribution*, Phys. Plasmas **22**, 052112 (2015) (5 pages).
- [7256] M. Bilal, A. ur-Rehman, S. Mahmood and M.A. Shahzad, *Effect of non-thermal and non-extensive parameters on electron plasma waves in hybrid Cairns-Tsallis distributed plasmas*, Eur. Phys. J. Plus **137**, 788 (2022).
- [7257] M. Bilal, A. Ur-Rehman, S. Mahmood, M.A. Shahzad, M. Sarfraz and M. Ahmad, *Kinetic theory of dust ion-acoustic waves in the presence of hybrid Cairns-Tsallis distributed electrons*, Phys. Scr. **97**, 125606 (2022).
- [7258] M. Bilal, A. Ur-Rehman, M.A. Shahzad, M. Sarfraz and S. Mahmood, *Kinetic-scale diagnostics of destabilization of electromagnetic electron whistler-cyclotron modes in the presence of hybrid non-thermal non-extensive electrons*, Chinese Journal of Physics **91**, 947-965 (2024).
- [7259] R. Moulick, A. Garg and M. Kumar, *Sheath formation in the presence of non-extensive electron distribution*, Contributions to Plasma Physics (2021). doi: 10.1002/ctpp.202100047
- [7260] O. Bouzit, M. Tribeche, and A.S. Bains, *Modulational instability of ion-acoustic waves in plasma with a q-nonextensive nonthermal electron velocity distribution*, Phys. Plasmas **22**, 084506 (2015) (4 pages), doi: 10.1063/1.4928891
- [7261] I. Lourek and M. Tribeche, *On the role of the κ -deformed Kaniadakis distribution in nonlinear plasma waves*, Physica A **441**, 215-220(2016), doi: <http://dx.doi.org/10.1016/j.physa.2015.08.055>
- [7262] I. Lourek and M. Tribeche, *Thermodynamic properties of the blackbody radiation: A Kaniadakis approach*, Phys. Lett. A **381**, 452-456 (2017).
- [7263] I. Lourek and M. Tribeche, *Dust charging current in non equilibrium dusty plasma in the context of Kaniadakis generalization*, Physica A **517**, 522-529 (2019).
- [7264] K. Bentabet, S. Mayout and M. Tribeche, *Generalized polarization force acting on dust grains in a dusty plasma*, Physica A **466**, 492-501 (2017), doi: <http://dx.doi.org/10.1016/j.physa.2016.09.055>
- [7265] R.A. Cairns, *Negative ion sound solitary waves revisited*, J. Plasma Phys. **79** (6), 1035-1037 (2013), doi: 10.1017/S0022377813000974
- [7266] F. Verheest, *Ambiguities in the Tsallis description of non-thermal plasma species*, J. Plasma Phys. **79** (6), 1031-1034 (2013), doi:10.1017/S0022377813001049
- [7267] F. Huang, Y. Chen, Y. Li and M.Y. Yu, *Effect of guide field on lower-hybrid drift instabilities in current sheet containing energetic particles*, Phys. Plasmas **19**, 012110 (2012) (5 pages).
- [7268] U.N. Ghosh, P. Chatterjee and R. Roychoudhury, *The effect of q-distributed electrons on the head-on collision of ion acoustic solitary waves*, Phys. Plasmas **19**, 012113 (2012) (6 pages).
- [7269] U.N. Ghosh, A. Saha, N. Pal and P. Chatterjee, *Dynamic structures of nonlinear ion acoustic waves in a nonextensive electron-positron-ion plasma*, J. Theor. Appl. Phys. **9**, 321-329 (2015), doi: 10.1007/s40094-015-0192-6
- [7270] A. Saha, J. Tamang, G.C. Wu and S. Banerjee, *Superperiodicity, chaos and coexisting orbits of ion-acoustic waves in a four- component nonextensive plasma*, Commun. Theor. Phys. **72**, 115501 (2020) (12 pages), doi: 10.1088/1572-9494/aba256
- [7271] D.K. Ghosh, P. Chatterjee and U.N. Ghosh, *Nonplanar dust-ion acoustic Gardner solitons in a dusty plasma with q-nonextensive electron velocity distribution*, Phys. Plasmas **19**, 033703 (2012) (7 pages).
- [7272] D.K. Ghosh, G. Mandal, P. Chatterjee and U.N. Ghosh, *Nonplanar ion acoustic solitary waves in electron-positron-ion plasma with warm Ions, and electron and positron following q-nonextensive velocity distribution*, IEEE Transactions on Plasma Science **41** (5), 1600-1606 (2013).
- [7273] G. Mandal, A. Paul, K. Roy and M. Asaduzzaman, *Small and arbitrary amplitude dust-acoustic solitary waves with nonextensive electrons and vortex-like distributed ions*, Jurnal Fisik Malaysia **38** (1), 01001-010015 (2017).
- [7274] K. Roy, G. Mandal, M.K. Ghorui, U.N. Ghosh and P. Chatterjee, *Collisions of ion acoustic multi-solitons in electron-positron-ion plasma with the presence of nonthermal nonextensive electrons*, Jurnal Fizik Malaysia **39** (1), 10041-10053 (2018).

- [7275] U.N. Ghosh, D.K. Ghosh, P. Chatterjee, M. Bacha and M. Tribeche, *Nonplanar ion-acoustic Gardner solitons in a pair-ion plasma with nonextensive electrons and positrons*, *Astrophys. Space Sci.* **343**, 265-272 (2013).
- [7276] M. Emamuddin and A.A. Mamun, *Gardner solitons in dusty plasmas with nonextensive ions and two-temperature superthermal electrons*, *Astrophys. Space Sci.* **351**, 561-571 (2014), doi: 10.1007/s10509-014-1861-7
- [7277] R. Dhawan, M. Kumar and H.K. Malik, *Influence of ionization on sheath structure in electropositive warm plasma carrying two-temperature electrons with non-extensive distribution*, *Phys. Plasmas* **27**, 063515 (2020), doi: 10.1063/5.0003242
- [7278] R. Dhawan and H.K. Malik, *Modelling of electronegative collisional warm plasma for plasma-surface interaction process*, *Plasma Sci. Technol.* **23**, 045402 (2021).
- [7279] H.K. Malik, Y.P. Jha and M. Kumar, *Modified Bohm criterion and sheath characteristics in nonextensive electronegative collisional warm plasma with electron emitting surfaces*, *IEEE Transactions on Plasma Science* (2024).
- [7280] Y.P. Jha, M. Kumar and H.K. Malik, *Effect of collisions, ionisation and non-extensivity in an electronegative warm plasma associated with electron emission from the wall*, *J. Theoretical Applied Physics* (2023), in press.
- [7281] R. Dhawan, M. Malik and H.K. Malik, *Modified Bohm's criterion in a collisional electronegative plasma having two-temperature non-extensive electrons*, *J. Theor. Appl. Physics* **16** (4), 162240 (1-8) (2022).
- [7282] R. Dhawan and H.K. Malik, *Sheath formation mechanism in collisional electronegative warm plasma with two-temperature non-extensive distributed electrons and ionization*, *J. Appl. Phys.* **133**, 043303 (2023).
- [7283] R. Dhawan and H.K. Malik, *Are the oscillations found in magnetized collisional electronegative warm plasma artifact during plasma-surface interaction?*, *J. Phys. D: Appl. Phys.* (2023), in press.
- [7284] S.K. El-Labany, W.F. El-Taibany, N.A. El-Bedwehy and N.A. El-Shafeay, *Modulation of the nonlinear ion acoustic waves in a weakly relativistic warm plasma with nonextensively distributed electrons*, *Alfarama Journal of Basic and Applied Sciences* **2** (1), 135-148 (2020), doi: 10.21608/ajbas.2020.39888.1030
- [7285] S. Guo, L. Mei and Z. Zhang, *Time-fractional Gardner equation for ion-acoustic waves in negative-ion-beam plasma with negative ions and nonthermal nonextensive electrons*, *Phys. Plasmas* **22**, 052306 (2015) (8 paginas).
- [7286] M. Eghbali and B. Farokhi, *Cylindrical and spherical dust-acoustic wave modulations in dusty plasmas with non-extensive distributions*, *PRAMANA - J. Physics* **84** (4), 637-651 (2015).
- [7287] U.N. Ghosh, P. Chatterjee and S.K. Kundu, *The effect of q-distributed ions during the head-on collision of dust acoustic solitary waves*, *Astrophys. Space Sci.* **339**, 255-260 (2012).
- [7288] M. Tribeche, L. Djebarni and R. Amour, *Ion-acoustic solitary waves in a plasma with a q-nonextensive electron velocity distribution*, *Phys. Plasmas* **17** (4), 042114 (2010) (6 pages).
- [7289] L.A. Gougam and M. Tribeche, *Weak ion-acoustic double layers in a plasma with a q-nonextensive electron velocity distribution*, *Astrophys. Space Sci.* **331**, 181-189 (2011).
- [7290] L.A. Gougam and M. Tribeche, *Debye shielding in a nonextensive plasma*, *Phys. Plasmas* **18**, 062102 (2011) (5 pages).
- [7291] A.S. Bains, M. Tribeche and T.S. Gill, *Modulational instability of ion-acoustic waves in a plasma with a q-nonextensive electron velocity distribution*, *Phys. Plasmas* **18**, 022108 (2011) (5 pages).
- [7292] A.S. Bains, M. Tribeche and T.S. Gill, *Modulational instability of electron-acoustic waves in a plasma with a q-nonextensive electron velocity distribution*, *Phys. Lett. A* **375**, 2059-2063 (2011).
- [7293] A.S. Bains, M. Tribeche, N.S. Saini and T.S. Gill, *A nonlinear Zakharov-Kuznetsov equation in magnetized plasma with q-nonextensive electrons velocity distribution*, *Phys. Plasmas* **18** (10), 104503 (2011) (4 pages).
- [7294] H.B. Qiu and S.Q. Liu, *Nonlinear behavior of plasma: connection with nonextensive statistics*, *Physica A* **510**, 486-491 (2018), doi: 10.1016/j.physa.2018.06.124
- [7295] T.S. Gill, P. Bala and A.S. Bains, *Electrostatic wave structures and their stability analysis in nonextensive magnetised electron-positron-ion plasma*, *Astrophys. Space Sci.* **357**, 63 (2015) (10 pages), doi: 10.1007/s10509-015-2261-3
- [7296] S. Juneja and P. Bala, *Electrostatic solitary waves containing electron beam featuring q-nonextensive distribution of electrons*, *IJSART* **1** (8), 2395-1052 (2015).
- [7297] A. Ryczkowski, T. Piotrowski, M. Staszczak, M. Wiktorowicz and P. Adrich, *Optimization of the regularization parameter in the Dual Annealing method used for the reconstruction of energy spectrum of electron beam generated by the AQUIRE mobile accelerator*, *Z. Med. Phys.* (2023), in press, doi:10.1016/j.zemedi.2023.03.003
- [7298] S. Juneja and P. Bala, *Drifting effect of electron in multi-ion plasmas with non extensive distribution of electrons*, *International Journal of Computer Applications* (0975 - 8887), *International Conference on Advancements in Engineering and Technology*, 7-10 (2015).

- [7299] P. Bala, T.S. Gill, A.S. Bains and H. Kaur, *Ion-acoustic dressed solitary structures in two component plasma with Tsallis-nonthermal velocity distribution of electrons*, Indian J. Phys. **91**(12), 1625-1634 (2017), doi:10.1007/s12648-017-1056-5
- [7300] P. Bala and H. Kaur, *Oblique Propagation of Nonlinear Solitary Waves in Magnetized Plasma with Nonextensive Electrons*, - Physical Science International Journal (2019).
- [7301] P. Bala, A. Kaur and K. Kaur, *Arbitrary amplitude electron-acoustic solitons and double layers with Cairns-Tsallis-distributed hot electrons*, Pramana-J. Phys. **95**, 20 (2021), doi: 10.1007/s12043-020-02060-2
- [7302] E. Sanchez and B. Atenas, *Application of Cairns-Tsallis distribution to the dipole-type Hamiltonian mean-field model*, Phys. Rev. E **108**, 044123 (2023).
- [7303] P. Bala and T.S. Gill, *Multimode excitation and modulational instability of beam plasma system with Tsallis-distributed electrons*, Pramana-J. Phys. **95**, 59 (2021).
- [7304] O.R. Rufai, A.S. Bains and Z. Ehsan, *Arbitrary amplitude ion acoustic solitary waves and double layers in a magnetized auroral plasma with q-nonextensive electrons*, Astrophys. Space Sci. (2015) **357**, 102 (2015) (7 pages), doi: 10.1007/s10509-015-2329-0
- [7305] A. Saha, R. Ali and P. Chatterjee, *Nonlinear excitations for the positron acoustic waves in auroral acceleration regions*, Adv. Space Res. (2017), in press, <http://dx.doi.org/10.1016/j.asr.2017.06.012>
- [7306] Z.Z. Li, H. Zhang, X.R. Hong, D.N. Gao, J. Zhang, W.S. Duan and L. Yang, *PIC simulation of compressive and rarefactive dust ion-acoustic solitary waves*, Phys. Plasmas **23**, 082111 (2016) (6 pages).
- [7307] S.A. Shan and H. Saleem, *Compressive and rarefactive double layers in non-uniform plasma with q-nonextensive distributed electrons*, Astrophys. Space Sci. **363**, 99 (2018), doi: 10.1007/s10509-018-3302-5
- [7308] O.R. Rufai, R. Bharuthram, S.V. Singh and G.S. Lakhina, *Effect of excess superthermal hot electrons on finite amplitude ion-acoustic solitons and supersolitons in a magnetized auroral plasma*, Phys. Plasmas **22**, 102305 (2015) (7 pages).
- [7309] A.A. Chernyshov, B.V. Kozelov and M.M. Mogilevsky, *Non-extensive (Tsallis) q-statistics and auroral glow*, Physica A **639**, 129661 (2024).
- [7310] O.R. Rufai and R. Bharuthram, *Electrostatic fluctuations in a magnetized two-component plasma with q-nonextensive electrons and thermal ions*, Phys. Plasmas **23**, 092306 (2016) (6 pages).
- [7311] O.R. Rufai, R. Bharuthram and S.K. Maharaj, *The effects of suprathermal particles on the existence domain of oblique low-frequency solitary waves in multi-component magnetospheric plasmas*, Phys. Plasmas **28**, 052901 (2021), doi: 10.1063/5.0031330
- [7312] U.N. Ghosh, P.K. Mandal and P. Chatterjee, *Cylindrical Zakharov-Kuznestov equation for ion-acoustic waves with electrons featuring non-extensive distribution*, Astrophys. Space Sci. **349**, 765-771 (2014), doi: 10.1007/s10509-013-1670-4
- [7313] P.K. Mandal, U.N. Ghosh and P. Chatterjee, *Zakharov-Kuznestov-Burger equation for ion-acoustic waves in cylindrical geometry*, Earth Moon Planets **115**, 45-58 (2015), doi: 10.1007/s11038-015-9466-x
- [7314] U.N. Ghosh, P.K. Mandal and P. Chatterjee, *The roles of non-extensivity and dust concentration as bifurcation parameters in dust-ion acoustic traveling waves in magnetized dusty plasma*, Phys. Plasmas **21**, 033706 (2014) (7 pages).
- [7315] X.L. Liu and X.Q. Li, *The full Zakharov equations in nonextensive q-plasma*, Phys. Plasmas **21**, 022306 (2014) (7 pages), doi: 10.1063/1.4865221
- [7316] N.S. Saini and Shalini, *Ion acoustic solitons in a nonextensive plasma with multi-temperature electrons*, Astrophys. Space Sci. **346**, 155-163 (2013), DOI 10.1007/s10509-013-1431-4
- [7317] Shalini and N.S. Saini, *Ion acoustic solitary waves and double layers in a plasma with two temperature electrons featuring Tsallis distribution*, Phys. Plasmas **21**, 102901 (2014) (13 pages).
- [7318] Shalini, N.S. Saini and A.P. Misra, *Modulation of ion-acoustic waves in a nonextensive plasma with two-temperature electrons*, Phys. Plasmas **22**, 092124 (2015) (10 pages).
- [7319] N.S. Saini and R. Kohli, *Dust-acoustic solitary waves and double layers with two temperature ions in a nonextensive dusty plasma*, Astrophys. Space Sci. (2013) (12 pages), DOI 10.1007/s10509-013-1578-z
- [7320] H.R. Pakzad, K. Javidan and A. Rafiei, *Dust-ion acoustic waves modulation in dusty plasmas with nonextensive electrons*, Astrophys. Space Sci. **353**, 543-550 (2014), doi: 10.1007/s10509-014-2032-6
- [7321] N.S. Saini and R. Kohli, *Electrostatic envelope excitations under transverse perturbations in a plasma with nonextensive hot electrons*, Astrophys. Space Sci. **349**, 293-303 (2014), doi: 10.1007/s10509-013-1649-1
- [7322] M. Tribeche and P.K. Shukla, *Charging of a dust particle in a plasma with a non extensive electron distribution function*, Phys. Plasmas **18**, 103702 (2011) (4 pages).
- [7323] M. Tribeche, R. Amour and P.K. Shukla, *Ion acoustic solitary waves in a plasma with nonthermal electrons featuring Tsallis distribution*, Phys. Rev. E **85**, 037401 (2012) (5 pages).

- [7324] M. Bacha, M. Tribeche and P.K. Shukla, *Dust ion-acoustic solitary waves in a dusty plasma with nonextensive electrons*, Phys. Rev. E **85**, 056413 (2012) (8 pages).
- [7325] S. Choudhury and D. Banerjee, *Propagation and interaction of dust ion acoustic solitary waves (DIASWs) for the damped forced modified Korteweg-de-Vries-Burger equation at some critical composition of parameters*, Plasma Res. Express **2**, 035007 (2020), doi: 10.1088/2516-1067/abab5a
- [7326] P. Eslami, M. Mottaghizadeh and H.R. Pakzad, *Nonplanar dust acoustic solitary waves in dusty plasmas with ions and electrons following a q -nonextensive distribution*, Phys. Plasmas **18**, 102303 (2011) (6 pages).
- [7327] P. Eslami, M. Mottaghizadeh and H.R. Pakzad, *Modulational instability of ion acoustic waves in $e-p-i$ plasmas with electrons and positrons following a q -nonextensive distribution*, Phys. Plasmas **18**, 102313 (2011) (7 pages).
- [7328] R. Amour and M. Tribeche, *Nonextensive electron and ion dust charging currents*, Phys. Plasmas **18**, 033706 (2011) (5 pages).
- [7329] M. Tribeche and A. Merriche, *Nonextensive dust-acoustic solitary waves*, Phys. Plasmas **18**, 034502 (2011) (4 pages).
- [7330] A. Merriche and M. Tribeche, *Modulational instability of electron-acoustic waves in a plasma with Cairns-Tsallis distributed electrons*, Physica A **421**, 463-472 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2014.11.028>
- [7331] A. Merriche, L. Ait Gougam and M. Tribeche, *Head-on collision of two ion-acoustic solitary waves in plasmas with electrons described by Tsallis distribution*, Physica A **442**, 409-416 (2016).
- [7332] A. Merriche, M. Benzekka and R. Amour, *Head-on collision of two ion-acoustic solitons in pair-ion plasmas with nonthermal electrons featuring Tsallis distribution*, Z. Naturforsch. A (2021), doi: 10.1515/zna-2020-0319
- [7333] M. Benzekka, N. Bouchemla and A. Merriche, *Nonlinear dust acoustic waves in nonuniform complex plasma under the effect of Tsallis polarization force*, Physics of Wave Phenomena **31** (4), 281-292 (2023).
- [7334] S. Mayout and M. Tribeche, *Arbitrary amplitude dust acoustic solitary waves in an electron-depleted dusty plasma with two high energy-tail ion distributions*, Astrophys. Space Sci. **335**, 443-450 (2011).
- [7335] R. Amour, M. Tribeche and T.H. Zerguini, *Nonextensive collisionless dust-acoustic shock waves in a charge varying dusty plasma*, Astrophys. Space Sci. **338**, 57-61 (2012).
- [7336] R. Amour and M. Tribeche, *Collisionless damping of dust-acoustic waves in a charge varying dusty plasma with nonextensive ions*, Phys. Plasmas **21**, 123709 (2014) (7 pages).
- [7337] A. Fodil, S. Younsi and R. Amour, *Effect of external oblique magnetic field on the nonextensive dust acoustic soliton energy*, Eur. Phys. J. Plus **135**, 389 (2020), doi:doi.org/10.1140/epjp/s13360-020-00404-w
- [7338] S. Benaiche, M. Bacha, A. Merriche and R. Amour, *Effect of Tsallis-Gurevich distributed ions on nonlinear dust-acoustic oscillations in collisionless nonextensive plasma*, Contributions to Plasma Physics e202200132 (2023), doi: 10.1002/ctpp.202200132
- [7339] M. Benzekka and M. Tribeche, *Nonlinear dust acoustic waves in a charge varying complex plasma with nonthermal ions featuring Tsallis distribution*, Astrophys. Space Sci. **338**, 63-72 (2012).
- [7340] M. Shahmansouri and M. Tribeche, *Nonextensive dust acoustic shock structures in complex plasmas*, Astrophys. Space Sci. **346**, 165-170 (2013), DOI 10.1007/s10509-013-1430-5
- [7341] M. Bacha and M. Tribeche, *Nonextensive dust acoustic waves in a charge varying dusty plasma*, Astrophys. Space Sci. **337** (1), 253-259 (2012).
- [7342] M. Bacha and M. Tribeche, *Nonlinear dust-ion acoustic waves in a dusty plasma with non-extensive electrons and ions*, J. Plasma Physics **79** (5), 569-576 (2013), doi:10.1017/S0022377812000979
- [7343] M. Bacha, L. Ait Gougam and M. Tribeche, *Ion-acoustic rogue waves in magnetized solar wind plasma with nonextensive electrons*, Physica A **466**, 199-210 (2017), doi: 10.1016/j.physa.2016.09.013
- [7344] P.K. Prasad and A. Saha, *Bifurcation analysis of ion-acoustic waves for Schrodinger equation in nonextensive solar wind plasma*, Adv. Space Research (2020), in press.
- [7345] A. Merriche and M. Tribeche, *Electron-acoustic rogue waves in a plasma with Tribeche-Tsallis-Cairns distributed electrons*, Annals of Physics **376**, 436-447 (2017), doi: <http://dx.doi.org/10.1016/j.aop.2016.11.002>
- [7346] W.F. El Taibany and M. Tribeche, *Nonlinear ion-acoustic solitary waves in electronegative plasmas with electrons featuring Tsallis distribution*, Phys. Plasmas **19**, 024507 (2012) (4 pages).
- [7347] B. Sahu and M. Tribeche, *Nonplanar electron acoustic shock waves in a plasma with electrons featuring Tsallis distribution*, Phys. Plasmas **19**, 022304 (2012) (5 pages).
- [7348] J.N. Han, J.X. Li, J.H. Luo, G.H. Sun, Z.L. Liu, S.H. Ge and X.X. Wang, *Planar and nonplanar electron-acoustic solitary waves in a plasma with a q -nonextensive electron velocity distribution*, Phys. Scr. **89**, 025603 (2014) (9 pages), doi:10.1088/0031-8949/89/02/025603

- [7349] S.A. El-Tantawy, M. Tribeche and W.M. Moslem, *Nonlinear structures in a nonextensive electron-positron-ion magnetoplasma*, Phys. Plasmas **19**, 032104 (2012) (7 pages).
- [7350] S.A. El-Tantawy, *Effect of ion viscosity on dust ion-acoustic shock waves in a nonextensive magnetoplasma*, Astrophys. Space Sci. **361**, 249 (2016) (pages), doi: 10.1007/s10509-016-2831-z
- [7351] M. Tribeche and H.R. Pakzad, *Ion-acoustic shock waves in a plasma with weakly relativistic warm ions, thermal positrons and a background electron nonextensivity*, Astrophys. Space Sci. **339** (2), 237-241 (2012).
- [7352] H.R. Pakzad and M. Tribeche, *Effect of superthermal electrons on dust-acoustic shock waves in coupled dusty plasmas*, J. Plasma Physics **79** (1), 97-103 (2013).
- [7353] K. Javidan and H.R. Pakzad, *Ion acoustic solitary waves in high relativistic plasmas with superthermal electrons and thermal positrons*, Indian J. Phys. **86** (11), 1037-1042 (2012).
- [7354] K. Javidan, *Cylindrical and spherical ion acoustic solitary waves in electron-positron-ion plasmas with superthermal electrons*, Astrophys. Space Sci. **343**, 667-673 (2013).
- [7355] H.R. Pakzad and K. Javidan, *Ion acoustic solitary waves in electron-positron-ion plasmas with q-nonextensive electrons and high relativistic ions*, Indian J. Phys. **87** (7), 705-710 (2013), DOI 10.1007/s12648-013-0279-3
- [7356] H.R. Pakzad and K. Javidan, *Obliquely propagating electron acoustic solitons in magnetized plasmas with nonextensive electrons*, Nonlin. Processes Geophys. **20**, 249-255 (2013).
- [7357] M. Ghobakhloo, M.E. Zomorrodian and K. Javidan, *Distribution functions of electrons in the Earth and Venus ionospheres: Effects on the propagation of localized waves*, New Astronomy **62**, 115-120 (2018).
- [7358] M. Ghobakhloo, M.E. Zomorrodian and K. Javidan, *Effects of dust polarity and nonextensive electrons on the dust-ion acoustic solitons and double layers in earth atmosphere*, Advances Space Research **61** (9), 2259-2266 (2018), doi: 10.1016/j.asr.2018.02.012
- [7359] K. Javidan, M.M. Yazdanpanah and H. Nematollahi, *Non-extensive behaviour of the QCD strong coupling constant*, preprint (2020), 2003.06859 [hep-ph].
- [7360] H. Nematollahi, K. Javidan and M.M. Yazdanpanah, *The QCD strong coupling constant at low energies: a non-extensive treatment*, Eur. Phys. J. A **57**, 78 (2021), doi: 10.1140/epja/s10050-021-00391-1
- [7361] P. Astfalk, T. Gorler and F. Jenko, *DSHARK: A dispersion relation solver for obliquely propagating waves in bi-kappa-distributed plasmas*, J. Geophys. Res. A **120** (9), 7107-7120 (2015).
- [7362] H.R. Pakzad, K. Javidan and M. Tribeche, *Time evolution of nonplanar electron acoustic shock waves in a plasma with superthermal electrons*, Astrophys. Space Sci. (2014), in press, dpi: 10.1007/s10509-014-1892-0
- [7363] M. Tribeche, S. Younsi and T.H. , *Arbitrary amplitude dust-acoustic double-layers in a warm dusty plasma with suprathermal electrons, two-temperature thermal ions, and drifting dust grains*, Astrophys. Space Sci. **339**, 243-247 (2012).
- [7364] M. Tribeche, L. Djebarni and H. Schamel, *Solitary ion-acoustic wave propagation in the presence of electron trapping and background nonextensivity*, Phys. Lett. A **376**, 3164-3171(2012).
- [7365] A.S. Bains, M. Tribeche and C.S. Ng, *Dust-acoustic wave modulation in the presence of q-nonextensive electrons and/or ions in dusty plasma*, Astrophys. Space Sci. **343**, 621-628 (2013).
- [7366] K. Mebrouk, L.A. Gougam and M. Tribeche, *Nonextensive statistical mechanics approach to electron trapping in degenerate plasmas*, Physica A **451**, 525-532 (2016), doi: http://dx.doi.org/10.1016/j.physa.2016.02.003
- [7367] B. Sahu, *Ion acoustic solitary and shock waves with nonextensive electrons and thermal positrons in nonplanar geometry*, Astrophys. Space Sci. **338** (2), 251-257 (2012).
- [7368] B. Sahu and M. Tribeche, *Nonextensive dust acoustic solitary and shock waves in nonplanar geometry*, Astrophys. Space Sci. **338** (2), 259-264 (2012).
- [7369] B. Sahu, *Propagation of two-solitons in an electron acoustic waves in a plasma with electrons featuring Tsallis distribution*, Astrophys. Space Sci. **346**, 415-420 (2013), DOI 10.1007/s10509-013-1467-5
- [7370] D. Dutta and B. Sahu, *Nonlinear features of electrostatic waves in a plasma with nonthermal-Tsallis distributed electrons*, Phys. Plasmas **23**, 062313 (2016) (7 pages).
- [7371] D. Dutta and B. Sahu, *Nonlinear structures in an ion-beam plasmas including dust impurities with nonthermal nonextensive electrons*, Commun. Theor. Phys. **68** (1), 117-124 (2017).
- [7372] A.U. Rehman and J.K. Lee, *Electron acoustic waves in a plasma with a q-nonextensive distribution of electrons*, Phys. Plasmas **25**, 022107 (2018).
- [7373] A.U. Rehman, M. Ahmad, S.A. Shan and T. Majeed, *Kinetic theory of ion acoustic waves in a q-nonextensive distributed ions and electrons plasma*, Physica A **506**, 938-948 (2018).
- [7374] A.U. Rehman, M. Ahmad and M.Y. Hamza, *Effect of non-extensivity parameter q on the damping rate of dust ion acoustic waves in non-extensive dusty plasma*, Contributions to Plasma Physics **59** (1), 54-62 (2019), doi: 10.1002/ctpp.201800038

- [7375] A.U. Rehman and M. Ahmad, *Stability analysis of the acoustic like modes in nonextensive pair ion plasma*, *Astrophys. Space Sci.* **364**, 90 (2019), doi: doi.org/10.1007/s10509-019-3577-1
- [7376] Z.U. Rehman, C. Tao, H.S. Bakouch, T. Hussain and Q. Shan, *A flexible bounded distribution: Information measures and lifetime data analysis*, *Bull. Malays. Math. Sci. Soc.* **46**, 115 (2023).
- [7377] K. Roy, T. Saha and P. Chatterjee, *Large amplitude double layers in a dusty plasma with nonthermal electrons featuring Tsallis distribution*, *Astrophys Space Sci* **346**, 409-413 (2013), DOI 10.1007/s10509-013-1469-3
- [7378] A. Saha and P. Chatterjee, *Solitonic, periodic and quasiperiodic behaviors of dust ion acoustic waves in superthermal plasmas*, *Brazilian J. Phys.* **45**, 419-426 (2015), doi: 10.1007/s13538-015-0329-8
- [7379] K. Roy, A. Saha, P. Chatterjee and C.S. Wong, *Head on collision of dust acoustic multi-solitons in a nonextensive plasma*, *Jurnal Fizik Malaysia* **37** (1) (2015) (16 pages).
- [7380] U.N. Ghosh, P. Chatterjee and M. Tribeche, *Interaction of dust-ion acoustic solitary waves in nonplanar geometry with electrons featuring Tsallis distribution*, *Phys. Plasmas* **19**, 112302 (2012) (5 pages).
- [7381] U.N. Ghosh and P. Chatterjee, *Effect of non-extensivity during the collision between inward and outward ion acoustic solitary waves in cylindrical and spherical geometry*, *J. Plasma Phys.* **79** (5), 789-795 (2013), doi:10.1017/S0022377813000457
- [7382] B. Sahu and M. Tribeche, *Small amplitude double-layers in an dusty plasma with ions featuring the Tsallis distribution*, *Astrophys. Space Sci.* **341**, 573-578 (2012).
- [7383] S. Ghebache and M. Tribeche, *Nonlinear ion-acoustic double-layers in electronegative plasmas with electrons featuring Tsallis distribution*, *Physica A* **447**, 180-187 (2016), doi: http://dx.doi.org/10.1016/j.physa.2015.12.026
- [7384] S. Ghebache and M. Tribeche, *Arbitrary amplitude ion-acoustic solitary waves in electronegative plasmas with electrons featuring Tsallis distribution*, *Physica A* **483**, 193-200 (2017), doi: http://dx.doi.org/10.1016/j.physa.2017.04.183
- [7385] S. Ghebache, *Contribution a l' etude des oscillations non lineaires d'un plasma magnetise*, Doctor Thesis (Faculte de Physique, Universite Boumediene, Alger, 2019).
- [7386] M. Ferdousi, M.R. Miah, S. Sultana and A.A. Mamun, *Dust-acoustic shock waves in an electron depleted nonextensive dusty plasma*, *Astrophys. Space Sci.* **360**, 43 (2015) (6 pages), doi: 10.1007/s10509-015-2547-5
- [7387] S. Bansal, M. Aggarwal and T.S. Gill, *Study of obliquely propagating electron acoustic shock waves with nonextensive electron population*, *Plasma Sci. Technol.* **21**, 015301 (2019) (7 pages), doi: 10.1088/2058-6272/aeaad8
- [7388] S. Bansal, T.S. Gill and M. Aggarwal, *Oblique modulation of electron acoustic waves in nonextensive plasma*, *Phys. Plasmas* **26**, 072116 (2019), doi: 10.1063/1.5094245
- [7389] S. Bansal and M. Aggarwal, *Non-planar electron-acoustic waves with hybrid Cairn-Tsallis distribution*, *Pramana – J. Phys.* **92**, 49 (2019), doi: 10.1007/s12043-018-1713-z
- [7390] S. Bansal and M. Aggarwal, *Electron-acoustic shock waves in cylindrical and spherical geometry with non-extensive electrons*, *Plasma Physics Reports* **45** (11), 91-96 (2019).
- [7391] T.S. Gill and S. Bansal, *Collisionless damping of nonplanar dust acoustic waves due to dust charge fluctuation in nonextensive polarized plasma*, *Physica Scripta* **96**, 075605 (2021).
- [7392] S. Bansal and M. Aggarwal, *Zakharov-Kuznetsov-Burgers equation in a magnetised non-extensive electron-positron-ion plasma*, *Pramana - J. Phys.* **94**, 51 (2020).
- [7393] M.N. Haque, A. Mannan, and A.A. Mamun, *Three-dimensional nonlinear structures in magnetized complex plasmas*, *Plasma Physics Reports* **45** (11), 1026-1034 (2019).
- [7394] M. Tribeche and R. Sabry, *Electron-acoustic solitary waves in a magnetized plasma with hot electrons featuring Tsallis distribution*, *Astrophys. Space Sci.* **341**, 579-585 (2012).
- [7395] R. Sabry and M.A. Omran, *Propagation of cylindrical and spherical electron-acoustic solitary wave packets in unmagnetized plasma*, *Astrophys. Space Sci.* (2013) **344**, 455-461 (2013) (7 pages). DOI 10.1007/s10509-013-1356-y (2013) (7 pages).
- [7396] M. Bacha, S. Boukhalfa and M. Tribeche, *Ion-acoustic rogue waves in a plasma with a q-nonextensive electron velocity distribution*, *Astrophys. Space Sci.* **341**, 591-595 (2012).
- [7397] S.A. El-Tantawy, E.I. El-Awady and M. Tribeche, *On the rogue waves propagation in non-Maxwellian complex space plasmas*, *Phys. Plasmas* **22**, 113705 (2015) (6 pages).
- [7398] K. Ourabah and M. Tribeche, *Dielectric screening in the nonextensive Thomas-Fermi model*, *Astrophys. Space Sci.* **341**, 587-589 (2012).
- [7399] K. Roy, T. Saha, P. Chatterjee and M. Tribeche, *Large amplitude double-layers in a dusty plasma with a q-nonextensive electron velocity distribution and two-temperature isothermal ions*, *Phys. Plasmas* **19**, 042113 (2012) (4 pages).

- [7400] M. Benzekka and M. Tribeche, *Dust acoustic solitons in a charge varying dusty plasma in the presence of ion nonthermality and background nonextensivity*, Phys. Plasmas **20**, 083702 (2013) (6 pages).
- [7401] K. Ourabah and M. Tribeche, *Planck radiation law and Einstein coefficients reexamined in Kaniadakis κ statistics*, Phys. Rev. E **89**, 062130 (2014) (5 pages).
- [7402] R. Amour, L.A. Gougam and M. Tribeche, *Dressed ion-acoustic soliton in a plasma with electrons featuring Tsallis distribution*, Physica A **436**, 856-864 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2015.05.050>
- [7403] A. Singh and N. Gupta, *Second harmonic generation by relativistic self-focusing of q-Gaussian laser beam in preformed parabolic plasma channel*, Phys. Plasmas **22**, 013102 (2015) (9 pages), doi: 10.1063/1.4905521
- [7404] N. Gupta, N. Singh and A. Singh, *Second harmonic generation of q-Gaussian laser beam in preformed collisional plasma channel with nonlinear absorption*, Phys. Plasmas **22**, 113106 (2015) (10 pages).
- [7405] N. Gupta and S. Kumar, *Gouy phase shift of Q-Gaussian laser beams In collisional plasma with density ramp*, European Journal of Molecular and Clinical Medicine **07** (07), 3805-3810 (2020).
- [7406] N. Gupta and S. Kumar, *Generation of second harmonics of relativistically self-focused q-Gaussian laser beams in underdense plasma with axial density ramp*, Optical and Quantum Electronics **53** (4), 193 (2021).
- [7407] N. Gupta and S. Kumar, *Generation of second harmonics of q-Gaussian laser beams in collisionless plasma with axial density ramp*, Nonlinear Optics Quantum Optics **54** (1-2), 45-61 (2021).
- [7408] N. Gupta and S. Kumar, *Nonlinear interaction of elliptical q-Gaussian laser beams with plasmas with axial density ramp: Effect of ponderomotive force*, preprint (2021).
- [7409] N. Gupta, S. Choudhry and S.B. Bhardwaj, *Stimulated Brillouin scattering of elliptical q-Gaussian laser beams in plasmas with axial density ramp: Effect of self-focusing*, Journal of Applied Spectroscopy **89** (6), (2023) [Russian Original **89** (6), (2022)]
- [7410] N. Gupta, S. Choudhry, S.B. Bhardwaj, S. Kumar and S. Kumar, *Relativistic effects on stimulated Brillouin scattering of self-focused q-Gaussian laser beams in plasmas with axial density ramp*, J. Russian Laser Research **42** (4) (2021), doi: 10.1007/s10946-021-09978-x
- [7411] N. Gupta, S. Kumar and S.B. Bhardwaj, *Stimulated Raman scattering of self focused elliptical q-Gaussian laser beam in plasma with axial temperature ramp: effect of ponderomotive force*, J. Electromagnetic Waves and Applications **36** (6), 767-786 (2022), doi: 10.1080/09205071.2021.1983877
- [7412] N. Gupta, S. Kumar and S.B. Bhardwaj, *Stimulated Raman scattering of self-focused elliptical q-Gaussian laser beam in plasma with axial density ramp: effect of ponderomotive force*, J. Opt. (2022), doi: 10.1007/s12596-021-00822-8
- [7413] N. Gupta and S.B. Bhardwaj, *Relativistic effects on electron acceleration by elliptical q-gaussian laser beam driven electron plasma wave*, Optical and Quantum Electronics **53**, 700 (2021), doi: 10.1007/s11082-021-03302-2
- [7414] N. Gupta, R. Johari, S.B. Bhardwaj, R. Rani and N. Patial, *Self-compression of elliptical q-Gaussian laser pulse in plasmas with axial density ramp*, J. Opt. (2022), doi: 10.1007/s12596-022-00891-3
- [7415] N. Gupta, R. Johari, *Laser-driven electron acceleration by q-Gaussian laser pulse in plasma: Effect of self-focusing*, Journal of Applied Spectroscopy **90** (5) (2023).
- [7416] N. Gupta, S. Choudhry, S. Kumar and S.B. Bhardwaj, *Self-focusing of laser-driven ion acoustic waves in plasma with axial density ramp*, J. Opt. (2022), doi: 10.1007/s12596-022-00955-4
- [7417] N. Gupta, *Self-focusing of rippled elliptical q-Gaussian laser beam in plasma with axial density ramp*, Journal of Applied Spectroscopy **90** (6) (2024).
- [7418] H.A. Salih, K.I. Hassoon and R.A. Khamis, *Investigating some parameters of q-Gaussian laser beam in plasma*, Phys. Plasmas **29**, 023103 (2022), doi: 10.1063/5.0079661
- [7419] S.V. Singh, *Nonlinear ion-acoustic waves in an inhomogeneous plasma with non-thermal distribution of electrons*, J. Plasma Physics **81**, 905810315 (2015) (11 pages), doi:10.1017/S0022377815000094
- [7420] M.K. Ahmed and O.P. Sah, *Effect of ion temperature on arbitrary amplitude Kinetic Alfvén solitons in a plasma with a q-nonextensive electron velocity distribution*, Astrophys. Space Sci. **353**, 145-150 (2014), doi: 10.1007/s10509-014-2013-9
- [7421] M.K. Ahmed and O.P. Sah, *Solitary kinetic Alfvén waves in nonextensive electron-positron-ion plasma*, J. King Saud University - Science **30**, 375-380 (2018), doi: <http://dx.doi.org/10.1016/j.jksus.2017.05.00>
- [7422] M.K. Ahmed and O.P. Sah, *Nonlinear dust kinetic Alfvén waves in a dust-ion plasma with ions following q-nonextensive velocity distribution*, in *Plasma and Fusion Science - From Fundamental Research to Technological Applications* (CRC Press, 2018).
- [7423] M. Singh, N. Kaur and N.S. Saini, *Effect of polarization force on small amplitude dust kinetic Alfvén solitary and rogue waves in a nonextensive plasma*, Physica A **503**, 1228-1240 (2018).

- [7424] E.M. Abulwafa, A.M. Elhanbaly, A.A. Mahmoud, and A.F. Al-Araby, *Arbitrary amplitude dust-acoustic waves in four-component dusty plasma using non-extensive electrons and ions distributions-soliton solution*, Phys. Plasmas **24**, 013704 (2017) (12 pages).
- [7425] E.M. Abulwafa, A.M. Elhanbaly, A.A. Mahmoud and A.F. Al-Araby, *Arbitrary amplitude double-layers in four-component dusty plasma with q-non-extensive electrons and ions*, Phys. Plasmas **24**, 053704 (2017).
- [7426] A.A. Mahmoud, E.M. Abulwafa, A.F. Al-Araby and A.M. Elhanbaly, *Plasma parameters effects on dust acoustic solitary waves in dusty plasmas of four components*, Advances in Mathematical Physics, 7935317 (2018) (11 pages), doi: 10.1155/2018/7935317 (2018).
- [7427] H.F. Darweesh, A.M. El-Hanbaly and E.M. Abulwafa, *Theoretical study of dust acoustic solitary waves interaction in a strongly coupled dusty plasma with nonextensive electrons and ions*, Quant. Phys. Lett. **7** (1), 21-28 (2018), doi: <http://dx.doi.org/10.18576/qpl/070104>
- [7428] A.A. Mahmoud, *Effects of the non-extensive parameter on the propagation of ion acoustic waves in five-component cometary plasma system*, Astrophys. Space Sci. **363**, 18 (2018), doi: 10.1007/s10509-017-3229-2
- [7429] H.G. Abdelwahed and A.A. Mahmoud, *On the propagation of dynamical waves in complex cometary plasma environments with thermal heavy ions and non-extensive light species*, Phys. Fluids **36**, 103123 (2024); doi: 10.1063/5.0227044
- [7430] D. Dutta and D. Kolay, *Nonlinear interaction and modulational instability of dust acoustic disturbances in a magnetized cometary plasma*, Contributions to Plasma Physics (2024).
- [7431] G. Sreekala, M. Manesh, T.W. Neethu, V. Anu, S. Sijo and V. Chandu, *Rogue waves in multi-ion cometary plasmas*, Plasma Physics Reports **44** (1), 102-109 (2018).
- [7432] M. Manesh, B. Gopika, M. Celin, G. Sreekala, S. Sijo and V. Chandu, *Ion acoustic shock waves in a six component cometary plasma*, Physics Journal **3**, 24-36 (2019).
- [7433] N.T. Willington and C. Venugopal, *Ion acoustic shock waves with nonextensive electron distributions in a five-component cometary plasma*, Acoustic Waves in Plasma **33**, 146-158 (2025).
- [7434] A. Sabetkar and D. Dorrnian, *Non-extensive effects on the characteristics of dust-acoustic solitary waves in magnetized dusty plasma with two-temperature isothermal ions*, J. Plasma Physics **80** (4), 565-579 (2014), doi:10.1017/S0022377814000099
- [7435] N. Shahmohammadi and D. Dorrnian, *Effect of dust charge fluctuation on multidimensional instability of dust-acoustic solitary waves in a magnetized dusty plasma with nonthermal ions*, Phys. Plasmas **22**, 103707 (2015) (9 pages).
- [7436] F.F. Kiyaei and D. Dorrnian, *Effects of external magnetic field on oblique propagation of ion acoustic cnoidal wave in nonextensive plasma*, Phys. Plasmas **24**, 012107 (2017) (7 pages).
- [7437] F. Farhadkiyaei and D. Dorrnian, *Nonlinear ion-acoustic cnoidal wave in electron-positron-ion plasma with nonextensive electrons*, Contributions to Plasma Physics **58** (1), 42-55 (2018), doi: 10.1002/ctpp.201600076
- [7438] F. Farhadkiyaei, *Ion acoustic cnoidal waves in electron-positron-ion plasmas with q-nonextensive electrons and positrons and high relativistic ions*, Journal of Theoretical and Applied Physics **17** (1), 172315 (1-9) (2023).
- [7439] W. Masood, H. Rizvi, H. Hasnain and N. Batool, *Dust drift shock waves with non-Maxwellian ion population in nonuniform collisional dusty plasmas in planetary environments*, Astrophys. Space Sci. (2013), DOI 10.1007/s10509-013-1382-9
- [7440] Gul-e-Ali, W. Masood and A.M. Mirza, *Nonlinear vortex structures with perpendicular shear flow, hot ions, and nonthermal distribution of electrons*, Phys. Plasmas **23**, 022302 (2016) (6 pages).
- [7441] H. Alinejad and M. Shahmansory, *Low intensity dust ion-acoustic shock waves due to dust charge fluctuation in a nonextensive dusty plasma*, Phys. Plasmas **19**, 083705 (2012) (5 pages).
- [7442] H. Alinejad, *Ion acoustic solitary waves in magnetized nonextensive electron-positron-ion plasma*, Astrophys. Space Sci. (2013), DOI 10.1007/s10509-013-1363-z
- [7443] M. Shahmansouri and H. Alinejad, *Effect of electron nonextensivity on oblique propagation of arbitrary ion acoustic waves in a magnetized plasma*, Astrophys. Space Sci. **344**, 463-470 (2013).
- [7444] M. Shahmansouri, H. Alinejad and M. Tribeche, *Breather structures in degenerate relativistic non-extensive plasma*, J. Plasma Physics **83** (3), 905830303 (2017).
- [7445] N. Panahi, H. Alinejad and M. Mahdavi, *Effect of nonextensive electrons on dust-ion acoustic wave self-modulation*, Canadian J. Phys. **93** (8), 912-919 (2015).
- [7446] H. Alinejad, *Effect of dust polarity on transcritical bifurcation of dust ion-acoustic waves in a nonextensive dusty plasma*, Chaos, Solitons and Fractals **157**, 111907 (2022).
- [7447] M. Shahmansouri and M. Tribeche, *Arbitrary amplitude dust acoustic waves in a nonextensive dusty plasma*, Astrophys. Space Sci. **344**, 99-104 (2013).

- [7448] K. Ourabah and M. Tribeche, *Nonextensive statistical mechanics approach to the Sommerfeld model for metallic elements*, Internat. J. Mod. Phys. B **27**, 1350181 (2013) (11 pages), doi: 10.1142/S0217979213501816
- [7449] M. Shahmansouri and H. Alinejad, *Arbitrary amplitude electron acoustic waves in a magnetized nonextensive plasma*, Astrophys. Space Sci., DOI 10.1007/s10509-013-1533-z (9 pages).
- [7450] E. Saberian and A. Esfandyari-Kalejahi, *Langmuir oscillations in a nonextensive electron-positron plasma*, Phys. Rev. E **87**, 053112 (2013) (10 pages).
- [7451] A. Rehman and M. Ahmad, *Comment on “Langmuir oscillations in a nonextensive electron-positron plasma”*, Phys. Rev. E **99**, 017201 (2019).
- [7452] E. Saberian and A. Esfandyari-Kalejahi, *Kinetic theory of acoustic-like modes in nonextensive pair plasmas*, Astrophys. Space Sci. **349**, 799-811 (2014), doi: 10.1007/s10509-013-1678-9
- [7453] E. Saberian, *Propagation and domains of the invariant ion-acoustic solitons in the plasmas*, Scientific Reports **14**, 3586 (2024).
- [7454] E. Saberian, A. Esfandyari-Kalejahi, A. Rastkar-Ebrahimzadeh and M. Afsari-Ghazi, *Propagation of ion-acoustic solitons in an electron beam-superthermal plasma system with finite ion-temperature: Linear and fully nonlinear investigation*, Phys. Plasmas **20**, 032307 (2013) (15 pages).
- [7455] E. Saberian, *On the spectrum of plasma modes in a field-free pair plasma: Dispersion and Landau damping in Tsallis statistics*, Physica A **490**, 289-299 (2018).
- [7456] E. Saberian, *The generalized ion-sound speed in space and astrophysical plasmas*, Astrophysical Journal **887**, 121 (2019).
- [7457] E. Saberian and G. Livadiotis, *Plasma oscillations and spectral index in non-extensive statistics*, Physica A **593**, 126909 (2022).
- [7458] E. Saberian, *A different viewpoint of the Sagdeev’s methodology for the allowed domains of ion-acoustic solitons and double layers in typical plasmas*, Waves in Random and Complex Media (2022), doi: 10.1080/17455030.2022.2065045
- [7459] E. Saberian, *The invariant ion-acoustic waves in the plasma*, Scientific Reports **12**, 21766 (2022).
- [7460] Y.Z. Xiong, H. Chen and S.Q. Liu, *The longitudinal plasma modes in mDM-plasma system*, AIP Advances **11**, 065013 (2021), doi: 10.1063/5.0050112
- [7461] L. Tan, Q. Yang, H. Chen and S. Liu, *The longitudinal plasma modes of κ -deformed Kaniadakis distributed plasmas carrying orbital angular momentum*, Entropy **24**, 1211 (2022).
- [7462] H. Alinejad and M. Tribeche, *Electrostatic solitary waves and double layers in a non-extensive dusty plasma with arbitrarily charged dust*, J. Plasma Physics **79** (5), 635-640 (2013), doi:10.1017/S00223778130001961
- [7463] H. Alinejad, *Spike-like traveling waves at the critical point of bifurcation in a nonextensive dusty plasma with dust polarity*, IEEE Transactions on Plasma Science (2022), doi: 10.1109/TPS.2022.3152810
- [7464] L.A. Rios and R.M.O. Galvao, *Nonlinear stationary structures in nonthermal plasmas*, J. Phys.: Conference Series **370**, 012044 (2012) (5 pages).
- [7465] D.C. Nicholls, M.A. Dopita and R.S. Sutherland, *Resolving the electron temperature discrepancies in Hii regions and planetary nebulae: κ -distributed electrons*, Astrophys. J. **752**, 148 (2012) (16 pages).
- [7466] D.C. Nicholls, M.A. Dopita, R.S. Sutherland, L.J. Kewley and E. Palay, *Measuring nebular temperatures: The effect of new collision strengths with equilibrium and κ -distributed electron energies*, Astrophys. J. Suppl. Series **207**, 21 (2013) (20 pages), doi:10.1088/0067-0049/207/2/21
- [7467] M. Akbari-Moghanjoughi, *Universal characteristics of ion-acoustic wave dynamics in magnetized plasmas with emphasis on Tsallis distribution*, Astrophys. Space Sci. **337**, 613-622 (2012).
- [7468] M. Akbari-Moghanjoughi, *Envelope excitations in nonextensive plasmas with warm-ions*, Phys. Lett. A **378**, 3617-3625 (2014).
- [7469] M. Akbari-Moghanjoughi, *Self-similar and diffusive expansion of nonextensive plasmas*, Phys. Plasmas **22**, 032302 (2015) (8 pages).
- [7470] L.A. Rios and R.M.O. Galvao, *Self-modulation of linearly polarized electromagnetic waves in non-Maxwellian plasmas*, Phys. Plasmas **17** (4), 042116 (2010) (8 pages).
- [7471] L.A. Rios and R.M.O. Galvao, *Modulation of whistler waves in nonthermal plasmas*, Phys. Plasmas **18**, 022311 (2011) (10 pages).
- [7472] L.A. Rios, R.M.O. Galvao and L. Cirto, *Comment on Debye shielding in a nonextensive plasma [Phys. Plasmas 18, 062102 (2011)]*, Phys. Plasmas **19**, 034701 (2012) (2 pages).
- [7473] L.A. Rios and R.M.O. Galvao, *Ion-acoustic double-layers in a magnetized plasma with nonthermal electrons*, Phys. Plasmas **20**, 112301 (2013) (5 pages).
- [7474] L.A. Rios, *Plasmas nao-ideais e complexos*, communication (2013).

- [7475] M. Sharifi and A. Parvazian, *Electrostatic waves in a magnetized plasma with nonextensive distribution*, Physica A **393**, 489-497 (2014), doi: <http://dx.doi.org/10.1016/j.physa.2013.09.024>
- [7476] M. Sharifi and M.N. Nasrabadi, *Ordinary and extraordinary waves in hot nonextensive plasma*, Physica A **558**, 124989 (2020), doi: [10.1016/j.physa.2020.124989](https://doi.org/10.1016/j.physa.2020.124989)
- [7477] M. Sharifi and A. Parvazian, *Electron Bernstein waves in nonextensive statistics*, Physica A **412**, 45-53 (2014).
- [7478] S. Mackovjak, E. Dzifcakova and J. Dudik, *On the possibility to diagnose the non-Maxwellian κ -distributions from the Hinode/EIS EUV Spectra*, Solar Phys. **282**, 263-281 (2013).
- [7479] E. Dzifcakova and J. Dudik, *H to ZN ionization equilibrium for the non-Maxwellian electron κ -distribution: Updated calculations*, Astrophys. J. Suppl. Series **206**, 6, (2013) (9 pages).
- [7480] J. Dudik, G. Del Zanna, H.E. Mason, E. Dzifcakova, *Signatures of the non-Maxwellian κ -distributions in optically thin line spectra. I. Theory and synthetic Fe IX-XIII spectra*, Astronomy and Astrophysics **570**, A124 (2014) (23 pages), doi: <http://dx.doi.org/10.1051/0004-6361/201424124>
- [7481] J. Dudik, G. Del Zanna, H.E. Mason and E. Dzifcakova, *Signatures of the non-Maxwellian κ -distributions in optically thin line spectra I. Theory and synthetic Fe IX-XIII spectra*, preprint (2014), 1408.0950 [astro-ph.SR].
- [7482] E. Dzifcakova, J. Dudik, P. Kotrc, F. Farnik and A. Zemanova, *KAPPA: A package for synthesis of optically thin spectra for the non-Maxwellian κ -distributions based on the chianti database*, Astrophys. J. Supplement Series, **217**, 14 (2015) (14 pages), doi [10.1088/0067-0049/217/1/14](https://doi.org/10.1088/0067-0049/217/1/14)
- [7483] J. Dudik, S. Mackovjak, E. Dzifcakova, G. Del Zanna, D.R. Williams, M. Karlicky, H.E. Mason, J. Lorincik, P. Kotrc, F. Farnik and A. Zemanova, *Imaging and spectroscopic observations of a transient coronal loop: Evidence for the non-Maxwellian κ -distributions*, Astrophysical J. **807**,123 (2015) (19pages), doi: [10.1088/0004-637X/807/2/123](https://doi.org/10.1088/0004-637X/807/2/123) © 2015.
- [7484] E. Dzifcakova, J. Dudik, A. Zemanova, J. Lorincik and M. Karlicky, *KAPPA: A Package for the Synthesis of Optically Thin Spectra for the Non-Maxwellian κ -distributions. II. Major Update to Compatibility with CHIANTI Version 10*, Astrophysical Journal Supplement Series **257**, 62 (2021), doi: [10.3847/1538-4365/ac2aa7](https://doi.org/10.3847/1538-4365/ac2aa7)
- [7485] L.A. Gougam and M. Tribeche, *Response to "Comment on Debye shielding in a nonextensive plasma" [Phys. Plasmas 19, 034701 (2012)]*, Phys. Plasmas **19**, 034702 (2012) (2 pages).
- [7486] L. Djebarni, L.A. Gougam and M. Tribeche, *Effect of electron trapping and background nonextensivity on the ion-acoustic soliton energy*, Astrophys. Space Sci. **350**, 541-545 (2014), doi: [10.1007/s10509-013-1754-1](https://doi.org/10.1007/s10509-013-1754-1)
- [7487] L.A. Gougam and M. Tribeche, *Ion-acoustic soliton energy in a plasma with nonextensive electrons*, Physica A (2014), in press, doi: <http://dx.doi.org/10.1016/j.physa.2014.02.071>
- [7488] S.A. Shan and A. Mushtaq, *Dust acoustic soliton and double layers with streaming dust and superthermal particles*, Astrophys. Space Sci. **346**, 171-181 (2013), DOI [10.1007/s10509-013-1433-2](https://doi.org/10.1007/s10509-013-1433-2)
- [7489] S.A. Shan, A. Mushtaq and N. Akhtar, *Ion acoustic double layers in the presence of positrons beam and q-nonextensive velocity distributed electrons*, Astrophys. Space Sci. (2013) (10 pages), in press, DOI: [10.1007/s10509-013-1593-0](https://doi.org/10.1007/s10509-013-1593-0)
- [7490] S.A. Shan, *Ion acoustic solitons in an electronegative plasma with electron trapping and nonextensivity effects*, Phys. Plasmas **25**, 032123 (2018) (8 pages).
- [7491] M.N. Khattak, A. Mushtaq and Z. Ehsan, *Electrostatic baryonic solitary waves in ambiplasma with nonextensive leptons*, Chinese J. Phys. **54**, 503-514 (2016).
- [7492] A.U. Shah, A. Mushtaq, M. Farooq, A. Khan and A.U. Rehman, *Drift dust acoustic soliton in the presence of field-aligned sheared flow and nonextensivity effects*, Phys. Plasmas **25**, 053706 (2018), doi: [10.1063/1.5038020](https://doi.org/10.1063/1.5038020)
- [7493] M. Farooq, A. Mushtaq and M. Shamir, *Analysis of Cairns-Tsallis distribution for oblique drift solitary waves in a rotating electron-positron-ion magneto-plasma*, Phys. Plasmas **25**, 122110 (2018), doi: [10.1063/1.5055757](https://doi.org/10.1063/1.5055757)
- [7494] S.A. Shan, A. Mushtaq, N. Mustafa and A.U. Rehman, *Dust ion-acoustic solitons with trapped q-non-extensive electrons, dissipative processes, and streaming ions*, Contributions to Plasma Physics **59** (1), 9-19 (2019), doi: [10.1002/ctpp.201700220](https://doi.org/10.1002/ctpp.201700220)
- [7495] M. Raghunathan and R. Ganesh, *Nonlinear Landau damping and formation of Bernstein-Greene-Kruskal structures for plasmas with q-nonextensive velocity distributions*, Phys. Plasmas **20**, 032106 (2013) (10 pages).
- [7496] M. Raghunathan and R. Ganesh, *Nonlinear Landau damping and formation of BGK modes for plasmas with q-nonextensive velocity distributions*, International Conference on Complex Processes in Plasmas and Nonlinear Dynamical Systems (ICPPNDS), A. Das and A.S. Sharma, eds., AIP Conference Proceedings **1582**, 183-190 (2014), doi: [10.1063/1.4865356](https://doi.org/10.1063/1.4865356)
- [7497] P. Trivedi and R. Ganesh, *Driven phase space vortices in plasmas with nonextensive velocity distribution*, Phys. Plasmas **24**, 032107 (2017) (10 pages).

- [7498] D. Chatterjee and A.P. Misra, *Nonlinear Landau damping and modulation of electrostatic waves in a nonextensive electron-positron pair plasma*, Phys. Rev. E **92**, 063110 (2015) (18 pages).
- [7499] Y. Liu, S.Q. Liu and K. Xu, *Debye shielding in a dusty plasma with nonextensively distributed electrons and ions*, Phys. Plasmas **19**, 073702 (2012) (6 pages).
- [7500] S. Lee and H. Lim, *Debye shielding of an electron in various plasma distributions*, J. Korean Physical Society (2021).
- [7501] G. Livadiotis and D.J. McComas, *Electrostatic shielding in plasmas and the physical meaning of the Debye length*, J. Plasma Physics **80** (3), 341-378 (2014), doi:10.1017/S0022377813001335
- [7502] G. Livadiotis, *Why is the kappa distribution of fundamental importance in astrophysical and space plasmas?*, white paper (2015) (2 pages).
- [7503] G. Livadiotis, *Nonextensive statistical mechanics: Equivalence between dual entropy and dual probabilities*, Entropy **22**, 594 (2020).
- [7504] M. Oka, J. Birn, M. Battaglia, C.C. Chaston, S.M. Hatch, G. Livadiotis, S. Imada, Y. Miyoshi, M. Kuhar, F. Effenberger, E. Eriksson, Y.V. Khotyaintsev and A. Retino, *Electron power-law spectra in solar and space plasmas*, Space Sci. Rev. **214**, 82 (2018), doi: 10.1007/s11214-018-0515-4
- [7505] S.Q. Liu, H. Chen and X.Q. Li, *Magneto-modulational instability in Kappa distributed plasmas with self-generated magnetic fields*, Phys. Plasmas **19**, 092114 (2012) (9 pages).
- [7506] D.G. Li, S.Q. Liu and X.Q. Li, *Self-generated magnetic fields in q-distributed plasmas*, Phys. Plasmas **20**, 022308 (2013) (11 pages).
- [7507] S. Guo, L. Mei and A. Sun, *Nonlinear ion-acoustic structures in a nonextensive electron-positron-ion-dust plasma: Modulational instability and rogue waves*, Annals of Physics **332**, 38-55 (2013).
- [7508] S. Guo, L. Mei, Y. He and Y. Li, *Modulation instability and ion-acoustic rogue waves in a strongly coupled collisional plasma with nonthermal nonextensive electrons*, Plasma Phys. Control. Fusion **58**, 025014 (2016) (9 pages), doi:10.1088/0741-3335/58/2/025014
- [7509] S. Guo, L. Mei, Y. He, C. Ma and Y. Sun, *Modulation instability and dissipative ion-acoustic structures in collisional nonthermal electron-positron-ion plasma: solitary and shock waves*, Plasma Sources Sci. Technol. **25**, 055006 (2016) (11 pages), doi:10.1088/0963-0252/25/5/055006
- [7510] A.S. Bains, M. Tribeche, N.S. Saini and T.S. Gill, *Modulation instability and rogue wave structures of positron-acoustic waves in q-nonextensive plasmas*, Physica A **466**, 111-119 (2017), doi: http://dx.doi.org/10.1016/j.physa.2016.09.003
- [7511] Y.Y. Wang, J.T. Li, C.Q. Dai, X.F. Chen and J.F. Zhang, *Solitary waves and rogue waves in a plasma with nonthermal electrons featuring Tsallis distribution*, Phys. Lett. A **377**, 2097-2104 (2013).
- [7512] S. Guo, L. Mei and W. Shi, *Rogue wave triplets in an ion-beam dusty plasma with superthermal electrons and negative ions*, Phys. Lett. A **377**, 2118-2125 (2013).
- [7513] S. Guo, H. Wang and L. Mei, *(3+1)-dimensional cylindrical Korteweg-de Vries equation for nonextensive dust acoustic waves: Symbolic computation and exact solutions*, Phys. Plasmas **19**, 063701 (2012) (7 pages).
- [7514] S. Ali Shan and N. Akhtar, *Korteweg-de Vries equation for ion acoustic soliton with negative ions in the presence of nonextensive electrons*, Astrophys. Space Sci. **346**, 367-374 (2013), DOI 10.1007/s10509-013-1470-x
- [7515] C. Rogers, *Reciprocal gaussian phenomena in a Korteweg capillarity system*, Meccanica (2019), in press, doi: doi.org/10.1007/s11012-019-01030-2
- [7516] S. Ali Shan, A. Ur-Rehman and A. Mushtaq, *Electron-acoustic solitary waves in a beam plasma with electron trapping and nonextensivity effects*, Phys. Plasmas **23**, 092118 (2016) (7 pages).
- [7517] S. Ali Shan, A. Ur-Rehman and A. Mushtaq, *Ion-acoustic solitary waves in a positron beam plasma with electron trapping and nonextensivity effects*, Phys. Plasmas **24**, 032104 (2017) (7 pages).
- [7518] N. Akhtar, W.F. El-Taibany and S. Mahmood, *Electrostatic double layers in a warm negative ion plasma with nonextensive electrons*, Phys. Lett. A **377**, 1282-1289 (2013).
- [7519] W.F. El-Taibany, M.M. Selim, N.A. El-Bedwehy and O.M. Al-Abbasy, *Linear and nonlinear dust acoustic waves in an inhomogeneous magnetized dusty plasma with nonextensive electrons*, Phys. Plasmas **21**, 073710 (2014) (7 pages).
- [7520] E.F. El-Shamy, M. Tribeche and W.F. El-Taibany, *The collisions of two ion acoustic solitary waves in a magnetized nonextensive plasma*, Cent. Eur. J. Phys. **12** (11), 805-812 (2014), doi: 10.2478/s11534-014-0504-5
- [7521] W.F. El-Taibany and N.A. Zedan, *Langmuir oscillations in a nonthermal nonextensive electron-positron plasma*, Phys. Plasmas **24**, 022116 (2017) (7 pages), doi: 10.1063/1.4976128
- [7522] S. Hussain, N. Akhtar and S. Mahmood, *Propagation of ion acoustic shock waves in negative ion plasmas with nonextensive electrons*, Phys. Plasmas **20**, 092303 (2013) (7 pages).

- [7523] S. Hussain, H. Ur-Rehman and S. Mahmood, *Obliquely propagating solitary wave structures in nonextensive magneto-rotating plasmas*, *Astrophys. Space Sci.* **350**, 185-190 (2014), doi: 10.1007/s10509-013-1703-z
- [7524] S. Hussain, H. Ur-Rehman and S. Mahmood, *Two dimensional ion acoustic shocks in electron-positron-ion plasmas with warm ions, and q-nonextensive distributed electrons and positrons*, *Astrophys. Space Sci.* **351**, 573-580 (2014), doi: 10.1007/s10509-014-1868-0
- [7525] S. Bukhari, S. Hussain, M. Irfan and S. Ali, *Streaming instability of electron-acoustic waves with nonextensive q-distributed electrons*, *Chinese Journal of Physics* **80**, 253-260 (2022), doi: 10.1016/j.cjph.2022.06.012
- [7526] S. Bukhari, M. Irfan and M. Ahmed, *Twisted dust-acoustic waves in a self-gravitating dusty plasma with nonextensive q-distributed electrons and ions*, *Phys. Scr.* **98**, 055613 (2023).
- [7527] S. Bukhari, A. Bukhari, M. Shahid and A. Hussain, *Low frequency twisted waves in a self-gravitating nonextensive complex plasma*, *New J. Phys.* **25**, 073017 (2023).
- [7528] S. Ali Shan and N. Akhtar, *Large amplitude acoustic solitons in a warm electronegative dusty plasma with q-nonextensive distributed electrons*, *Astrophys. Space Sci.* **349**, 273-283 (2014), doi: 10.1007/s10509-013-1647-3
- [7529] S. Ali Shan, N. Akhtar and S. Ali, *KP Burgers shocks in a warm electronegative plasma with q-nonextensive distributed electrons*, *Astrophys. Space Sci.* (2014), in press, doi: 10.1007/s10509-014-1834-x
- [7530] S. Bukhari, N. Hussain and S. Ali, *Unstable mode of ion-acoustic waves with two temperature q-nonextensive distributed electrons*, *Chinese Physics B* **30**, 095202 (2021).
- [7531] M.G. Hafez, N.C. Roy, M.R. Talukder and M. Hossain Ali, *Ion acoustic shock and periodic waves through Burgers equation in weakly and highly relativistic plasmas with nonextensivity*, *Plasma Sci. Technol.* **19**, 015002 (2017) (13 pages), doi:10.1088/1009-0630/19/1/015002
- [7532] U.M. Abdelsalam, M.S. Zobaer, H. Akther, M.G.M. Ghazal and M.M. Fares, *Nonlinear wave solutions of cylindrical KdV-Burgers equation in nonextensive plasmas for astrophysical objects*, *Acta Physica Polonica A* **137** (6), 1061-1067 (2020).
- [7533] S.A. Shan, N. Akhtar and A. Mushtaq, *Kadomtsev-Petviashvili solitons in a warm electronegative plasma with q-nonextensive electrons*, *Phys. Scr.* **90**, 015602 (2015) (8 pages), doi:10.1088/0031-8949/90/1/015602
- [7534] N. Akhtar, W.F. El-Taibany, S. Mahmood, E.E. Behery, S.A. Khan, S. Ali and S. Hussain, *Transverse instability of ion acoustic solitons in a magnetized plasma including nonextensive electrons and positrons*, *J. Plasma Phys.* **81** (5), 905810518 (2015) (19 pages), doi: http://dx.doi.org/10.1017/S0022377815001038
- [7535] R. Jagannathan and S.A. Khan, *On the deformed oscillator and the deformed derivative associated with the Tsallis q-exponential*, preprint (2019), 1911.02428 [math-ph].
- [7536] S.A. Shan and H. Saleem, *Vertical sizes of 1-D and 2-D electrostatic solitons with nonextensive and trapped electrons in the upper ionosphere*, *Phys. Plasmas* **25**, 052107 (2018).
- [7537] H. Saleem and S.A. Shan, *Solar wind interaction with dusty plasma produces electrostatic instabilities and solitons*, *Astrophys. Space Sci.* **366**, 41 (2021), doi: 10.1007/s10509-021-03939-1
- [7538] N. Imtiaz, S. Hussain and Q. Haque, *Propagation of ion-acoustic shocks in electron-positron-ion magnetoplasmas with non-extensivity and rotational effects*, *The Nucleus* **53** (2), 114-120 (2016).
- [7539] E.E. Behery, M.M. Selim and W.F. El-Taibany, *Nonplanar dynamics of variable size dust grains in nonextensive dusty plasma*, *Phys. Plasmas* **22**, 112105 (2015) (8 pages).
- [7540] S.K. El-Labany, W.F. El-Taibany, E.E. Behery and S.M. Fouda, *Two solitons oblique collision in anisotropic non-extensive dusty plasma*, *Phys. Plasmas* **24**, 033713 (2017) (8 pages).
- [7541] H.G. Abdelwahed, *Properties of damped cylindrical solitons in nonextensive plasmas*, *Zeitschrift fur Naturforschung a* **73** (10)(2018), doi: 10.1515/zna-2018-0157
- [7542] H.G. Abdelwahed, E.K. El-Shewy, A.A. El-Rahman and N.F. Abdo, *Cylindrical shock potentials in nonextensive space plasmas*, *Indian J. Phys.* (2020), doi: doi.org/10.1007/s12648-019-01658-6
- [7543] H.G. Abdelwahed, E.K. El-Shewy, M.A.E. Abdelrahman and A.A. El-Rahman, *Positron nonextensivity contributions on the rational solitonic, periodic, dissipative structures for MKP equation described critical plasmas*, *Advances in Space Research* (2021), in press.
- [7544] S.K. El-Labany, W.F. El-Taibany, E.E. Behery and S.M. Fouda, *Collision of dust ion acoustic multisolitons in a non-extensive plasma using Hirota bilinear method*, *Phys. Plasmas* **25**, 013701 (2018).
- [7545] W.F. El-Taibany, E.E. Behery, S.K. El-Labany and A.M. Abdelghanyd, *Gravitoelectrostatic excitations in an opposite polarity complex plasma*, *Phys. Plasmas* **26**, 063701 (2019), doi: 10.1063/1.5092514
- [7546] E.E. Behery, *Head-on collision of dust acoustic solitons in a nonextensive plasma with variable size dust grains of arbitrary charge*, *Phys. Rev. E* **94**, 053205 (2016) (7 pages).
- [7547] S. Ali Shan and A. Ur-Rehman, *Nonplanar solitons in a warm electronegative plasma with electron nonextensivity effects*, *Astrophys Space Sci.* **352**, 593-604 (2014), doi: 10.1007/s10509-014-1968-x

- [7548] S. Ali Shan, S. Ali and A. Ur-Rehman, *Nonplanar shocks in a warm electronegative plasma with electron nonextensivity effects*, *Astrophys. Space Sci.* **353**, 151-162 (2014), doi: 10.1007/s10509-014-2019-3
- [7549] A. Ur-Rehman, S. Ali and M.Y. Hamza, *Kinetic study of twisted electron plasma waves in q-nonextensive plasmas*, *AIP Advances* **8**, 045013 (2018).
- [7550] J. Dudik, J. Kasparova, E. Dzifcakova, M. Karlicky and S. Mackovjak, *The non-Maxwellian continuum in the X-ray, UV, and radio range*, *Astronomy and Astrophysics* **539**, A107 (2012) (12 pages).
- [7551] S. Mackovjak, E. Dzifcakova and J. Dudak, *Differential emission measure analysis of active region cores and quiet Sun for the non-Maxwellian κ -distributions*, *Astronomy and Astrophysics* **564**, A130 (2014).
- [7552] C. Bellei, J.R. Davies, P.K. Chauhan and Z. Najmudin, *Coherent transition radiation in relativistic laser-solid interactions*, *Plasma Phys. Control. Fusion* **54**, 035011 (2012) (12 pages).
- [7553] Y. Liu, S.Q. Liu and B. Dai, *Arbitrary amplitude kinetic Alfvén solitons in a plasma with a q-nonextensive electron velocity distribution*, *Phys. Plasmas* **18**, 092309 (2011) (7 pages).
- [7554] Y. Liu, Y.F. Wang and T.P. Hu, *Dispersive Alfvén waves in a plasma with anisotropic superthermal particles*, *Phys. Plasmas* **23**, 042103 (2016) (8 pages).
- [7555] Y. Liu, S.Q. Liu and L. Zhou, *Bohm criterion in a dusty plasma with nonextensive electrons and cold ions*, *Phys. Plasmas* **20**, 043702 (2013) (9 pages).
- [7556] R.L. Mace, R.D. Sydora and I. Silin, *Effects of superthermal ring current ion tails on the electromagnetic ion cyclotron instability in multi-ion magnetospheric plasmas*, *J. Geophys. Research-Space Phys.* **116**, A05206 (2011).
- [7557] M.B.M. Niyat, S.M. Khorashadizadeh and A.R. Niknam, *Electrostatic ion cyclotron instability in a plasma with q-nonextensive distributions*, *Phys. Plasmas* **23**, 122110 (2016) (8 pages).
- [7558] D.R. Borgohain, K. Saharia and K. S. Goswami, *Behavior of plasma sheath with nonextensively distributed two-temperature electrons and isothermal ions*, *Phys. Plasmas* **23**, 122113 (2016) (8 pages).
- [7559] D.R. Borgohain and K. Saharia, *Plasma sheath with two temperature q-nonextensive electron distribution*, communication (2017).
- [7560] D.R. Borgohain and K. Saharia, *Characteristics of electronegative plasma sheath with q-nonextensive electron distribution*, *Plasma Physics Reports* **44** (1), 137-144 (2018).
- [7561] D.R. Borgohain and K. Saharia, *Behavior of collisional sheath in electronegative plasma with q-nonextensive electron distribution*, *Phys. Plasmas* **25**, 032122 (2018).
- [7562] D.R. Borgohain and K. Saharia, *Sheath criterion in constant mean free path collisional plasma with two distinct temperature q-nonextensive electrons*, *Indian J. Phys.* **93** (1), 107-114 (2019), doi: 10.1007/s12648-018-1263-8
- [7563] D.R. Borgohain, *Effect of particle trapping in a three-component plasma sheath model containing Tsallis distributed electrons*, *Radiation Effects and Defects in Solids - Incorporating Plasma Science and Plasma Technology* (2020), doi: 10.1080/10420150.2020.1774882
- [7564] L. Chen, C. Tan, M. Fa, P. Duan, M. Liu, X. Liu, J. Chen, Y. Liu, W. Cui and B. Zheng, *Characteristics of dusty plasma sheath over a spacecraft surface near Jupiter's ring with oblique magnetic field and non-extensive electrons*, *J. Phys. D: Appl. Phys.* **58**, 255204 (2025).
- [7565] R. Kakoti and K. Saharia, *Effect of nonextensivity on the characteristics of supersolitons in a two-temperature electron plasma*, *Contributions to Plasma Physics* e201900167 (2020).
- [7566] R. Kakoti and K. Saharia, *The overtaking interaction of electron acoustic solitary waves in a plasma with hot non-extensive electrons*, *Radiation Effects and Defects in Solids* 1-17 (2022), in press, doi: 10.1080/10420150.2021.2014492
- [7567] R. Kakoti and K. Saharia, *Study of formation of rogue waves in an electronegative plasma with nonextensive electrons*, *AIP Conference Proceedings* **2357**, 040005 (2022).
- [7568] R.F. Benson, A.F. Vinas, V.A. Osherovich, J. Fainberg, C.M. Purser, M.L. Adrian, I.A. Galkin and B.W. Reinisch, *Magnetospheric electron-velocity-distribution function information from wave observations*, *J. Geophys. Res.-Space Phys.* **118** (8), 5039-5049 (2013).
- [7569] B.O. Ogunsua, J.A. Laoye, I.A. Fuwape and A.B. Rabiou, *The comparative study of chaoticity and dynamical complexity of the low-latitude ionosphere, over Nigeria, during quiet and disturbed days*, *Nonlin. Processes Geophys.* **21**, 127-142 (2014), doi:10.5194/npg-21-127-2014
- [7570] A.B. Rabiou, B.O. Ogunsua, I.A. Fuwape and J.A. Laoye, *The transient variation in the complexes of the low-latitude ionosphere within the equatorial ionization anomaly region of Nigeria*, *Nonlin. Processes Geophys.* **22**, 527-543 (2015), doi:10.5194/npg-22-527-2015
- [7571] J.A. Laoye, B.O. Ogunsua and S.O. Kareem, *Links between the complexities in atmospheric-soil energy exchange and temperature dynamics in tropical regions*, *J. Atmospheric and Solar-Terrestrial Physics* **219**, 105651 (2021).

- [7572] B.O. Ogunsua and J.A. Laoye, *Tsallis q-stat and the evidence of long-range interactions in soil temperature dynamics*, Entropy **23**, 909 (2021), doi: 10.3390/e23070909
- [7573] A.T. Adediji, J.S. Ojo and O.A. Abimbola, *Chaotic characteristics of microwave radio field strength over Nigeria*, J. Phys.: Conference Series **2034**, 012024 (2021), doi: 10.1088/1742-6596/2034/1/012024
- [7574] M.C. Hell, *Supporting information for swell generation under extra-tropical storms*, J. Geophysical Research (2021), in press.
- [7575] R.A. Treumann and W. Baumjohann, *Electron mirror branch: Observational evidence from “historical” AMPTE-IRM and Equator-S measurements*, preprint (2018), 1804.01131 [physics.space-ph].
- [7576] B.O. Ogunsua and J.A. Laoye, *Tsallis non-extensive statistical mechanics in the ionospheric detrended total electron content during quiet and storm periods*, Physica A **497**, 310-318 (2018).
- [7577] B. Ogunsua, *Low latitude ionospheric TEC responses to dynamical complexity quantifiers during transient events over Nigeria*, Advances Space Research **61** (7), 1689-1701 (2018).
- [7578] B.O. Ogunsua, J.S. Ojo and A.T. Adediji, *Atmospheric chaoticity and complexity from radio refractivity derived from Akure station*, Advances Space Research **62**, 1690-1701 (2018), doi: 10.1016/j.asr.2018.06.035
- [7579] Y. Zheng and J. Du, *The gravitational heat conduction and the hierarchical structure in solar interior*, EPL **105**, 54002 (2014) (5 pages) , doi: 10.1209/0295-5075/105/54002
- [7580] A. Sharma and I. Kourakis, *Spatial evolution of a q-Gaussian laser beam in relativistic plasma*, Laser and Particle Beams **28**, 479-489 (2010).
- [7581] A. Sharma, V. Jha, M. Roy and B. Kumar, *One-dimensional velocity distribution in seepage channel using Tsallis and Shannon entropy*, Stochastic Environmental Research and Risk Assessment (2022), in press.
- [7582] I. Kourakis, S. Sultana and M.A. Hellberg, *Dynamical characteristics of solitary waves, shocks and envelope modes in kappa-distributed non-thermal plasmas: an overview*, Plasma Phys. Control. Fusion **54**, 124001 (2012) (7 pages).
- [7583] F. Verheest and M.A. Hellberg, *Stopbands in fast ion-acoustic soliton propagation revisited*, Phys. Plasmas **27**, 102306 (2020), doi: 10.1063/5.0021956
- [7584] A.S. Bains, B. Li and M. Tribeche, *Envelope excitations in electronegative plasmas with electrons featuring the Tsallis distribution*, Phys. Plasmas **20**, 092119 (2013) (7 pages).
- [7585] A.S. Bains and M. Tribeche, *Oblique shock dynamics in nonextensive magnetized plasma*, Astrophys. Space Sci. **351**, 191-195 (2014), doi: 10.1007/s10509-014-1808-z
- [7586] J.L. Du, *Transport coefficients in Lorentz plasmas with the power-law kappa-distribution*, preprint (2013), 1307.3849 [physics.plasm-ph].
- [7587] J.L. Reis Jr., J. Amorim and A. Dal Pino Jr., *Occupancy of rotational population in molecular spectra based on nonextensive statistics*, Phys. Rev. E **83**, 017401 (2011) (4 pages).
- [7588] J.L. Reis Jr., J. Amorim and A. Dal Pino Jr., *Rotational temperature measurements in molecular plasmas using nonadditive Tsallis statistics*, Physica A **404**, 192-199 (2014), doi: <http://dx.doi.org/10.1016/j.physa.2014.02.066>
- [7589] J.L. Reis Jr., *Aplicacao da Fisica Estatistica Nao Extensiva em Espectroscopia Molecular de Plasmas Frios*, Doctoral Thesis (Instituto Tecnologico de Aeronautica, Sao Jose dos Campos, 2012).
- [7590] N. Ahmadihojatabad, H. Abbasi and H. Hakimi Pajouh, *Influence of superthermal and trapped electrons on oblique propagation of ion-acoustic waves in magnetized plasma*, Phys. Plasmas **17**, 112305 (2010) (7 pages).
- [7591] Z.E. Abbasi and A. Esfandyari-Kalejahi, *The effect of non-extensive particles on slowing down and diffusion of a particle's beam in the plasma*, Phys. Plasmas **23**, 073112 (2016) (9 pages).
- [7592] Z.E. Abbasi, and A. Esfandyari-Kalejahi, *Transport coefficients of a weakly ionized plasma with nonextensive particles*, Phys. Plasmas **26**, 012301 (2019), doi: 10.1063/1.5051585
- [7593] B. Azarvand-Hassanfard, A. Esfandyari-Kalejahi and M. Akbari-Moghanjoughi, *Generation of dispersive shock waves in nonextensive plasmas*, Canadian Journal Physics **96** (10), 1063-1073 (2018), doi: 10.1139/cjp-2017-0589
- [7594] M.N. Kadijani and H. Abbasi, *Molecular dynamics simulations of one-component dust in plasma: Non-extensivity associated with potential range and external white noise*, Phys. Plasmas **23**, 093706 (2016) (6 pages).
- [7595] M.N. Kadijani and H. Abbasi, *Influence of external white noise on the formation of Tsallis' velocity distribution function: A molecular dynamics study*, Phys. Plasmas **23**, 093707 (2016) (6 pages).
- [7596] J. Gong and J.L. Du, *Dust charging processes in the nonequilibrium dusty plasma with nonextensive power-law distribution*, Phys. Plasmas **19**, 023704 (2012) (6 pages).
- [7597] J. Gong, Z.P. Liu and J.L. Du, *Dust-acoustic waves and stability in the permeating dust plasma: II. Power-law distributions*, preprint (2012), 1202.0645 [physics.plasm-ph].

- [7598] S. Yasmin, M. Asaduzzaman and A.A. Mamun, *Evolution of higher order nonlinear equation for the dust ion-acoustic waves in nonextensive plasma*, Phys. Plasmas **19**, 103703 (2012) (5 pages).
- [7599] S. Yasmin, M. Asaduzzaman and A.A. Mamun, *Dust ion-acoustic shock waves in nonextensive dusty plasma*, Astrophys. Space Sci. **343**, 245-250 (2013).
- [7600] S. Yasmin, M. Asaduzzaman and A.A. Mamun, *Time-dependent non-planar DIA shock waves in non-extensive dusty plasma*, J. Plasma Physics **79** (5), 545-551 (2013).
- [7601] S. Ashraf, S. Yasmin, M. Asaduzzaman and A.A. Mamun, *Obliquely propagating nonextensive dust-ion-acoustic solitary waves in a dusty magnetoplasma*, Astrophys. Space Sci. **344**, 145-151 (2013).
- [7602] M. Emamuddin, S. Yasmin and A.A. Mamun, *Higher order nonlinear equations for the dust-acoustic waves in a dusty plasma with two temperature-ions and nonextensive electrons*, Phys. Plasmas **20**, 043705 (2013) (6 pages).
- [7603] M. Emamuddin, S. Yasmin, M. Asaduzzaman and A. A. Mamun, *Dust-acoustic solitary structures in a magnetized dusty plasma with two-temperature nonextensive electrons*, Phys. Plasmas **20**, 083708 (2013) (7 pages).
- [7604] M. Emamuddin, M.M. Masud and A.A. Mamun, *Dust-acoustic solitary waves in a magnetized dusty plasmas with nonthermal ions and two-temperature nonextensive electrons*, Astrophys. Space Sci. **349**, 821-828 (2014), doi: 10.1007/s10509-013-1692-y
- [7605] M. Emamuddin, S. Yasmin and A.A. Mamun, *Higher-order solitary structures of nonextensive electrons having two distinct temperatures in a dusty plasma*, J. Korean Physical Society **64** (12), 1834-1840 (2014).
- [7606] M. Emamuddin and A.A. Mamun, *Dust-acoustic shock waves for multi-temperature electrons and ions*, J. Korean Physical Society **74** (10), 959-966 (2019).
- [7607] M. Emamuddin and A.A. Mamun, *Formation of highly nonlinear dust-acoustic solitary waves due to high-temperature electrons and ions*, J. Theor. Applied Phys. (2019), doi: doi.org/10.1007/s40094-019-0335-2
- [7608] A. Rafat, M.M. Rahman, M.S. Alam and A.A. Mamun, *Higher-order nonlinear equations for the electron-acoustic waves in a nonextensive electron-positron-ion plasma*, Astrophys. Space Sci. **358**, 19 (2015) (9 pages), doi: 10.1007/s10509-015-2417-1
- [7609] M. Emamuddin and A.A. Mamun, *K-dV solitons in a magnetized dusty plasma with two distinct temperature nonextensive electrons and Maxwellian ions*, Astrophys. Space Sci. **353**, 507-514 (2014), doi: 10.1007/s10509-014-2080-y
- [7610] S. Ashraf, S. Yasmin, M. Asaduzzaman and A.A. Mamun, *Nonlinear propagation of dust-acoustic waves in a magnetized nonextensive dusty plasma*, Astrophys. Space Sci. (2013), in press, doi: 10.1007/s10509-013-1572-5
- [7611] S. Ashraf, S. Yasmin, M. Asaduzzaman and A.A. Mamun, *Electrostatic solitary structures in a magnetized nonextensive plasma with q-distributed electrons*, Fizika plazmy **40** (4), 376-381 (2014).
- [7612] S. Ashraf, S. Yasmin, M. Asaduzzaman, and A.A. Mamun, *Electrostatic solitary structures in a magnetized nonextensive plasma with q-distributed electrons*, Plasma Physics Reports **40** (4), 306-311 (2014).
- [7613] M. Sharifian, H.R. Sharifinejad, M.B. Zarandi and A.R. Niknam, *Effect of q-non-extensive distribution of electrons on the plasma sheath floating potential*, J. Plasma Physics **80**, 607-618 (2014), doi:10.1017/S0022377813000688
- [7614] M.M. Hatami, *Nonextensive statistics and the sheath criterion in collisional plasmas*, Phys. Plasmas **22**, 013508 (2015) (6 pages).
- [7615] M.M. Hatami, *Sheath structure in plasmas with nonextensively distributed electrons and thermal ions*, Phys. Plasmas **22**, 023506 (2015) (5 pages).
- [7616] M.M. Hatami and M. Tribeche, *Arbitrary amplitude ion-acoustic solitary waves in a two-temperature nonextensive electron plasma*, Physica A **491**, 55-63 (2018).
- [7617] M.M. Hatami and M. Tribeche, *Sheath properties in two-temperature non-Maxwellian electron plasmas*, IEEE Transactions on Plasma Science (2018), in press.
- [7618] M.M. Hatami, M. Tribeche and A.A. Mamun, *Debye length and electric potential in magnetized nonextensive plasma*, Phys. Plasmas **25**, 094502 (2018), doi: 10.1063/1.5036760
- [7619] M.M. Hatami, M. Tribeche and A.A. Mamun, *Effects of positive ion temperature and negative ion number density on arbitrary amplitude ion-acoustic solitary waves in nonextensive electronegative plasma*, Astrophys Space Sci. **364**, 21 (2019), doi: 10.1007/s
- [7620] M.M. Hatami and A.R. Niknam, *Effects of two-temperature nonextensive electrons on ion-acoustic double layers*, Physica A **564**, 125533 (2021), doi: 10.1016/j.physa.2020.125533.
- [7621] M.M. Hatami, *Effects of electron temperature on ion-acoustic solitons and double layers in nonextensive plasmas*, Phys. Wave Phen. **31**, 427-433 (2023).

- [7622] M. Shahmansouri, M.J. Lee and Y.D. Jung, *Kinetic theory of electrostatic surface waves in a dusty plasma slab with electrons / ions featuring the Tsallis distribution*, Phys. Plasmas **25**, 093701 (2018), doi: 10.1063/1.5041013
- [7623] N.N. Safa, H. Ghomi and A.R. Niknam, *Effect of the q -nonextensive electron velocity distribution on a magnetized plasma sheath*, Phys. Plasmas **21**, 082111 (2014) (7 pages).
- [7624] A. Mousavi, A. Esfandiari-Kalejahi, and i-Moghanjoughi, *Nonextensivity effect on radio-wave transmission in plasma sheath*, Phys. Plasmas **23**, 043516 (2016) (7 pages).
- [7625] N.N. Safa, H. Ghomi and A.R. Niknam, *Plasma immersion ion implantation characteristics with q -nonextensive electron velocity distribution*, J. Plasma Physics (Cambridge University Press, 2015) (13 pages), doi:10.1017/S0022377814000981
- [7626] A.R. Niknam, H. Roozbahani, M. Hashemzadeh and D. Komaizi, *Particle in cell simulations of Buneman instability of a current-driven plasma with q -nonextensive electron velocity distribution*, Phys. Plasmas **21**, 092307 (2014) (9 pages).
- [7627] M. Hashemzadeh, *Ion-acoustic and Buneman instabilities in collisional plasmas with q -nonextensive distribution*, Physica A **459**, 68-77 (2016), doi: <http://dx.doi.org/10.1016/j.physa.2016.04.018>
- [7628] A.R. Niknam, E. Rastbood, S.M. Khorashadizadeh and A.E. Roodbaraki, *Effect of nonextensive velocity distribution on the filamentation instability in a current-driven dusty plasma*, Astrophys. Space Sci. **357**, 50 (2015) (7 pages), doi:10.1007/s10509-015-2268-9
- [7629] S.M. Khorashadizadeh, E. Rastbood and A.R. Niknam, *Kinetic theory of the filamentation instability in a collisional current-driven plasma with nonextensive distribution*, Phys. Plasmas **22**, 072103 (2015) (5 pages).
- [7630] A.R. Niknam, E. Rastbood and S.M. Khorashadizadeh, *Dielectric permittivity tensor and low frequency instabilities of a magnetoactive current-driven plasma with nonextensive distribution*, Phys. Plasmas **22**, 122102 (2015) (8 pages).
- [7631] M.S. Alam, M.M. Masud and A.A. Mamun, *Effects of bi-kappa distributed electrons on dust-ion-acoustic shock waves in dusty superthermal plasmas*, Chin. Phys. B **22** (11), 115202 (2013) (6 pages).
- [7632] M. Ferdousi, S. Yasmin, S. Ashraf and A.A. Mamun, *Nonlinear propagation of ion-acoustic waves in an electron-positron-ion plasma*, Astrophys. Space. Sci. **352**, 579-584 (2014), doi: 10.1007/s10509-014-1950-7
- [7633] I. Tasnim, M.M. Masud, M.G.M. Anowar and A.A. Mamun, *Dust-acoustic shockwaves in nonthermal dusty plasmas with two population ions*, IEEE Transactions on Plasma Science **43** (7), 2187-2194 (2015).
- [7634] M.R. Hossen, S.A. Ema and A.A. Mamun, *Small amplitude dust-electron-acoustic shock waves and double layers in a nonextensive complex plasma with viscous electron fluids*, IEEE Transactions on Plasma Science **44** (4), 492-500 (2016), doi: 10.1109/TPS.2016.2536808
- [7635] M.R. Hossen, S.A. Ema and A.A. Mamun, *Nonlinear dynamics in a nonextensive complex plasma with viscous electron fluids*, Chinese Phys. Lett. **33** (6), 065203 (2016) (4 pages).
- [7636] S. Khondaker, A. Mannan, N.A. Chowdhury and A.A. Mamun, *Rogue waves in multi-pair plasma medium*, Contrib. Plasma Phys. (2019) (9 pages), doi: 10.1002/ctpp.201800125
- [7637] M. Ferdousi and A.A. Mamun, *Electrostatic shock structures in nonextensive plasma with two distinct temperature electrons*, Braz. J. Phys. **45**, 89-94 (2015), doi: 10.1007/s13538-014-0285-8
- [7638] M. Ferdousi, S. Yasmin, S. Ashraf and A.A. Mamun, *Ion-acoustic shock waves in nonextensive electron-positron-ion plasma*, Chin. Phys. Lett. **32** (1), 015201 (2015) (5 pages).
- [7639] M. Ferdousi, S. Yasmin, S. Ashraf and A.A. Mamun, *Cylindrical and spherical ion-acoustic shock waves in nonextensive electron-positron-ion plasma*, IEEE Transactions on Plasma Science **43** (2), 7009998 , 643-649 (2015).
- [7640] S.A. Ema, M. Ferdousi, and A.A. Mamun, *Compressive and rarefactive dust-ion-acoustic Gardner solitons in a multi-component dusty plasma*, Phys. Plasmas **22**, 043702 (2015) (7 pages).
- [7641] M. Ferdousi, S. Sultana, and A.A. Mamun, *Oblique propagation of ion-acoustic solitary waves in a magnetized electron-positron-ion plasma*, Phys. Plasmas **22**, 032117 (2015) (7 pages).
- [7642] M. Khalid, S.A. El-Tantawy and Ata-ur-Rahman, *Oblique ion acoustic excitations in a magneto-plasma having κ -deformed Kaniadakis distributed electrons*, Astrophys. Space Sci. **365**, 75 (2020), doi: doi.org/10.1007/s10509-020-03787-5
- [7643] M. Khalid, G. Ullah, M. Khan, S. Ahamad, S. Nabi and D. Khan, *Oblique propagation of nonlinear ion-acoustic cnoidal waves in magnetized electron-positron-ion plasmas with nonextensive electrons*, Plasma Sci. Technol. **23**, 035301 (2021), doi: 10.1088/2058-6272/abda23
- [7644] S.A. El-Tantawy, M. Khalid, A. Kabir, A.A. Hussain, A.W. Alrowaily and C.G.L. Tiofack, *Low-frequency nonlinear ion-acoustic cnoidal waves in a superthermal plasma with a monoenergetic electron beam*, AIP Advances **13**, 105017 (2023).

- [7645] A.H. Almuqrin, D.V. Douanla, C.G.L. Tiofack, Alim, A. Mohamadou, S.M.E. Ismaeel and S.A. El-Tantawy, *On the propagation and interaction of the low-frequency ion-acoustic multi-solitons in a magnetoplasma having nonextensive electrons using Hirota bilinear method*, Journal of Low Frequency Noise, Vibration and Active Control (2025), in press.
- [7646] S.A. Ema, M. Ferdousi, S. Sultana and A.A. Mamun, *Roles of negatively-charged heavy ions and nonextensivity in cylindrical and spherical dust-ion-acoustic shock waves*, J. Korean Physical Society **66** (11), 1697-1703 (2015).
- [7647] A.A. Mamun, M. Ferdousi and S. Sultana, *Dust-acoustic solitary waves in a magnetized opposite polarity dust-plasma medium*, Phys. Scr. **90**, 088011 (2015) (6 pages), doi:10.1088/0031-8949/90/8/088011
- [7648] N. Jannat, M. Ferdousi and A.A. Mamun, *Nonplanar ion-acoustic shock waves in a multi-ion plasma with nonextensive electrons and positrons*, J. Korean Physical Society **67** (3), 496-501 (2015).
- [7649] N. Jannat, M. Ferdousi and A.A. Mamun, *Ion-acoustic shock waves in nonextensive multi-ion plasmas*, Commun. Theor. Phys. **64** (4), 479-484 (2015).
- [7650] S.K. Zaghbeer, H.H. Salah, N.H. Sheta, E.K. El-Shewy and A. Elgarayhi, *Dust acoustic shock waves in dusty plasma of opposite polarity with non-extensive electron and ion distributions*, J. Plasma Phys. **80** (3), 517-528 (2014), doi: 10.1017/S0022377814000063
- [7651] S.K. Zaghbeer, H.H. Salah, N.H. Sheta, E.K. El-Shewy and A. Elgarayh, *Effect of nonextensive electron and ion on dust acoustic rogue waves in dusty plasma of opposite polarity*, Astrophys. Space Sci. **353**, 493-500 (2014), doi: 10.1007/s10509-014-2081-x
- [7652] S. Guo and L. Mei, *Three-dimensional dust-ion-acoustic rogue waves in a magnetized dusty pair-ion plasma with nonthermal nonextensive electrons and opposite polarity dust grains*, Phys. Plasmas **21**, 082303 (2014) (9 pages).
- [7653] A. Esfandyari-Kalejahi and V. Ebrahimi, *Computation of generalized and exact dispersion relations for longitudinal plasma waves in nonextensive plasmas and the effects of the nonextensivity on the oscillation modes and damps*, Phys. Plasmas **21**, 032126 (2014) (9 pages).
- [7654] V. Ebrahimi and A. Esfandyari-Kalejahi, *Theoretical description based on general and exact nonextensive dispersion relations of plasma oscillation data and verification of new acoustic plasma waves*, Phys. Plasmas **21**, 092106 (2014) (5 pages).
- [7655] V. Ebrahimi and A. Esfandyari-Kalejahi, *Electromagnetic plasma waves in the nonextensive statistics*, Astrophys. Space Sci. (2015) **357**, 30 (2015) (6 pages), doi:10.1007/s10509-015-2304-9
- [7656] A. Esfandyari-Kalejahi and M. Afsari-Ghazi, *New results from exact solution of the dispersion relation for nonextensive electron-ion plasma in the framework of collisionless kinetic theory*, AIP Advances **9**, 055303 (2019).
- [7657] H. Yu and J. Du, *The nonextensive parameter for nonequilibrium plasmas in magnetic field*, preprint (2014), 1403.1760 [physics.plasm-ph].
- [7658] Y.H. Chen, Y. Nishimura and C.Z. Cheng, *Kappa distribution function effects on Landau damping in electrostatic Vlasov simulation*, Terrestrial Atmospheric and Oceanic Sciences **24** (2), 273-281 (2013), doi: 10.3319/TAO.2012.10.26.01
- [7659] Y. Zhou and J. Du, *Escape rate for the power-law distribution in low-to-intermediate damping*, Physica A (2014), in press.
- [7660] M.S. Zobaer, N. Roy and A.A. Mamun, *RETRACTED ARTICLE: Observing the result of external magnetic field with nonextensivity on DA waves for two temperature electrons in a dusty plasmas*, Astrophys. Space Sci. **350**, 231-236 (2014), doi: 10.1007/s10509-013-1746-1
- [7661] J.W. Dai, X.C. Chen and X.Q. Li, *Dust ion acoustic instability with q-distribution in nonextensive statistics*, Astrophys. Space Sci. **346**, 183-190 (2013), DOI 10.1007/s10509-013-1440-3
- [7662] D.G. Li, S.Q. Liu and X.Q. Li, *Anomalous magnetic viscosity in accretion disks with q-distributed plasmas*, Astrophys. Space Sci. (2013) (8 pages), DOI 10.1007/s10509-013-1568-1
- [7663] K. Roy, T. Saha and P. Chatterjee, *Effect of ion temperature on ion-acoustic solitary waves in a plasma with a q-nonextensive electron velocity distribution*, Phys. Plasmas **19**, 104502 (2012) (3 pages).
- [7664] A. Saha and P. Chatterjee, *Dust ion acoustic travelling waves in the framework of a modified Kadomtsev-Petviashvili equation in a magnetized dusty plasma with superthermal electrons*, Astrophys. Space Sci. **349**, 813-820 (2014), doi: 10.1007/s10509-013-1685-x
- [7665] A. Saha and P. Chatterjee, *Bifurcations of dust acoustic solitary waves and periodic waves in an unmagnetized plasma with nonextensive ions*, Astrophys. Space Sci. **351**, 533-537 (2014), doi: 10.1007/s10509-014-1849-3
- [7666] A. Saha and P. Chatterjee, *Propagation and interaction of dust acoustic multi-soliton in dusty plasmas with q-nonextensive electrons and ions*, Astrophys. Space Sci. **353**, 169-177 (2014), doi: 10.1007/s10509-014-2028-2

- [7667] A. Saha and P. Chatterjee, *Solitonic, periodic, quasiperiodic and chaotic structures of dust ion acoustic waves in nonextensive dusty plasmas*, Eur. Phys. J. D **69**, 203 (2015) (8 pages), doi: 10.1140/epjd/e2015-60115-7
- [7668] A. Saha and P. Chatterjee, *Qualitative structures of electron-acoustic waves in an unmagnetized plasma with q -nonextensive hot electrons*, Eur. Phys. J. Plus **130** 222 (2015) (9 pages), doi: 10.1140/epjp/i2015-15222-2
- [7669] K. Roy, T. Saha and P. Chatterjee, *Effect of ion kinematic viscosity on large amplitude dust ion acoustic solitary waves*, Astrophys. Space Sci. **349**, 745-751 (2014), doi: 10.1007/s10509-013-1625-9
- [7670] K. Roy, P. Chatterjee, S.S. Kausik and C.S. Wong, *Shock waves in a dusty plasma having q -nonextensive electron velocity distribution*, Astrophys. Space Sci. **350**, 599-605 (2014), doi: 10.1007/s10509-014-1783-4
- [7671] A. Saha, P. Chatterjee and C.S. Wong, *Dynamic motions of ion acoustic waves in plasmas with superthermal electrons*, Braz. J. Phys. **45**, 656-663 (2015), doi: 10.1007/s13538-015-0358-3
- [7672] B. Ghosh and S. Banerjee, *Effect of nonthermal electrons and positrons on ion-acoustic solitary waves in a plasma with warm drifting ions*, Indian J. Phys. **89** (12), 1307-1312 (2015), doi: 10.1007/s12648-015-0706-8
- [7673] M. Hashemzadeh, *Effect of q -nonextensive parameter and saturation time on electron density steepening in electron-positron-ion plasmas*, Phys. Plasmas **22**, 112109 (2015) (9 pages).
- [7674] M. Hashemzadeh, *Nonextensive statistics and skin depth of transverse wave in collisional plasma*, Phys. Plasmas **23**, 052113 (2016).
- [7675] J. Tamang, K. Sarkar and A. Saha, *Solitary wave solution and dynamic transition of dust ion acoustic waves in a collisional nonextensive dusty plasma with ionization effect*, Physica A **505**, 18-34 (2018).
- [7676] A. Saha and J. Tamang, *Effect of q -nonextensive hot electrons on bifurcations of nonlinear and supernonlinear ion-acoustic periodic waves*, Advances Space Research (2018), in press, doi: 10.1016/j.asr.2018.11.010
- [7677] J. Tamang and A. Saha, *Dynamical behavior of supernonlinear positron-acoustic periodic waves and chaos in nonextensive electron-positron-ion plasmas*, Zeitschrift fur Naturforschung A (2019), doi: 10.1515/zna-2018-0476
- [7678] J. Tamang and A. Saha, *Influence of dust-neutral collisional frequency and nonextensivity on dynamic motion of dust-acoustic waves*, Waves in Random and Complex Media (2019), doi: doi.org/10.1080/17455030.2019.1605230
- [7679] J. Tamang and A. Saha, *Bifurcations of small-amplitude supernonlinear waves of the $mKdV$ and modified Gardner equations in a three-component electron-ion plasma*, Phys. Plasmas **27**, 012105 (2020), doi: 10.1063/1.5115821
- [7680] J. Tamang, A. Abdikian and A. Saha, *Phase plane analysis of small amplitude electron-acoustic supernonlinear and nonlinear waves in magnetized plasmas*, Physica Scripta **95**, 10 (2020).
- [7681] H. Fichtner, K. Scherer, M. Lazar, H.J. Fahr and Z. Voros, *On the entropy of plasmas described with regularized κ -distributions*, Phys. Rev. E **98** (5), 053205 (2018).
- [7682] H. Qiu, Z. Zhou, X. Peng, X. Zhang, Y. Zhu, Y. Gao, D. Xiao, H. Bao, T. Xu, J. Zhang, T. Huang, J. Zhou, Z. Ming, P. Xiang, H. Yang, X. Wang and D. Wu, *Initial measurement of electron nonextensive parameter with electric probe*, Phys. Rev. E **101**, 043206 (2020).
- [7683] M.-A. Paun, V.-A. Paun and V.-P. Paun, *Fractal modeling of polymer plasma laser ablation, plasma plume Tsallis entropy and its q -statistics interpretation, Part I: Theory*, Entropy **24**, 342 (2022), doi: 10.3390/e24030342
- [7684] M. Alqahtani, N. Demir and M. Strickland, *Nonextensive hydrodynamics of boost-invariant plasmas*, Eur. Phys. J. C (2022) **82**, 973 (2022).
- [7685] T. Prebibaj, F. Antoniou, F. Asvesta, H. Bartosik, C. Bracco, G.P. Di Giovanni and E. Renner, *Characterization of the vertical beam tails in the CERN PS booster*, 13th Int. Particle Acc. Conf. (Bangkok, Thailand, 2022), doi: 10.18429/JACoW-IPAC2022-MOPOST05
- [7686] G. Sharma, R. Paul, K. Deka, R. Moulick, S. Adhikari, S.S. Kausik and B.K. Saikia, *Study of two-electron temperature plasma sheath using nonextensive electron distribution in presence of an external magnetic field*, AIP Advances **13**, 015011 (2023), doi: 10.1063/5.0128420
- [7687] R. Paul, K. Deka, G. Sharma, R. Moulick, S. Adhikari, S.S. Kausik and B.K. Saikia, *Study of a collisionless magnetized plasma sheath with nonextensively distributed species*, Plasma Sci. Technol. (2023), in press.
- [7688] R. Paul, G. Sharma, K. Deka, R. Moulick, S. Adhikari, S.S. Kausik and B.K. Saikia, *Charge fluctuations on the dust grains in the presence of energetic electrons*, Physica Scripta **99**, 065602 (2024).
- [7689] Y.P. Jha, M. Kumar and H.K. Malik, *Effect of q -nonextensively distributed plasma electrons on double sheath characteristics and virtual cathode formation associated with electron emitting surfaces*, IEEE Transactions on Plasma Science (2023).
- [7690] M. El Bojaddaini, M. El Kaouini and H. Chatei, *Sheath structure behavior in collisional non-extensive plasma with negative ions*, Eur. Phys. J. Plus **139**, 373 (2024).

- [7691] E.G. Nerney, *Diffusive equilibrium: Modeling anisotropic Maxwellian and kappa field line distributions in Io's plasma torus using multi-fluid and kinetic approaches*, preprint (2024).
- [7692] F.D. Nobre and C. Tsallis, *D=3 Ising spin-glass renormalization-group approach: Influence of tailed distributions on T_c* , Phys. Lett. A **250**, 375 (1998).
- [7693] S.T.O. Almeida and F.D. Nobre, *Fixed-point distributions of short-range Ising spin glasses on hierarchical lattices*, Phys. Rev. E **91**, 032138 (2015) (10 pages).
- [7694] J. Klos and S. Kobe, *Simulated annealing with Tsallis weights for $\pm J$ spin glass*, Acta Physica Polonica A **97** (5) (2000).
- [7695] O.H. Menin, A.S. Martinez and A.M. Costa, *Reconstruction of bremsstrahlung spectra from attenuation data using generalized simulated annealing*, Applied Radiation and Isotopes (2016), in press, doi: <http://dx.doi.org/10.1016/j.apradiso.2016.02.014> 1411.2932 [physics.comp-ph].
- [7696] A.S. Martinez and W.V. Abreu, *The scientific contribution of the Kaniadakis entropy to nuclear reactor physics: A brief review*, Entropy **25**, 478 (2023).
- [7697] J.P.O. Manrique and A.M. Costa, *Reconstrucao de espectros de raios X de aceleradores lineares clinicos usando o metodo de recozimento simulado generalizado*, communicated at XXI Congresso Brasileiro de Fisica Medica (24 a 27 de Agosto de 2016, Florianopolis).
- [7698] L. Chen, Z.B. Li, C. Hui, X. Cheng, B.L. Li and P.J. Shi, *A general method for parameter estimation in light-response models*, Scientific Reports **6**, 27905 (2016) (8 pages), doi: 10.1038/srep27905
- [7699] O.H. Menin, A.M. da Costa and A.S. Martinez, *Reconstrucao numerica do espectro de raio-X via simulated annealing generalizado*, Workshop de Informatica Biomedica (WIBm, 2015), ISSN 2237-3594.
- [7700] A.S. Martinez, *Nocoes de modelagem biologica: Anotacoes*, preprint (2020).
- [7701] J. Klos and S. Kobe, *Generalized simulated annealing algorithms using Tsallis statistics: Application to $\pm J$ spin glass model*, in *Nonextensive Statistical Mechanics and Its Applications*, eds. S. Abe and Y. Okamoto, Series *Lecture Notes in Physics* (Springer-Verlag, Heidelberg, 2001) [ISBN 3-540-41208-5].
- [7702] E.V. Vakarin and J.P. Badiali, *Thermodynamic non-additivity in disordered systems*, preprint (2003) [cond-mat/0305554].
- [7703] E.V. Vakarin and J.P. Badiali, *Thermodynamic non-additivity in disordered systems with extended phase space*, Central Eur. J. Phys. **2**, 241-253 (2004).
- [7704] E.V. Vakarin, *On the origin of power-law distributions in systems with constrained phase space*, Condensed Matter Phys. **16** (4), 43802 (2013) (8 pages), doi: 10.5488/CMP.16.43802 <http://www.icmp.lviv.ua/journal>
- [7705] F. Brouers, O. Sotolongo-Costa, A. Gonzalez and J.P. Pirard, *Entropic origin of dielectric relaxation universalities in heterogeneous materials (polymers, glasses, aerogel catalysts)*, preprint (2006) [cond-mat/0604143].
- [7706] L.A. Herrera, L.M. Salvatierra, P.L.Q. Dammig, L.I. Kovaleski, I.M. Irurzun, A.C. Razzitte, and E.E. Mola, *Enfoque de los modelos de ruptura dielectrica desde la termodinamica estadistica*, Energeia **8** (8) **2010** (11 pages).
- [7707] L.A. Herrera, L.M. Salvatierra, A.C. Razzitte, L.I. Kovalevski, P.L.Q. Dammig, I.M. Irurzun and E.E. Mola, *Analisis acerca de la distribucion de Weibull con datos truncados y la distribucion generalizada de Pareto aplicado a fallas en dielectricos*, Energeia **10** (10) (2012) (12 pages).
- [7708] W.J. Ma and C.K. Hu, *Generalized statistical mechanics and scaling behavior for non-equilibrium polymer chains: I. monomers connected by rigid bonds*, J. Phys. Soc. Japan **79** (2), 024005 (2010) (6 pages).
- [7709] W.J. Ma and C.K. Hu, *Generalized statistical mechanics and scaling behavior for non-equilibrium polymer chains: II. Monomers Connected by Springs*, J. Phys. Soc. Japan **79** (2), 024006 (2010) (7 pages).
- [7710] C.K. Hu and W.J. Ma, *Molecular dynamics approach to relaxation and aggregation of polymer chains*, Progr. Theor. Phys. Supplement **184**, 369-384 (2010).
- [7711] W.J. Ma and C.K. Hu, *Molecular dynamics approach to aggregation of polymer chains with monomers connected by springs*, J. Phys. Soc. Japan **79** (10), 104002 (2010) (11 pages).
- [7712] C.K. Hu, *Slow dynamics in proteins and polymer chains*, 4th International Symposium on Slow Dynamics in Complex Systems, AIP Conf. Proc. **1518**, 541-550 (2013).
- [7713] W.J. Ma and C.K. Hu, *Physical mechanism for biopolymers to aggregate and maintain in non-equilibrium states*, Scientific Reports **7** 3105 (2017), doi: 10.1038/s41598-017-03136-7.
- [7714] C.K. Hu, *Proteins aggregation and human diseases*, J. Phys.: Conference Series **604**, 012009 (2015) (20 pages), doi:10.1088/1742-6596/604/1/012009
- [7715] N.A. Makarevich, *Nonideality factor in the thermodynamic analysis of real polymer solutions*, Polym. Sci. Ser. A (2022), doi: 10.1134/S0965545X22020031

- [7716] J. Horikawa and T. Wada, *Experimental investigation on the surface potential decays of dielectric materials with q -exponential function*, communicated at the Research Institute of Mathematical Science Workshop on Mathematical Aspects of Generalized Entropies and their Applications (7-9 July 2009, Kyoto).
- [7717] L. Enciso, M. Gun, M.S. Ruiz and A.C. Razzitte, *Entropy in multifractal non equilibrium structures of dielectric breakdown*, J. Stat. Mech. 094011 (2019).
- [7718] J. Habasaki, *On the nature of heterogeneous dynamics of ions in ionic conducting glasses*, J. Non-crystalline Sol. **353**, 3956-3968 (2007).
- [7719] S.H. Nandyala, G. Hungerford, J.L. Rao, I.B. Leonor, R. Pires and R.L. Reis, *Structural, UV-VIS-NIR luminescence and decay associated spectral profiles of Sm³⁺ doped calcium phosphate glass*, Adv. Mater. Lett. **7** (9), 702-707 (2016), doi: 10.5185/amlett.2016.6244
- [7720] A.A. Lukichev, *Nonlinear relaxation functions. Physical meaning of the Jonscher's power law*, J. Non-crystalline Solids **442**, 17-21 (2016).
- [7721] A.A. Lukichev, *Classification of relaxation processes. Generalized equation yielding new relaxation functions*, J. Physics and Chemistry of Solids **145**, 109539 (2020).
- [7722] M.L.F. Nascimento, *Non-extensive treatment of surface nucleation on glass particles*, Physica A **391**, 6077-6083 (2012).
- [7723] L.C. Malacarne, R.S. Mendes, E.K. Lenzi, S. Picoli Jr. and J.P. Dal Molin, *A non-Gaussian model in polymeric network*, Eur. Phys. J. E **20**, 395-399 (2006).
- [7724] G.C. Yalcin, *Time series analysis and q -statistics applicability in the study of disordered electrical conductivity in polymers*, Doctor Thesis (Istanbul University, 2009) [In Turkish].
- [7725] G.C. Yalcin, Y. Skarlatos and K.G. Akdeniz, *q -Gaussian analysis in complex polymers*, communicated at the Conference in Honour of Murray Gell-Mann's 80th Birthday (24-26 February 2010, Nanyang Technological University, Singapore).
- [7726] G.C. Yalcin, Y. Skarlatos and K.G. Akdeniz, *q -Gaussian analysis of the electronic behavior in polymethylmetacrylate*, Proceedings of the Conference in Honour of Murray Gell-Mann's 80th Birthday, eds. H. Fritzsche and K.K. Phua (World Scientific, Singapore, 2011).
- [7727] G.C. Yalcin, Y. Skarlatos and K.G. Akdeniz, *q -Gaussian analysis of the electronic behavior in polymethylmetacrylate*, Chaos, Solitons and Fractals **57**, 73-78 (2013).
- [7728] G.C. Yalcin and C. Beck, *Currents in complex polymers: An example of superstatistics for short time series*, Phys. Lett. A **376**, 2344-2347 (2012).
- [7729] G.C. Yalcin, C. Velarde and A. Robledo, *Entropies for severely contracted configuration space*, Heliyon (2015) (14 pages).
- [7730] A. Robledo and C. Velarde, *How, why and when Tsallis statistical mechanics provides precise descriptions of natural phenomena*, Entropy **24**, 1761 (2022).
- [7731] C. Velarde and A. Robledo, *Number theory, borderline dimension and extensive entropy in distributions of ranked data*, Plos One (2022), doi: 10.1371/journal.pone.0279448
- [7732] A. Robledo and C. Velarde, *A Half-century research footpath in statistical physics*, preprint (2024), 2401.06181 [cond-mat.stat-mech].
- [7733] N.A. Makarevich, *Thermodynamics of real polymer solutions in the new Renyi and Tsallis formalism*, Proceedings of the National Academy of Sciences of Belarus, Chemical Series **57** (2), 162-176 (2021).
- [7734] S. Curilef and A.R.R. Papa, *Tsallis-statistical approach to the specific heat of liquid ⁴He - Comparison with other results*, Int. J. Mod. Phys. B **11**, 2303 (1997).
- [7735] Q.A. Wang, M. Pezeril and A. Le Mehaute, *Nonextensive boson gas and specific heat of ⁴He superfluid*, Physica A **278**, 337 (2000).
- [7736] K.S. Fa, P.R.B. Pedreira, R.S. Mendes and E.K. Lenzi, *Variational study of ground state and vortex states of Bose-Einstein condensation in anisotropic traps*, preprint (2000).
- [7737] K.S. Fa and E.K. Lenzi, *Note on BEC in nonextensive statistical mechanics*, Braz. J. Phys. **31**, 317 (2001).
- [7738] K.S. Fa, R.S. Mendes, P.R.B. Pedreira and E.K. Lenzi, *q -Gaussian trial function and Bose-Einstein condensation*, Physica A **295**, 242 (2001) [Proc. IUPAP Workshop on New Trends on Fractal Aspects of Complex Systems (16-20 October 2000, Maceio-AL, Brazil), ed. M.L. Lyra (Elsevier, Amsterdam, 2001)].
- [7739] B. Tanatar, *Trapped interacting Bose gas in nonextensive statistical mechanics*, Phys. Rev. E **65**, 046105 (2002).
- [7740] E. Erdemir and B. Tanatar, *q -Gaussian trial function in high density Bose-Einstein condensates*, Physica A **322**, 449 (2003).
- [7741] J. Jersblad, H. Ellmann, K. Stochkel, A. Kastberg, L. Sanchez-Palencia and R. Kaiser, *Non-Gaussian velocity distributions in optical lattices*, Phys. Rev. A **69**, 013410 (2004).

- [7742] C.M. Dion, S. Jonsell, A. Kastberg and P. Sjolund, *Bimodal momentum distribution of laser-cooled atoms in optical lattices*, Phys. Rev. A **93**, 053416 (2016) (10 pages).
- [7743] S. Biswas, *More accurate theory for Bose-Einstein condensation fraction*, Phys. Lett. **372**, 1574-1578 (2008).
- [7744] A. Rovenchak, *Weakly nonadditive Polychronakos statistics*, Phys. Rev. A **89**, 052116 (2014) (7 pages).
- [7745] A. Rovenchak, *Two-parametric fractional statistics models for anyons*, Eur. Phys. J. B **87**, 175 (2014) (6 pages), doi: 10.1140/epjb/e2014-50171-8
- [7746] A. Rovenchak, *Models of frequency spectrum in texts based on quantum distributions in fractional space dimensions*, 20th International Conference on Control Systems and Science 645-649 (2015), doi: 10.1109/CSCS.2015.44
- [7747] M.Y. Hornetska and A.A. Rovenchak, *Two-parameter modifications of anyonic statistics*, Ukrainian J. Phys. **61** (2), 168-177 (2016).
- [7748] A. Rovenchak, *Ideal Bose-gas in nonadditive statistics*, Low Temperature Physics **44** (10), 1025-1031 (2018), doi: 10.1063/1.5055843; Fizika Nizkikh Temperatur **44** (10), 1308-1315 (2018).
- [7749] O.M. Chubai and A.A. Rovenchak, *Ideal Bose gas in some deformed types of thermodynamics. Correspondence between deformation parameters*, Ukr. J. Phys. **65** (6), 500 (2020), doi: 10.15407/ujpe65.6.500
- [7750] B. Sobko and A. Rovenchak, *Effective modeling of physical systems with fractional statistics*, Low Temp. Phys. **48**, 621 (2022).
- [7751] Y.E. Kim, *Theory of Bose-Einstein condensation mechanism for deuteron-induced nuclear reactions in micro/nano-scale metal grains and particles*, Naturwissenschaften **96**, 803-811 (2009).
- [7752] V.K. Verma, *An evaluation of condensation temperature T_c and condensate fraction N_0/N as a Function of T/T_c for Bose-Einstein condensation of trapped atomic gas using non extensive statistical mechanics*, J. Pure Appl. and Ind. Phys. **3** (2), 110-114 (2013).
- [7753] A. Guha and P.K. Das, *An extensive study of Bose-Einstein condensation in liquid Helium using Tsallis statistics*, Physica A **497**, 272-284 (2018).
- [7754] J.H. Ou and Y.K. Ho, *Benchmark calculations of Renyi, Tsallis entropies, and Onicescu information energy for ground state helium using correlated Hylleraas wave functions*, Internat. J. Quantum Chemistry e25928 (2019).
- [7755] J.H. Ou and Y.K. Ho, *Shannon, Renyi, Tsallis entropies and Onicescu information energy for low-lying singly excited states of Helium*, Atoms **7**, 70 (2019), doi: 10.3390/atoms7030070
- [7756] P. Ma, Y. Zheng and G. Qi, *The nonextensive Bose-Einstein condensation and photon gas with parameter transformation*, Eur. Phys. J. Plus **134**, 502 (2019), doi: 10.1140/epjp/i2019-12882-8
- [7757] E. Megias, V.S. Timoteo, A. Gammal and A. Deppman, *Bose-Einstein condensation and non-extensive statistics*, preprint (2021), 2105.07548 [cond-mat.quant-gas].
- [7758] E. Megias, M.J. Teixeira, V.S. Timoteo and A. Deppman, *Nonlinear Klein-Gordon equation and the Bose-Einstein condensation*, Eur. Phys. J. Plus **137**, 325 (2022).
- [7759] I.A. Sadiq and M.A.Z. Habeeb, *Bose-Einstein condensation of q-deformed bosons harmonically trapped on Sierpinski carpet and Menger sponge*, Acta Physica Polonica A **144** (4), 234 (2023).
- [7760] G. Wilk and Z. Wlodarczyk, *Do we observe Levy flights in cosmic rays?*, Nucl. Phys. B (Proc. Suppl.) **75A**, 191 (1999). [hep-ph/9809463].
- [7761] C. Tsallis, *Nonextensive statistical mechanics: Applications to high energy physics*, EPJ Web Conf. **13**, 5001 (2011) (8 pages).
- [7762] G. Wilk, *Nonextensive critical effects in relativistic nuclear mean field models*, communicated at the Conference on Hot and Cold Baryonic Matter (Budapest, 15 to 19 August 2010).
- [7763] J. Rozynek and G. Wilk, *Nonextensive critical effects in relativistic nuclear mean field models*, EPJ Web Conf. **13**, 5002 (2011) (7 pages).
- [7764] K. Urmosy, *Hadron production in a parton cascade model with non-additive energy composition*, communicated at the Conference on Hot and Cold Baryonic Matter (Budapest, 15 to 19 August 2010).
- [7765] G.G. Barnafoldi, *Tsallis distribution in high-energy heavy ion collisions*, communicated at the Conference on Hot and Cold Baryonic Matter (Budapest, 15 to 19 August 2010).
- [7766] K. Urmosy, T.S. Biro and G.G. Barnafoldi, *Pion production via resonance decay in a non-extensive quark-gluon medium with non-additive energy composition rule*, EPJ Web Conf. **13**, 5003 (2011) (6 pages).
- [7767] Z. Schram, *Lattice gauge theory with fluctuating temperature*, communicated at the Conference on Hot and Cold Baryonic Matter (Budapest, 15 to 19 August 2010).
- [7768] T.S. Biro and Z. Schram, *Lattice gauge theory with fluctuating temperature*, EPJ Web Conf. **13**, 5004 (2011) (6 pages).

- [7769] T.S. Biro and Z. Schram, *Polyakov loop behavior in non-Extensive SU(2) lattice gauge theory*, preprint (2011), 1105.1931 [hep-lat].
- [7770] T.S. Biro and Z. Schram, *Non-extensive entropic distance based on diffusion: Restrictions on parameters in entropy formulae*, *Entropy* **18**, 42 (2016) (9 pages), doi:10.3390/e18020042
- [7771] T.S. Biro, A. Jakovac and Z. Schram, *Nuclear and quark matter at high temperature*, *Eur. Phys. J. A* **53**, 52 (2017) (28 pages), doi: 10.1140/epja/i2017-12235-4
- [7772] M. Rybczynski, Z. Wlodarczyk and G. Wilk, *Self-organized criticality in atmospheric cascades*, *Nucl. Phys. B (Proc. Suppl.)* **97**, 81-84 (2001).
- [7773] A. Lavagno, *Memory effects, fluctuations and correlations in high-energy nuclear collisions*, preprint (1998).
- [7774] I. Bediaga, E.M.F. Curado and J. Miranda, *A nonextensive thermodynamical equilibrium approach in $e^+e^- \rightarrow$ hadrons*, *Physica A* **286**, 156 (2000).
- [7775] A. Ohsawa, *Adiabatic expansion, local equilibrium and extended Maxwell distribution for fire-ball to describe multiple particle production*, *International Journal of Modern Physics A* **38** (31), 2350166 (2023).
- [7776] S. Sharma, M. Kaur and S. Thakur, *Modified Weibull and Tsallis distributions for multiplicities in e^+e^- collisions at LEP2 energies*, preprint (2017), 1708.09297 [hep-ph].
- [7777] M. Kaur and P. Bala, *Gardner solitons in electron-positron-ion plasma featuring Cairns-Tsallis electrons*, *Internat. J. Physics and Research* **9** (1), 9-20 (2019).
- [7778] P. Bala and A. Sharma, *Electron-acoustic dressed solitons with nonthermal-Tsallis distributed hot electrons*, *Indian J. Phys.* (2021), doi: 10.1007/s12648-021-02115-z
- [7779] S. Sharma and M. Kaur, *Moments of multiplicity distributions using Tsallis statistics in leptonic and hadronic collisions*, preprint (2019),
- [7780] R. Aggarwal and M. Kaur, *Some compelling overview of charged particle multiplicity distribution in pp collisions at the LHC*, *Workshop on Frontiers in High Energy Physics 2019*, 205-211 (Springer, 2020).
- [7781] C. Beck, *Non-extensive statistical mechanics and particle spectra in elementary interactions*, *Physica A* **286**, 164 (2000).
- [7782] L.A. Trevisan, *A nonextensive statistical model for the nucleon structure function*, communicated at the XXXIV Congresso Paulo Leal Ferreira de Fisica (19-21 October 2011, Sao Paulo).
- [7783] L.A. Trevisan and C. Mirez, *A nonextensive statistical model for the nucleon structure function*, *AIP Conf. Proc.* **1520**, 397-399 (2013), XII Hadron Physics (22-27 April 2012, Bento Goncalves, Rio Grande do Sul, Brazil) (3 pages); doi:http://dx.doi.org/10.1063/1.4796011
- [7784] L.A. Trevisan and C. Mirez, *A nonextensive statistical model for the nucleon structure function*, *Internat. J. Modern Phys. E* **22**, (7), 1350044 (2013) (10 pages), doi: 10.1142/S0218301313500444
- [7785] L.A. Trevisan and C. Mirez, *Nuclear EMC effect in non-extensive statistical model*, *AIP Conf. Proc.* **1529**, 253-255 (2013) (3 pages), XXXV Brazilian Workshop on Nuclear Physics (2-6 September 2012, Sao Sebastiao, Sao Paulo, Brazil), doi:http://dx.doi.org/10.1063/1.4804130
- [7786] L.A. Trevisan and C. Mirez, *The polarized structure function of the nucleons with a non-extensive statistical quark model*, *AIP Conf. Proc.* **1529**, 259-261 (2013) (3 pages), XXXV Brazilian Workshop on Nuclear Physics (2-6 September 2012, Sao Sebastiao, Sao Paulo, Brazil), doi:http://dx.doi.org/10.1063/1.4804132
- [7787] L.A. Trevisan, *The polarized structure function from the nonextensive statistics*, *Internat. J. Mod. Phys. E* **25** (12), 1650101 (2016) (12 pages), doi: 10.1142/S0218301316501019
- [7788] L.A. Trevisan, C. Mirez and D.I. da Silva, *On the difference between the radii of gluons and quarks*, *Physics* **3**, 1155-1166 (2021), 10.3390/physics3040073
- [7789] R.B. Frigori, *Short-time dynamics of nonextensive gluodynamics*, *AIP Conf. Proc.* **1520**, 358-360 (2013), XII Hadron Physics (22-27 April 2012, Bento Goncalves, Rio Grande do Sul, Brazil) (3 pages); doi:http://dx.doi.org/10.1063/1.4795998
- [7790] R.B. Frigori, *Nonextensive lattice gauge theories: algorithms and methods*, *Computer Phys. Comm.* **185**, 2232-2239 (2014), doi: http://dx.doi.org/10.1016/j.cpc.2014.04.016
- [7791] K. Urmossy, G.G. Barnafoldi and T.S. Biro, *Generalised Tsallis statistics in electron-positron collisions*, *Europhys. Lett.* (2011), in press, 1101.3023 [hep-ph].
- [7792] K. Urmossy, T.S. Biro and G.G. Barnafoldi, *Pion production via resonance decay in a non-extensive quark-gluon medium with non-additive energy composition rule*, preprint (2011), 1101.3522 [hep-ph].
- [7793] D.D. Chinellato, J. Takahashi and I. Bediaga, *A non-extensive equilibrium analysis of π^+ p_T spectra at RHIC*, *J. Phys. G: Nucl. Part. Phys.* **37**, 094042 (2010) (6 pages).
- [7794] D.D. Chinellato, *Estudo de Estranhiza em Colisoes proton-proton no LHC*, (Doctor Thesis, Unicamp, Campinas-Sao Paulo, 2012).

- [7795] O.V. Utyuzh, G. Wilk and Z. Wlodarczyk, *The effects of nonextensive statistics on fluctuations investigated in event-by-event analysis of data*, J. Phys. G **26**, L39 (2000).
- [7796] O.V. Utyuzh, G. Wilk and Z. Wlodarczyk, *On the possible space-time fractality of the emitting source*, Phys. Rev. D **61**, 034007 (2000).
- [7797] G. Wilk and Z. Wlodarczyk, *Interpretation of the nonextensivity parameter q in some applications of Tsallis statistics and Levy distributions*, Phys. Rev. Lett. **84**, 2770 (2000).
- [7798] C. Beck, *Non-additivity of Tsallis entropies and fluctuations of temperature*, Europhys. Lett. **57**, 329 (2002).
- [7799] G. Wilk and Z. Wlodarczyk, *Nonexponential decays and nonextensivity*, Phys. Lett. A **290**, 55 (2001).
- [7800] G. Wilk and Z. Wlodarczyk, *Application of nonextensive statistics to particle and nuclear physics*, in *Non Extensive Statistical Mechanics and Physical Applications*, eds. G. Kaniadakis, M. Lissia and A. Rapisarda, Physica A **305**, 227 (2002).
- [7801] G. Wilk and Z. Wlodarczyk, *Tsallis distribution from minimally selected order statistics*, preprint (2007), 0708.2660 [cond-mat.stat-mech].
- [7802] M. Biyajima, M. Kaneyama, T. Mizoguchi and G. Wilk, *Analyses of κ_t distributions at RHIC by means of some selected statistical and stochastic models*, Eur. Phys. J. C **40**, 243 (2005).
- [7803] J. Dias de Deus, E.G. Ferreira, C. Pajares and R. Ugoccioni, *Universality of the transverse momentum distributions in the framework of percolation of strings*, Eur. Phys. J. C **40**, 229 (2005).
- [7804] C. Pajares, *String and parton percolation*, Eur. Phys. J. C , DOI 10.1140 (2005).
- [7805] C. Pajares and J.E. Ramirez, *On the relation between the soft and hard parts of the transverse momentum distribution*, Eur. Phys. J. A **59**, 250 (2023).
- [7806] D. Rosales Herrera, J.R. Alvarado Garcia, A. Fernandez Tellez, J.E. Ramirez and C. Pajares, *Nonextensivity and temperature fluctuations of the Higgs boson production*, Phys. Rev. C **110**, 015205 (2024).
- [7807] C.E. Aguiar and T. Kodama, *Hadron multiplicity distribution in non extensive statistics*, <http://omnis.if.ufrj.br/~carlos/conferencias/tsallis/multiplicity>
- [7808] C.E. Aguiar and T. Kodama, *Nonextensive statistics and multiplicity distribution in hadronic collisions*, Physica A **320**, 371 (2003).
- [7809] T. Kodama, H.-T. Elze, C.E. Aguiar and T. Koide, *Prethermalization and the effects of dynamical correlations*, preprint (2004) [cond-mat/0406732].
- [7810] T. Kodama, H.-T. Elze, C.E. Aguiar and T. Koide, *Dynamical correlations as origin of nonextensive entropy*, Europhys. Lett. **70**, 439 (2005).
- [7811] T. Kodama, *Prethermalization, non-extensive statistics and hydrodynamics*, J. Phys. G **31**, S1051 (2005).
- [7812] H.-T. Elze and T. Kodama, *On supercorrelated systems and phase space entrainment*, Phys. Lett. A **335**, 363 (2005).
- [7813] T. Kodama and T. Koide, *Dynamical origin of power spectra*, Eur. Phys. J. **40**, 289-297 (2009).
- [7814] R.D. de Souza, T. Koide and T. Kodama, *Hydrodynamic approaches in relativistic heavy ion reactions*, preprint (2015), 1506.03863 [nucl-th].
- [7815] T.S. Biro and B. Muller, *Almost exponential transverse spectra from power law spectra*, Phys. Lett. B **578**, 78 (2004).
- [7816] T.S. Biro, G. Purcsel and B. Muller, *What is the temperature in heavy ion collisions?*, Acta Physica Hungarica A - Heavy Ions Physics **21**, 85 (2004).
- [7817] C. Bierlich, A. Buckley, C.H. Christensen, P.H.L. Christiansen, C.B. Duncan, J.F. Grosse-Oetringhaus, P. Karczmarczyk, P. Kirchgaesser, J. Klein, L. Lonnblad, R. Preghenella, C.O. Rasmussen, M. Stefaniak and V. Vislavicius, *Confronting experimental data with heavy-ion models: RIVET for heavy ions*, Eur. Phys. J. C **80**, 485 (2020).
- [7818] C. Bierlich, J. Wilkinson, J. Sun, G. Manca, R.G. de Cassagnac and J. Otwinowski, *Open charm production cross section from combined LHC experiments in pp collisions at $\sqrt{s} = 5.02$ TeV*, Eur. Phys. J. Plus **139**, 593 (2024).
- [7819] J. Zimanyi, P. Levai and T.S. Biro, *Properties of quark matter produced in heavy-ion collision*, J. Phys. G: Nucl. Part. Phys. **31**, 711-718 (2005).
- [7820] T.S. Biro, G. Gyorgyi, A. Jakovac and G. Purcsel, *Non-Gibbs particle spectra from thermal equilibrium*, preprint (2004) [hep-ph/0409157].
- [7821] T.S. Biro and A. Jakovac, *Power-law tails from multiplicative noise*, Phys. Rev. Lett. **94**, 132302 (2005).
- [7822] T.S. Biro and G. Purcsel, *Nonextensive Boltzmann equation and hadronization*, Phys. Rev. Lett. **95**, 162302 (2005) (4 pages).
- [7823] T. S. Biro and G. Purcsel, *Non-extensive equilibration in relativistic matter*, Central Eur. J. Phys. **7**, 395-400 (2009).

- [7824] F.S. Navarra, O.V. Utyuzh, G. Wilk and Z. Wlodarczyk, *Estimating inelasticity with the information theory approach*, Phys. Rev. D **67**, 114002 (2003).
- [7825] G. Wilk and Z. Wlodarczyk, *Fluctuations, correlations and the nonextensivity*, Physica A **376**, 279-288 (2007).
- [7826] G. Wilk and Z. Wlodarczyk, *Correlations from generalized thermodynamic uncertainty relations*, Proceedings of Science (WPCF2011) 041 (2011) (6 pages) [The Seventh Workshop on Particle Correlations and Femtoscopy (University of Tokyo, September 20-24, 2011)].
- [7827] T. Osada, O.V. Utyuzh, G. Wilk and Z. Wlodarczyk, *Extended Gaussian ensemble or q-statistics in hadronic production processes?*, Eur. Phys. J. B **50**, 7-10 (2006).
- [7828] T. Osada and G. Wilk, *Nonextensive hydrodynamics for relativistic heavy-ion collision*, Phys. Rev. C **77**, 044903 (2008) (12 pages).
- [7829] T. Osada and G. Wilk, *Dissipative or just Nonextensive hydrodynamics? - Nonextensive/Dissipative correspondence*, Indian J. Phys. (2008), in press, 0805.2253 [nucl-th].
- [7830] T. Osada and G. Wilk, *Nonextensive/dissipative correspondence in relativistic hydrodynamics*, Progr. Theor. Phys. Suppl. (2008), in press, 0805.3572 [nucl-th].
- [7831] T. Osada and G. Wilk, *Causal dissipative hydrodynamics obtained from the nonextensive/dissipative correspondence*, preprint (2008), 0810.5192 [nucl-th].
- [7832] A.V. Kolesnichenko and B.N. Chetverushkin, *Kinetic derivation of a quasi-hydrodynamic system of equations on the base of nonextensive statistics*, Russian J. Numerical Analysis and Mathematical Modelling **28** (6), 547 (2013).
- [7833] T. Osada and G. Wilk, *Nonextensive/dissipative correspondence in relativistic hydrodynamics*, Progr. Theor. Phys. Suppl. **174**, 168-172 (2008).
- [7834] T. Osada and G. Wilk, *New method of modelling dissipative hydrodynamics*, preprint (2008), 0812.4164 [hep-ph].
- [7835] M. Biyajima, T. Mizoguchi, N. Nakajima, N. Suzuki and G. Wilk, *Modified Hagedorn formula including temperature fluctuation - Estimation of temperature at RHIC experiments*, Eur. Phys. J. C **48**, 597-603 (2007).
- [7836] M. Biyajima, T. Mizoguchi and N. Suzuki (ALICE Collaboration), *What is the implication of the observation by CDF Collaboration of the transverse momentum spectrum at $\sqrt{s} = 1.96$ TeV?*, preprint (2016), 1604.01264 [hep-ph].
- [7837] A. Badala (ALICE Collaboration), *Recent ALICE results on hadronic resonance production*, EPJ Web of Conferences **96**, 01003 (2015) (7 pages), doi: 10.1051/epjconf/20159601003
- [7838] A. Badala, *Overview of ALICE results on hadronic resonance production*, EPJ Web of Conferences **142**, 01004 (2017) (6 pages), doi: 10.1051/epjconf/201714201004
- [7839] G. Wilk, *Fluctuations, correlations and non-extensivity*, Brazilian J. Phys. **37**, 714-716 (2007).
- [7840] A. Paramonov and A. Rostovtsev, *Self-organized criticality in particle production*, preprint (2002) [hep-ph/0208233].
- [7841] K. Morawetz, *Critical Tsallis exponent in heavy ion reaction*, Physica A **305**, 234 (2002).
- [7842] I. Kurp and T. Wibig, *Non-extensivity in hadronic interactions at high energies*, Proc. ICRC 2001 [http://www.copernicus.org/icrc/papers/ici6455_p.pdf].
- [7843] I. Kurp and T. Wibig, *On the generalization of the thermodynamic picture of hadronic interactions at high energies*, preprint (2001).
- [7844] T. Wibig and I. Kurp, *Large transverse momenta in statistical models of high energy interactions*, JHEP 122003039 (Institute of Physics Publishing for SISSA/ISAS, 2003).
- [7845] I. Kurp and T. Wibig, *Non-extensivity parameter in thermodynamical model of hadronic interactions*, Proceedings of the 28th International Cosmic Ray Conference 1615-1618 (July 31-August 7, 2003, Japan, Universal Academy Press).
- [7846] T. Wibig, *Test of identified hadron multiplicities for nonextensive statistical model at LHC energies*, Internat. J. Mod. Phys. A **29** (3-4), 1450021 (2014) (13 pages), doi: 10.1142/S0217751X14500213
- [7847] T. Wibig, *Constraints for non-standard statistical models of particle creations by identified hadron multiplicity results at LHC energies*, Eur. Phys. J. C **74**, 2966 (2014) (8 pages), doi: 10.1140/epjc/s10052-014-2966-4
- [7848] Q. Wang, P.P. Yang and F.H. Liu, *Comparing a few distributions of transverse momenta in high energy collisions*, Results in Physics **12**, 259-267 (2019).
- [7849] D.B. Walton and J. Rafelski, *Equilibrium distribution of heavy quarks in Fokker-Planck dynamics*, Phys. Rev. Lett. **84**, 31 (2000).

- [7850] T. Bhattacharyya and J. Cleymans, *Non-extensive Fokker-Planck transport coefficients of heavy quarks*, preprint (2017), 1707.08425 [hep-ph].
- [7851] T. Song, K.C. Han and C.M. Ko, *Charmonium production from nonequilibrium charm and anticharm quarks in quark-gluon plasma*, preprint (2012), 1203.2964 [nucl-th].
- [7852] T. Bhattacharyya and A. Mukherjee, *Propagation of non-linear waves in hot, ideal, and non-extensive quark-gluon plasma*, Eur. Phys. J. C **80**, 656 (2020), doi: 10.1140/epjc/s10052-020-8191-4
- [7853] L.S. Moriggi, G.M. Peccini and M.V.T. Machado, *Role of nuclear gluon distribution on particle production in heavy ion collisions*, Phys. Rev. D **103**, 034025 (2021).
- [7854] H.X. Zhang and Y.X. Xiao, *Non-extensive hard thermal loop resummation and its applications: Analysis in zero and finite magnetic fields*, preprint (2024), 2411.17090 [hep-ph].
- [7855] H. Kohyama and A. Niegawa, *Quantum field theories in nonextensive Tsallis statistics*, Progress Theor. Phys. **115**, 73-88 (2006).
- [7856] A.N. Petridis, *Statistical behavior of finite-size partially equilibrated systems*, preprint (2000) [nucl-th/0005034].
- [7857] O.V. Utyuzh, G. Wilk and Z. Wlodarczyk, *The fractal properties of the source and BEC*, Czech. J. Phys. **50**, 132, Suppl. 2 (2000); [hep-ph/9910355]; communicated at the 12th Indian Summer School "Relativistic Heavy Ion Physics", Prague, 30 August-3 September 1999.
- [7858] G. Wilk and Z. Wlodarczyk, *Some remarks on the interpretation of degree of nonextensivity*, preprint (2000) [hep-ph/0002145].
- [7859] G. Wilk and Z. Wlodarczyk, *The imprints of nonextensive statistical mechanics in high-energy collisions*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13**, Number 3, 547 (Pergamon-Elsevier, Amsterdam, 2002).
- [7860] G. Wilk and Z. Wlodarczyk, *Stochastic network view on hadron production*, Acta Physica Polonica B **35**, 2141 (2004).
- [7861] F.S. Navarra, O.V. Utyuzh, G. Wilk and Z. Wlodarczyk, *Violation of the Feynman scaling law as a manifestation of nonextensivity*, N. Cimento C **24**, 725 (2001) [hep-ph/0009165].
- [7862] F.S. Navarra, O.V. Utyuzh, G. Wilk and Z. Wlodarczyk, *Estimating the inelasticity with the information theory approach*, Phys. Rev. D **67**, 114002 (2003) .
- [7863] F.S. Navarra, O.V. Utyuzh, G. Wilk and Z. Wlodarczyk, *Information theory approach (extensive and nonextensive) to high energy multiparticle production processes*, Physica A **340**, 467 (2004).
- [7864] F.S. Navarra, O.V. Utyuzh, G. Wilk and Z. Wlodarczyk, *Information theory in high energy physics (extensive and nonextensive approach)*, Physica A **344**, 568 (2004).
- [7865] G. Wilk and Z. Wlodarczyk, *Imprints of nonextensivity in multiparticle production*, in Proc. 6th International Workshop on Relativistic Aspects of Nuclear Physics (RANP2000, Tabatinga, Sao Paulo, Brazil, 17-20 October 2000), in press.
- [7866] G. Wilk and Z. Wlodarczyk, *The imprints of superstatistics in multiparticle production processes*, Cent. Eur. J. Phys. **10** (3), 568-575 (2012).
- [7867] N.A. Alves and R.B. Frigori, *Superstatistics and the quest of generalized ensembles equivalence in a system with long-range interactions*, preprint (2015), 1512.01502 [cond-mat.stat-mech].
- [7868] M. Rybczynski and Z. Wlodarczyk, *Imprints of energy limitation in transverse momentum distributions of jets*, Eur. Phys. J. A **51**, 80 (2015) (6 pages), doi: 10.1140/epja/i2015-15080-5
- [7869] G. Wilk and Z. Wlodarczyk, *Traces of nonextensivity in particle physics due to fluctuations*, in Proc. 10th International Workshop on Multiparticle Production - Correlations and Fluctuations in QCD, eds. N.G. Antoniou, F.K. Diakonou and C.N. Ktorides (World Scientific, Singapore, 2003), page 344 [hep-ph/0210175].
- [7870] J. Rozynek and G. Wilk, *Nonextensive effects in the Nambu-Jona-Lasinio model for QCD*, J. Phys. G **36**, 125108 (2009) (15 pages).
- [7871] J. Rozynek and G. Wilk, *Nonextensive Nambu-Jona-Lasinio model of QCD matter*, Eur. Phys. J. A **52**, 13 (2016) (15 pages), doi: 10.1140/epja/i2016-16013-6
- [7872] J. Rozynek and G. Wilk, *Erratum to: Nonextensive Nambu-Jona-Lasinio model of QCD matter*, Eur. Phys. J. A **52**, 204 (2016), doi: 10.1140/epja/i2016-16204-1
- [7873] J. Rozynek and G. Wilk, *Nambu Jona-Lasinio model of QCD matter revisited*, preprint (2015), 1510.08516 [nucl-th].
- [7874] J. Rozynek and G. Wilk, *Nonextensive quasiparticle description of QCD matter*, preprint (2018), 1810.07008 [hep-ph].
- [7875] J. Rozynek and G. Wilk, *Nonextensive critical effects in the Nambu-Jona-Lasinio model*, Acta Physica Polonica B **41**, 351-356 (2010).

- [7876] J. Rozynek and G. Wilk, *Nonextensive critical effects in relativistic nuclear mean field models*, preprint (2011), 1102.4497 [nucl-th].
- [7877] J. Rozynek, *Non-extensive distributions for a relativistic Fermi gas*, preprint (2015), 1506.00469 [nucl-th].
- [7878] J. Rozynek, *Nonextensive critical effects in the NJL model*, EPJ Web Conferences **95**, 05014 (2015) (5 pages), doi: 10.1051/epjconf/20159505014
- [7879] J. Rozynek, *Non-extensive distributions for a relativistic Fermi gas*, Physica A Physica A **440**, 27-32 (2015).
- [7880] J. Rozynek, *Critical phenomena in the non-extensive Nambu-Jona-Lasinio model*, Acta Physica Polonica B, Proceedings Supplement **10** (3), 705-709 (2017).
- [7881] J. Rozynek and G. Wilk, *Dynamical nonextensivity or nonextensive dynamics?*, Eur. Phys. J. Special Topics **229**, 751-758 (2020).
- [7882] Y.P. Zhao, *Thermodynamic properties and transport coefficients of QCD matter within the non-extensive Polyakov-Nambu-Jona-Lasinio model*, Phys. Rev. D **101**, 096006 (2020).
- [7883] E. Megias, M.J. Teixeira, V.S. Timoteo and A. Deppman, *Nambu-Jona-Lasinio model with a fractal inspired coupling*, preprint (2022), 2203.11080 [hep-ph].
- [7884] R. Korus, St. Mrowczynski, M. Rybczynski and Z. Wlodarczyk, *Transverse momentum fluctuations due to temperature variation in high-energy nuclear collisions*, Phys. Rev. C **64**, 054908 (2001).
- [7885] G. Wilk and Z. Wlodarczyk, *Multiplicity fluctuations due to the temperature fluctuations in high-energy nuclear collisions*, Phys. Rev. C **79**, 054903 (2009) (10 pages).
- [7886] A. Bialas, *Tsallis p_T distribution from statistical clusters*, Physics Letters B **747**, 190-192 (2015).
- [7887] A. Bialas and A. Bzdak, *Two-particle correlations in high-energy jets from statistical clusters*, preprint (2015), 1508.04235 [hep-ph].
- [7888] A. Bialas and A. Bzdak, *Short-range two-particle correlations from statistical clusters*, Phys. Rev. D **93**, 094015 (2016) (6 pages).
- [7889] A. Bialas and A. Bzdak, *Multi-particle correlations in transverse momenta from statistical clusters*, Phys. Lett. B **760**, 438-441 (2016).
- [7890] E. Andersen et al [NA36 Collaboration], *Measurement of negative particle multiplicity in S – Pb collisions at 200 GeV/c per nucleon with the NA36 TPC*, Phys. Lett. B **516**, 249 (2001).
- [7891] C. Tsallis and E.P. Borges, *Nonextensive statistical mechanics - Applications to nuclear and high energy physics*, in *Proc. 10th International Workshop on Multiparticle Production - Correlations and Fluctuations in QCD*, eds. N.G. Antoniou, F.K. Diakonou and C.N. Ktorides (World Scientific, Singapore, 2003), page 326 [cond-mat/0301521].
- [7892] O.V. Utyuzh, G. Wilk and Z. Wlodarczyk, *Multiparticle production processes from the nonextensive point of view*, preprint (2004) [hep-ph/0410341].
- [7893] O.V. Utyuzh, G. Wilk and Z. Wlodarczyk, *Multiparticle production processes from the Information Theory point of view*, *Heavy Ion Physics*, Acta Phys. Hung. A **19** (2004) and **25** (1) (2006) in press [hep-ph/0503048].
- [7894] M. Petrovici and A. Pop, *Collective phenomena in heavy ion collisions*, Rom. J. Phys. **57** (1-2), 419-430 (2012).
- [7895] O.V. Utyuzh, G. Wilk and Z. Wlodarczyk, *Information theory point of view on multiparticle production processes*, communicated at the 6th International Workshop on *Very High Multiplicity Physics* (JINR Dubna, 16-17 April 2005), and at the International Conference *New Trends In High-Energy Physics* (Yalta, Crimea, Ukraine, September 10-17 2005) [hep-ph/0510067].
- [7896] A.M. Teweldeberhan, H.G. Miller and R. Tegen, *Generalized statistics and the formation of a quark-gluon plasma*, Int. J. Mod. Phys. E - Nucl. Phys. **12**, 395 (2003).
- [7897] A.M. Teweldeberhan, H.G. Miller and R. Tegen, *κ -deformed statistics and the formation of a quark-gluon plasma*, Int. J. Mod. Phys. E **12**, 669 (2003).
- [7898] G. Wilk and Z. Wlodarczyk, *Tsallis distribution from minimally selected order statistics*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 76-79 (New York, 2007).
- [7899] G. Wilk and Z. Wlodarczyk, *Power laws in elementary and heavy-ion collisions - A story of fluctuations and nonextensivity?*, Eur. Phys. J. A **40**, 299-312 (2009).
- [7900] C.Y. Wong and G. Wilk, *Tsallis fits to pt spectra for pp collisions at LHC*, Acta Phys. Polon. B **43** (11), 2047-2054 (2012).
- [7901] C.Y. Wong and G. Wilk, *Tsallis fits to p_T spectra and relativistic hard scattering in pp collisions at LHC*, Phys. Rev. D **87**, 114007 (2013) (19 pages).
- [7902] G. Wilk and Z. Wlodarczyk, *Tsallis distribution with complex nonextensivity parameter q* , Physica A **413**, 53-58 (2014).

- [7903] G. Wilk and Z. Wlodarczyk, *Log-periodic oscillations of transverse momentum distributions*, preprint (2014), 1403.3508 [hep-ph].
- [7904] G. Wilk and Z. Wlodarczyk, *Oscillations in multiparticle production processes*, Entropy **19** (12), 670 (2017).
- [7905] A. Rovenchak, *Deforming Gibbs factor using Tsallis q -exponential with a complex parameter: An ideal Bose gas case*, Symmetry **12**, 732 (2020), doi: 10.3390/sym12050732
- [7906] G. Wilk and Z. Wlodarczyk, *Quasi-power laws in multiparticle production processes*, Chaos, Solitons and Fractals **81**, 487-496 (2015).
- [7907] G. Wilk and Z. Wlodarczyk, *Quasi-power law ensembles*, Acta Physica Polonica B **46** (6), 1103-1122 (2015).
- [7908] M. Rybczynski, G. Wilk and Z. Wlodarczyk, *System size dependence of the log-periodic oscillations of transverse momentum spectra*, EPJ Web of Conferences **90**, 01002 (2015) (6 pages), doi: 10.1051/epjconf/20159001002
- [7909] G. Wilk and Z. Wlodarczyk, *Tsallis distribution decorated with log-periodic oscillation*, Entropy **17** (1), 384-400 (2015), doi:10.3390/e17010384
- [7910] G. Wilk and Z. Wlodarczyk, *Temperature oscillations and sound waves in hadronic matter*, Physica A **486**, 579-586 (2017).
- [7911] L.J.L. Cirto, C. Tsallis, C.Y. Wong and G. Wilk, *The transverse-momenta distributions in high-energy pp collisions – A statistical-mechanical approach*, preprint (2014), 1409.3278 [hep-ph].
- [7912] C.Y. Wong, G. Wilk, L.J.L. Cirto and C. Tsallis, *Possible implication of a single nonextensive p_T distribution for hadron production in high-energy pp collisions*, EPJ Web of Conferences **90**, 04002 (2015) (10 pages), doi: 10.1051/epjconf/20159004002
- [7913] C.Y. Wong, G. Wilk, L.J.L. Cirto and C. Tsallis, *From QCD-based hard-scattering to nonextensive statistical mechanical descriptions of transverse momentum spectra in high-energy pp and $p\bar{p}$ collisions*, Phys. Rev. D **91**, 114027 (2015) (16 pages).
- [7914] N. Makke and S. Chawla, *Re-discovering Tsallis distribution from high-energy physics data using symbolic regression*, preprint (2024).
- [7915] M. Ghaffar, H.W. Ang and A.H. Chan, *From Tsallis scheme of high-energy pp collisions to generalized multiplicity distribution with modified combinatorics*, EPJ Web of Conferences **206**, 09008 (2019).
- [7916] S. Grigoryan, *Using Tsallis distribution for hadron spectra in pp collisions: pions and quarkonia at $\sqrt{s} = 5-13000$ GeV*, Phys. Rev. D **95**, 056021 (2017).
- [7917] L.N. Gao, F.H. Liu and B.C. Li, *Rapidity dependent transverse momentum spectra of heavy quarkonia produced in small collision systems at the LHC*, preprint (2019), arxiv 1901.05823
- [7918] C.Y. Wong, *Signature of the fragmentation of a color flux tube*, Phys. Rev. D **92**, 074007 (2015) (22 pages).
- [7919] L. McLerran and B. Schenke, *A Tale of tails: Photon rates and flow in ultra-relativistic heavy ion collisions*, Nuclear Physics A **946**, 158-170 (2016).
- [7920] W.C. Zhang and C.B. Yang, *Scaling behaviour of charged hadron p_T distributions in pp and $p\bar{p}$ collisions*, J. Phys. G: Nucl. Part. Phys. **41**, 105006 (2014) (9 pages), doi:10.1088/0954-3899/41/10/105006
- [7921] C. Tsallis and Z.G. Arenas, *Nonextensive statistical mechanics and high energy physics*, EPJ Web of Conferences **71**, 00132 (2014) (13 pages), doi:10.1051/epjconf/20147100132
- [7922] A.M. Tawfik and I.S. Elkamash, *On the correlation between Kappa and Levy stable distributions*, Physica A (2022), in press, doi: 10.1016/j.physa.2022.127576
- [7923] C.Y. Wong and G. Wilk, *Relativistic hard-scattering and Tsallis fits to p_T spectra in pp collisions at the LHC*, preprint (2013), 1309.7330 [hep-ph].
- [7924] C.Y. Wong, *Relativistic hard scattering and the hadron p_T spectrum in high-energy pp collisions*, Communication at Oak Ridge National Laboratory (LBL, March 24, 2015).
- [7925] A.A. Aparin and M.V. Tokarev, *Self-similarity of high- p_T cumulative hadron production in $p + A$ collisions at high energies at U70*, Phys. Particles and Nuclei Lett. **11** (4), 381-390 (2014).
- [7926] M. Tokarev and I. Zborovsky, *Self-similarity of K_S^0 -meson production in Au + Au collisions from BES-I at STAR and anomaly of “specific heat” and entropy*, Nuclear Physics A (2022), in press.
- [7927] M. Tokarev and I. Zborovsky, *Statistical properties of fractal entropy of K_S^0 -meson production in Au + Au collisions at RHIC*, Moscow University Physics Bulletin **79**, Suppl. 1, S129-S130 (2024).
- [7928] A. Alexey and T. Mikhail, *Cumulative hadron production in pA collisions in the framework of z -scaling*, Hadron Structure '15, Internat. J. Modern Physics: Conference Series **39**, 1560110 (2015) (7 pages), doi: 10.1142/S2010194515601106
- [7929] G. Wilk, *High energy collisions from nonextensive perspective*, communicated at the X Polish Workshop on Relativistic Heavy-Ion Collisions “Unreasonable effectiveness of statistical approaches to high-energy collisions”, (Kielce, Poland, 13-15 December 2013).

- [7930] G. Wilk, *Surprisingly close Tsallis fits to high transverse momentum hadrons produced at LHC*, communicated at the IX Workshop on Correlation and Femtoscopy (5-8 November 2013, Acireale, Italy).
- [7931] G. Wilk and Z. Wlodarczyk, *Self-similarity in jet events following from p-p collisions at LHC*, Phys. Lett. B **727**, 163-167 (2013).
- [7932] M.V. Bondarenco, S.T. Lukyanenko and P.V. Sorokin, *Parameterization for q_T -spectrum of inclusive Z-boson hadroproduction*, preprint (2013), 1309.0764 [hep-ph].
- [7933] S. Mazumder, T. Bhattacharyya and Jan-e Alam, *Gluon bremsstrahlung by heavy quarks: Its effects on transport coefficients and equilibrium distribution*, Phys. Rev D **89**, 014002 (2014) (8 pages).
- [7934] M. Rybczynski, Z. Wlodarczyk, and G. Wilk, *Scaling behavior of transverse momenta distributions in hadronic and nuclear collisions*, preprint (2012), 1212.1281 [hep-ph].
- [7935] T. Osada and G. Wilk, *Nonextensive perfect hydrodynamics - a model of dissipative relativistic hydrodynamics?*, Central Eur. J. Phys. **7**, 432-443 (2009).
- [7936] Z. Tang, F. Wang, Y. Xu and Z. Xu, *Spectral and radial flow at RHIC with Tsallis distribution in blast wave model*, preprint (2008).
- [7937] K. Jiang, Y. Zhu, W. Liu, H. Chen, C. Li, L. Ruan, M. Shao, Z. Tang and Z. Xu, *Onset of radial flow in p + p collisions*, Phys. Rev. C **91**, 024910 (2015) (6 pages).
- [7938] L. Li, N. Li and Y.F. Wu, *Measurement of anisotropic radial flow in relativistic heavy ion collisions*, J. Phys. G: Nucl. Part. Phys. **40**, 075104 (2013) (8 pages).
- [7939] F. Sikler (for the CMS Collaboration), *Soft physics capabilities of CMS in p-p and Pb-Pb*, J. Phys. G: Nucl.Part. Phys. **35**, 104150 (2008) (4 pages).
- [7940] CMS Collaboration, *Study of the inclusive production of charged pions, kaons, and protons in pp collisions at $s = 0.9, 2.76, \text{ and } 7 \text{ TeV}$* , Eur. Phys. J. C **72**, 2164 (2012) (37 pages).
- [7941] CMS Collaboration, *Study of the production of charged pions, kaons, and protons in pPb collisions at $\sqrt{s_{NN}} = 5.02 \text{ TeV}$* , Eur. Phys. J. C **74**, 2847 (2014) (27 pages), doi: 10.1140/epjc/s10052-014-2847-x
- [7942] ALICE Collaboration, *Measurement of pion, kaon and proton production in proton-proton collisions at $\sqrt{s} = 7 \text{ TeV}$* , Eur. Phys. J. C **75**, 226 (2015) (23 pages), doi: 10.1140/epjc/s10052-015-3422-9
- [7943] ALICE Collaboration, *Hyperon production in pp collisions at $\sqrt{s} = 7 \text{ TeV}$ at the LHC with ALICE*, EPJ Web of Conferences **97**, 00005 (2015) (4 pages), doi: 10.1051/epjconf/20159700005
- [7944] CMS Collaboration, *Measurement of Λ_b cross section and the $\bar{\Lambda}_b$ to Λ_b ratio with J/ψ Λ decays $\sqrt{s} = 7 \text{ TeV}$* , Phys. Lett. B **714**, 136-157 (2012).
- [7945] CMS Collaboration, *Measurement of the elliptic anisotropy of charged particles produced in PbPb collisions at $\sqrt{s} = 2.76 \text{ TeV}$* , Phys. Rev. C **87**, 014902 (2013) (34 pages).
- [7946] M. Rybczynski, Z. Wlodarczyk and G. Wilk, *On the possibility of q-scaling in high energy production processes*, J. Phys. G: Nucl. Part. Phys. **39**, 095004 (2012) (9 pages).
- [7947] J. Cleymans and D. Worku, *The Tsallis distribution in proton-proton collisions at $s=0.9 \text{ TeV}$ at the LHC*, J. Phys. G - Nuclear and Particle Phys. **39** (2), 025006 (2012) (12 pages).
- [7948] J. Cleymans and D. Worku, *Relativistic thermodynamics: Transverse momentum distributions in high-energy physics*, Eur. Phys. J. A **48**, 160 (2012) (8 pages).
- [7949] J. Cleymans, *The Tsallis distribution at the LHC*, preprint (2012), 1210.7464 [hep-ph] [communicated at CERN, Geneva, 1 February 2013].
- [7950] J. Cleymans, *The Tsallis distribution at the LHC: Phenomenology*, AIP Conference Proceedings **1625**, 31-37 (2014) [36th Brazilian Workshop on Nuclear Physics, Brazil, 1 to 5 September 2013; Code 109010].
- [7951] J. Cleymans, *The Tsallis distribution for p-p collisions at the LHC*, J. Physics: Conference Series **455**, 012049 (2013) (6 pages), doi:10.1088/1742-6596/455/1/012049
- [7952] J. Cleymans, *The Tsallis Distribution at the LHC*, EPJ Web of Conferences **70**, 00009 (2014) (6 pages), doi: 10.1051/epjconf/20147000009
- [7953] O. Ristea, A. Jipa, C. Ristea, C. Besliu, I. Lazanu, M. Calin, T. Esanu and V. Covlea, *Study of the particle transverse momentum spectra in relativistic heavy ion collisions using the Tsallis statistics*, EPJ Web of Conferences **66**, 04025 (2014) (4 pages), doi: 10.1051/epjconf/20146604025
- [7954] O. Ristea, C. Ristea and A. Jipa, *Rapidity dependence of charged pion production at relativistic energies using Tsallis statistics*, Eur. Phys. J. A **53**, 91 (2017), doi: 10.1140/epja/i2017-12286-5
- [7955] J. Cleymans, G.I. Lykasov, A.S. Parvan, A.S. Sorin, O.V. Teryaev, D. Worku, *Systematic properties of the Tsallis distribution: Energy dependence of parameters in high energy p-p collisions*, Phys. Lett. B **723**, 351-354 (2013).

- [7956] A.S. Parvan and O.V. Teryaev, *Comparing Tsallis statistics effects at high and very high energy pp collisions*, preprint (2016), 1607.01956 [hep-ph]. EPJ Web of Conferences **137**, 11004 (2017) DOI: 10.1051/epjconf/201713711004
- [7957] S. Kiselev, *Hadronic resonance production with ALICE at the LHC*, EPJ Web of Conferences **138**, 01022 (2017), doi: 10.1051/epjconf/201713801022
- [7958] J. Cleymans, M.D. Azmi, A.S. Parvan and O.V. Teryaev, *The parameters of the Tsallis distribution at the LHC*, EPJ Web of Conferences **137**, 11004 (2017) (5 pages), doi: 10.1051/epjconf/201713711004
- [7959] A.S. Parvan, *Transverse momentum distributions of hadrons in the Tsallis-1 and Tsallis-2 statistics*, EPJ Web of Conferences **138**, 03008 (2017)(6 pages), doi: 10.1051/epjconf/201713803008
- [7960] A.S. Parvan, *Comparison of exact and approximate results of the Tsallis statistics in ultrarelativistic pp collisions*, preprint (2016), 1608.01888 [nucl-th].
- [7961] A.S. Parvan, *Comparison of Tsallis statistics with the Tsallis-factorized statistics in the ultrarelativistic pp collisions*, Eur. Phys. J. A **52**, 355 (2016) (7 pages), doi: 10.1140/epja/i2016-16355-y
- [7962] A.S. Parvan, *Ultrarelativistic transverse momentum distribution of the Tsallis statistics*, Eur. Phys. J. A **53**, 53 (2017) (12 pages), doi: 10.1140/epja/i2017-12242-5
- [7963] J. Cleymans, *Systematic properties of the Tsallis distribution: Energy dependence of parameters*, 14th International Conference on Strangeness in Quark Matter (SQM2013), J. Phys.: Conference Series **509**, 012099 (2014), doi:10.1088/1742-6596/509/1/012099
- [7964] A.S. Parvan, *Ultrarelativistic transverse momentum distribution of Tsallis statistics*, Eur. Phys. J. A **53**, 53 (2017) (12 pages), doi: 10.1140/epja/i2017-12242-5
- [7965] M.D. Azmi and J. Cleymans, *Transverse momentum distributions at the LHC and Tsallis thermodynamics*, XXXI Max Born Symposium and HIC for FAIR Workshop (2013), 1310.0217 [hep-ph].
- [7966] S. De, S. De and S. Chattopadhyay, *Thermalization of dense hadronic matter in Au + Au collisions at energies available at the Facility for Antiproton and Ion Research*, Phys. Rev. C **94**, 054901 (2016) (9 pages).
- [7967] M.D. Azmi and J. Cleymans, *Transverse momentum distributions in p-Pb collisions and Tsallis thermodynamics*, preprint (2013), 1311.2909 [hep-ph].
- [7968] ALICE Collaboration, *Production of $K^*(892)^0$ and $\Phi(1020)$ in p-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV*, Eur. Phys. J. C **76**, 245 (2016) (21 pages), doi: 10.1140/epjc/s10052-016-4088-7
- [7969] M.D. Azmi and J. Cleymans, *Transverse momentum distributions in proton-proton collisions at LHC energies and Tsallis thermodynamics*, J. Phys. G: Nucl. Part. Phys. **41**, 065001 (2014) (10 pages), doi:10.1088/0954-3899/41/6/065001
- [7970] J. Cleymans and M.D. Azmi, *The Tsallis distribution at large transverse momenta*, communicated at Strangeness in Quark Matter (SQM) 2015 (JINR, Dubna, Russian Federation, 6-11 July 2015).
- [7971] J. Cleymans and M.D. Azmi, *Large transverse momenta and Tsallis thermodynamics*, J. Physics: Conference Series **668**, 012050 (2016) (4 pages), doi:10.1088/1742-6596/668/1/012050
- [7972] M. D. Azmi and J. Cleymans, *The Tsallis distribution at large transverse momenta*, Eur. Phys. J. C **75**, 430 (2015) (5 pages), doi: 10.1140/epjc/s10052-015-3629-9
- [7973] G.G. Barnafoldi, G. Biro, K. Urmosy and T.S. Biro, *Non-extensive statistical approach for hadronization and its application*, communicated at Strangeness in Quark Matter (SQM) 2015 (JINR, Dubna, Russian Federation, 6-11 July 2015).
- [7974] G. Biro, G.G. Barnafoldi, T.S. Biro and K. Urmosy, *Application of the non-extensive statistical approach to high energy particle collisions*, AIP Conference Proceedings **1853**, 080001 (2017).
- [7975] T. Wibig, *Multiplicities for non-extensive statistical model at LHC energies*, preprint (2013), 1304.0655 [hep-ph].
- [7976] V.V. Begun, M. Gazdzicki and M.I. Gorenstein, *Power law in a microcanonical ensemble with scaling volume fluctuations*, Phys. Rev. C **78**, 024904 (2008) (10 pages).
- [7977] T. Osada, *Relativistic hydrodynamical model in the presence of long-range correlations*, Phys. Rev. C **81**, 024907 (2010) (8 pages).
- [7978] T.S. Biro and E. Molnar, *Non-extensive statistics, relativistic kinetic theory and fluid dynamics*, Eur. Phys. J. A **48**, 172 (2012) (11 pages).
- [7979] Z.B.B. de Oliveira and R. Silva, *Relativistic kinetic theory and non-gaussian statistical*, Annals of Physics **375**, 227-232 (2016).
- [7980] P. K. Khandai, P. Sett, P. Shukla and V. Singh, *Hadron spectra in p+p collisions at RHIC and LHC energies*, Internat. J. Mod. Phys. A **28** (16), 1350066 (2013) (12 pages).

- [7981] P.K. Khandai, P. Sett, P. Shukla and V. Singh, *System size dependence of hadron p_T spectra in $p + p$ and $Au + Au$ collisions at $\sqrt{s_{NN}} = 200$ GeV*, J. Phys. G: Nucl. Part. Phys. **41**, 025105 (2014) (10 pages), doi:10.1088/0954-3899/41/2/025105
- [7982] P.K. Khandai, P. Sett, P. Shukla and V. Singh, *Description of hadron p_T spectra with modified Tsallis function*, Proceedings DAE Symp. on Nucl. Phys. **58**, 720-721, (2013).
- [7983] P. Sett and P. Shukla, *Pion p_T spectra in $p + p$ collisions as a function of \sqrt{s} and event multiplicity*, Advances in High Energy Physics, ID 896037 (2014) (7 pages), <http://dx.doi.org/10.1155/2014/896037>
- [7984] P. Sett and P. Shukla, *Inferring freeze-out parameters from pion measurements at RHIC and LHC*, Internat. J. Mod. Phys. E **24** (6), 1550046 (2015) (8 pages).
- [7985] A.A. Aparin and M.V. Tokarev, *Self-similarity of low- p_T cumulative pion production in proton-nucleus collisions at high energies*, Communicated at the International Conference and Hadron Structure 13 (June 30 to July 4, 2013, Tatranske Maltiare, Slovak Republic), preprint E2-2013-56.
- [7986] A.A. Aparin and M.V. Tokarev, *Self-similarity of low- p_T cumulative pion production in proton-nucleus collisions at U701*, Phys. Particles and Nuclei Lett. **11** (4), 391-403 (2014).
- [7987] E.V. Nedorezov, A.S. Parvan and A.A. Aparin, *Description of charged particle dependence on transverse momentum with Tsallis-like distribution*, Physics of Particles and Nuclei **55**, 984-989, (2024).
- [7988] E. Nedorezov, A. Aparin, A. Parvan and V.B. Luong, *A system size analysis of the fireball produced in heavy-ion collisions*, Particles **8**, 34 (2025).
- [7989] L. Zhu and R.C. Hwa, *Centrality and transverse momentum dependencies of minijets and hadrons in Au-Au collisions*, preprint (2013), 1307.3328 [nucl-th].
- [7990] Y. Nakamiya and K. Homma, *Measurability of Φ , ω and ρ mesons via di-electron decays in high-temperature states produced in heavy-ion collisions*, Prog. Theor. Exp. Phys. 113H01 (2013), (25 pages), doi: 10.1093/ptep/ptt088
- [7991] D.K. Mishra, P. Garg, P.K. Netrakanti and A.K. Mohanty, *Net-baryon number fluctuations with hadron resonance gas model using Tsallis distribution*, J. Phys. G: Nucl. Part. Phys. **42**, 105105 (2015) (11 pages), doi:10.1088/0954-3899/42/10/105105
- [7992] V.C. Dubey, A.K. Mishra and U.K. Sharma, *Diagnosing the Renyi holographic dark energy model in a flat universe*, Astrophys. Space Sci. **365**, 129 (2020), doi: 10.1007/s10509-020-03846-x
- [7993] S.K. Mishra, M.K. Shukla and A.K. Singh, *Sequential effect algebras dynamical systems and its invariance: The generalized α -Tsallis's entropy approach*, Asian-European Journal of Mathematics (2025).
- [7994] V.C. Dubey, U.K. Sharma and A. Pradhan, *Sharma-Mittal holographic dark energy model in conharmonically flat space-time*, International Journal of Geometric Methods in Modern Physics, 2150002 (2021) (21 pages), doi: 10.1142/S021988782150002X
- [7995] R. Rath, S. Tripathy, B. Chatterjee, R. Sahoo, S.K. Tiwari and A. Nath, *Violation of Wiedemann-Franz law for a hot hadronic matter created at NICA, FAIR and RHIC energies using non-extensive statistics*, Eur. Phys. J. A **55**, 125 (2019), doi: 10.1140/epja/i2019-12814-3
- [7996] R. Rath, A. Khuntia, R. Sahoo and J. Cleymans, *Event multiplicity, transverse momentum and energy dependence of charged particle production, and system thermodynamics in pp collisions at the Large Hadron Collider*, J. Phys. G: Nucl. Part. Phys. **47**, 055111 (2020).
- [7997] J. Cleymans, *The Tsallis Distribution at the LHC*, communicated at CERN Heavy Ion Forum (1 February 2013, Geneva).
- [7998] J. Cleymans, *The Tsallis Distribution at the LHC*, communicated at CERN Heavy Ion Forum (13 January 2014, Geneva) [Data from LHCb Collaboration, *Measurement of J/ψ production in pp collisions at $\sqrt{s_{NN}} = 7$ TeV*, Eur. Phys. J. C **71**, 1645 (2011) (17 pages), doi: 10.1140/epjc/s10052-011-1645-y].
- [7999] ALICE Collaboration, *Measurement of $\Lambda(1520)$ production in pp collisions at $\sqrt{s} = 7$ TeV and p -Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV*, Eur. Phys. J. C **80**, 160 (2020).
- [8000] LHCb Collaboration, *Study of the production of Λ_b^0 and \bar{B}^0 hadrons in pp collisions and first measurement of the $\Lambda_b^0 \rightarrow J/\psi p K^-$ branching fraction*, Chinese Physics C **40** (1), 011001 (2016) (16 pages).
- [8001] LHCb collaboration, *Forward production of Y mesons in pp collisions at $\sqrt{s} = 7$ and 8 TeV*, JHEP **11**, 103 (2015) (34 pages).
- [8002] *Production of ω mesons in pp collisions at $\sqrt{s} = 7$ TeV*, Eur. Phys. J. C **80**, 1130 (2020), doi: 10.1140/epjc/s10052-020-08651-y
- [8003] B.C. Li, Y.Z. Wang, F.H. Liu, X.J. Wen and Y.E. Dong, *Particle production in relativistic $pp(\bar{p})$ and AA collisions at RHIC and LHC energies with Tsallis statistics using the two-cylindrical multisource thermal model*, Phys. Rev. D **89**, 054014 (2014) (12 pages).

- [8004] V. Riabov, *Fitting PHENIX identified hadron production spectra to Tsallis function in $p + p$ and $d + Au$ collisions at 200 GeV*, communicated at CERN (1 February 2013, Geneva).
- [8005] F. Sikler, *Tsallis fitting of the CMS data*, communicated at CERN (1 February 2013, Geneva).
- [8006] F. Sikler (CMS Collaboration), *Identified particles in pPb collisions at $\sqrt{s_{NN}} = 5.02\text{ TeV}$ measured with the CMS detector*, Nuclear Physics A **926**, 128-135 (2014).
- [8007] M. Rybczynski and Z. Wlodarczyk, *Tsallis statistics approach to the transverse momentum distributions in $p-p$ collisions*, preprint (2014), 1401.5639 [hep-ph].
- [8008] L. Zhu and R.C. Hwa, *Effects of shower partons on soft and semihard hadrons produced in Pb-Pb collisions at 2.76 TeV*, preprint (2014), 1406.5733 [nucl-th].
- [8009] V. S. Sandul, V.V. Vechernin and G.A. Feofilov, *Influence of the effects of color reconnection and the formation of hadronic jets on the distribution of charged particles over the transverse momentum in pp -collisions at the energies of the Large Hadron Collider*, Bulletin of the Russian Academy of Sciences: Physics **83** (9), 1168-1172 (2019); Izvestiya Rossiiskoi Akademii Nauk, Seriya Fizicheskaya, **83** (9), 1277-1281 (2019).
- [8010] L.L. Li, F.H. Liu, M. Waqas, R. Al-Yusufi and A. Mujear, *Excitation functions of related parameters from transverse momentum (mass) spectra in high energy collisions*, Advances in High Energy Physics, 5356705 (2020) (21 pages), doi: 10.1155/2020/5356705
- [8011] X.H. Zhang, F.H. Liu, K.K. Olimov and A. Deppman, *Random statistical analysis of transverse momentum spectra of strange particles and dependence of related parameters on centrality in high energy collisions at the LHC*, preprint (2022), 2209.03894 [hep-ph].
- [8012] L.L. Li, F.H. Liu, M. Waqas and M. Ajaz, *Analyzing transverse momentum spectra by a new method in high-energy collisions*, Universe **8**, 31 (2022).
- [8013] M. Waqas, A.A.K.H. Ismail, M. Ajaz and A. Abdel Kader, *Excitation function of kinetic freeze-out parameters at 6.3, 17.3, 31, 900 and 7000 GeV*, Universe **8**, 138 (2022), doi: 10.3390/universe8020138
- [8014] M. Waqas, G.X. Peng, M. Ajaz, A.M. Khubrani, E.A. Dawi, M.A. Khan and A. Tawfik, *Pseudorapidity dependence of the transverse momentum distribution of charged particles in pp collisions at 0.9, 2.36, and 7 TeV*, Results in Physics **42**, 105989 (2022).
- [8015] M. Waqas, G.X. Peng, M. Ajaz, A.H. Ismail and E.A. Dawi, *Analyses of the collective properties of hadronic matter in Au-Au collisions at 54.4 GeV*, Phys. Rev. D **106**, 075009 (2022).
- [8016] S. De and S. De, *Empirical determination of the fractional energy loss of heavy mesons at RHIC and LHC energies*, preprint (2021), 2104.02644 [hep-ph].
- [8017] I. Aizenberg, Z. Citron and A. Milov, *Transverse mass scaling of heavy mesons at LHC energies*, preprint (2022), 2203.11831 [hep-ph].
- [8018] M. Waqas and B.C. Li, *Kinetic freeze-out temperature and transverse flow velocity in Au-Au collisions at RHIC-BES energies*, Advances in High Energy Physics, 1787183 (2020) (14 pages), doi: doi.org/10.1155/2020/1787183
- [8019] M. Waqas and G.X. Peng, *Study of dependence of kinetic freezeout temperature on the production cross-section of particles in various centrality intervals in Au-Au and Pb-Pb collisions at high energies*, Entropy **23**, 488 (2021), doi: 10.3390/e23040488
- [8020] M. Waqas, W. Bietenholz, M. Bouzidi, M. Ajaz, A.A.K.H. Ismail and T. Saidani, *Analyzing the correlation between thermal and kinematic parameters in various multiplicity classes within 7 and 13 TeV pp collisions*, J. Phys. G: Nucl. Part. Phys. **51**, 075102 (2024).
- [8021] M. Smolla, B. Schafer, H. Lesch and C. Beck, *Universal properties of primary and secondary cosmic ray energy spectra*, New Journal Physics **22**, 093002 (2020).
- [8022] J. Moerman, *Log-periodieke machtswetten in impulspectra van hadronische fragmenten bij kern-kernbotsingen: een diagnose*, Doctor Thesis (Gent University, Belgium, 2020).
- [8023] M.U. Ashraf, J. Tariq, S. Ikram and A.M. Khan, *Freeze-out properties of different strange hadrons from Au+Au collisions at $\sqrt{s_{NN}} = 54.4\text{ GeV}$* , preprint (2022), 2208.13274 [hep-ph].
- [8024] W.H. Wu, J.Q. Tao, H. Zheng, W.C. Zhang, X.Q. Liu, L.L. Zhu and A. Bonasera, *Thermodynamic properties at the kinetic freeze-out in the Au + Au and Cu + Cu collisions at the RHIC using the Tsallis distribution*, Nuclear Science and Techniques **34**, 151 (2023).
- [8025] P.T. Landsberg, *Self-organization, entropy and order*, in *On self-organization*, eds. R.K. Mishra, D. Maass and E. Zwierlein, Series in Synergetics **61**, 157 (Springer-Verlag, Berlin, 1994).
- [8026] C. Tsallis, G. Bemski and R.S. Mendes, *Is re-association in folded proteins a case of nonextensivity?*, Phys. Lett. A **257**, 93 (1999).
- [8027] M. Czachor, *Acceleration deforms exponential decays into power laws*, preprint (2024), 2409.18151 [physics.class-ph].

- [8028] M. Czachor, *Acceleration deforms exponential decays into generalized Zipf-Mandelbrot laws*, Physics Letters A **535**, 130272 (2025).
- [8029] L.M. Sousa and L.G. Rizzi, *Effects of the concentration of seeds, finite time-dependent supersaturations, and viscosity on the crystallization kinetics of monosodium urate monohydrate*, Journal of Molecular Modeling **30**, 281 (2024).
- [8030] B. Kierdaszuk and J. Wlodarczyk, *Interpretation of intramolecular stacking effect on the fluorescence intensity decay of 3-methylbenzimidazolyl(5'-5')guanosine dinucleotides using a model of lifetime distribution*, Eur. Biophys. J. **35**, 424-430 (2006).
- [8031] J. Wu, Y. Zhang and Z. Mu, *Predicting nucleosome positioning based on geometrically transformed Tsallis entropy*, Plos One **9** (11), e109395 (2014) (16 pages).
- [8032] D. Choy and S.-H. Chen, *Clipped random wave analysis of isometric lamellar microemulsions*, Phys. Rev. E **61**, 4148 (2000).
- [8033] D. Choy and S.-H. Chen, *Clipped random wave analysis of anisometric lamellar microemulsions*, Phys. Rev. E **63**, 021401 (2001).
- [8034] A. Upadhyaya, J.-P. Rieu, J.A. Glazier and Y. Sawada, *Anomalous diffusion and non-Gaussian velocity distribution of Hydra cells in cellular aggregates*, Physica A **293**, 549 (2001).
- [8035] S.Z. Lin, P.C. Chen, L.Y. Guan, Y. Shao, Y.K. Hao, Q. Li, B. Li, D.A. Weitz and X.Q. Feng, *Universal statistical laws for the velocities of collective migrating cells*, Adv. Biosys. **4**, 2000065 (2020).
- [8036] S.Z. Lin, W.Y. Zhang, D. Bi, B. Li and X.Q. Feng, *Energetics of mesoscale cell turbulence in two-dimensional monolayers*, Comm. Phys. **4**, 21 (2021), doi: 10.1038/s42005-021-00530-6
- [8037] B. Li, S.Z. Lin, Z.Y. Liu and X.Q. Feng, *EML webinar overview: Dynamics of collective cells*, Extreme Mechanics Letters **44**, 101255.(2021).
- [8038] A.M. Reynolds, *Can spontaneous cell movements be modelled as Lévy walks?*, Physica A **389**, 273-277 (2010).
- [8039] A.M. Reynolds and S. Geritz, *Tsallis distributions, Levy walks and correlated-type anomalous diffusion result from state-dependent diffusion*, Physica A **424**, 317-321 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2015.01.034>
- [8040] E.C. Rocha, *Estrutura analitica complexa das distribuicoes estaveis de Levy*, Doctor Thesis (Universidade Federal do Rio Grande do Norte, Departamento de Fisica Teorica e Experimental, 2020).
- [8041] F. Fernandez-Navarro, C. Hervas-Martinez, P.A. Gutierrez, R. Ruiz and J.C. Riquelme, *Evolutionary q-Gaussian radial basis functions for improving prediction accuracy of gene classification using feature selection*, Artificial Neural Networks-ICANN 2010, **6352**, Part I, 327-336 (2010).
- [8042] F. Fernandez-Navarro, C. Hervas-Martinez, M. Cruz-Ramirez, P.A. Gutierrez and A. Valero, *Evolutionary q-Gaussian Radial Basis Function Neural Network to determine the microbial growth/no growth interface of Staphylococcus aureus*, Applied Soft Computing **11**, 3012-3020 (2011).
- [8043] R.W. Ibrahim and M. Darus, *Analytic study of complex fractional Tsallis' entropy with applications in CNNs*, Entropy **20**, 722 (2018), doi: 10.3390/e20100722
- [8044] C.H. Zhang, S.J. Cheng and S.H. Cao, *The support vector machine fault diagnosis algorithm based on cloud computing*, Applied Mechanics and Materials **687-691**, 761-765 (2014) [International Conference on Manufacturing Technology and Electronics Applications, ICMTEA 2014, Taiyuan - China, 8 to 9 November 2014].
- [8045] D.S. Pillai and N. Rajasekar, *A comprehensive review on protection challenges and fault diagnosis in PV systems*, Renewable and Sustainable Energy Reviews **91**, 18-40 (2018).
- [8046] D. Li, E. Wang, D. Jin, D. Wang and W. Liang, *Response characteristics of weak current stimulated from coal under an impact load and its generation mechanism*, Sustainability **15**, 2605 (2023).
- [8047] I. Bancescu and I.D. Radulescu, *Wage segregation using Tsallis entropy*, Proceedings of the International Conference "Information Society and Sustainable Development" (2019).
- [8048] M. Hammad and K. Wang, *Fingerprint classification based on a Q-Gaussian multi-class support vector machine*, ACM (2017), doi: <http://dx.doi.org/10.1145/3077829.3077836>
- [8049] M. Hammad and K. Wang, *Parallel score fusion of ECG and fingerprint for human authentication based on convolution neural network*, Computers and Security (2018), in press, doi: 10.1016/j.cose.2018.11.003
- [8050] I. Basicovic, N. Blazic and S. Ocovaj, *On the use of generalized entropy formulas in detection of denial of service attacks*, Security and Privacy (2020), doi: 10.1002/spy2.134
- [8051] J. Singh, N. Jyoti and S. Behal, *On the use of information theory metrics for detecting DDoS attacks and flash events: an empirical analysis, comparison, and future directions*, Kuwait J.Sci. **48** (4), 1-24 (2021).
- [8052] T. Villmann and T. Geweniger, *Multi-class and cluster evaluation measures based on Renyi and Tsallis entropies and mutual information*, International Conference on Artificial Intelligence and Soft Computing

- (ICAISC) 2018: Artificial Intelligence and Soft Computing, 736-749, Lecture Notes in Computer Science **10841** (2018).
- [8053] S. Li and R. Cai, *The generalized maximum belief entropy model*, Soft Computing (2022), doi: 10.1007/s00500-022-06896-1
- [8054] F. Fernandez-Navarro, C. Hervás-Martínez, P.A. Gutiérrez and M. Carbonero-Ruz, *Evolutionary q-Gaussian radial basis function neural networks for multiclassification*, Neural Networks **24**, 779-784 (2011).
- [8055] M. Tezekbayev, V. Nikoulina, M. Galle and Z. Assylbekov, *Speeding up Entmax*, preprint (2021), 2111.06832 [cs.CL].
- [8056] F. Fernandez-Navarro, C. Hervás-Martínez, P.A. Gutiérrez, J.M. Pena-Barragan and F. Lopez-Granados, *Parameter estimation of q-Gaussian radial basis functions neural networks with a hybrid algorithm for binary classification*, Neurocomputing **75**, 123-134 (2012).
- [8057] F. Fernandez-Navarro, C. Hervás-Martínez and P.A. Gutiérrez, *Generalised Gaussian radial basis function neural networks*, Soft Comput. **17**, 519-533 (2013).
- [8058] H.U. Bodeker, C. Beta, T.D. Frank and E. Bodenschatz, *Quantitative analysis of random ameoboid motion*, Europhys. Lett. **90**, 28005 (2010) (6 pages).
- [8059] L. Diambra, L. C. Cintra, D. Schubert, and L. da F. Costa, *Non-Maxwellian velocity distribution and anomalous diffusion of in vitro kidney cells*, Physica A **365**, 481-490 (2005).
- [8060] L. Diambra, L. C. Cintra, Q. Chen, D. Schubert, and L. da F. Costa, *Cell adhesion protein decreases cell motion: Statistical characterization of locomotion activity*, Physica A **365**, 481-490 (2006).
- [8061] T. Nahlik, J. Urban, P. Cisar, J. Vanek, and D. Stys, *Entropy based approximation to cell monolayer development*, 5th European Conference of the International Federation for Medical and Biological Engineering (Budapest, 14-18 Sept 2011), ed. A. Jobbagy, Pts. 1 and 2, **37**, 563-566 (2012).
- [8062] D.V. Saraja, C. Subramanian, A.A. Rather and N.S. Rao, *Some contributions to Darna distribution with properties and applications in medical science*, Dickensian Journal **22** (6), 2057 (2022).
- [8063] B. Jayakumar, R. Elangovan and A.K. Rajalakshmi, *A New Exponentiated Distribution with Applications in Medical Science*, New Trends on Stochastic Processes, SQC & Reliability Using R Programming (2023).
- [8064] E. Akturk and A. Harkin, *Nonextensive statistical mechanics application to vibrational dynamics of protein folding*, Int. J. Theor. Phys. **46**, 2945-2949 (2007).
- [8065] J.P. Dal Molin, V.H.R. Silva, L.A. de Rosa, R.O.S. Soares, P.A. Silva and A. Caliri, *The roles of the stereochemical code and the entropic index q in the protein folding process: how to map out folding intermediate conformations*, preprint (2021).
- [8066] M.A. Moret, *Geometric structural aspects, protein folding and nonextensivity*, preprint (2009).
- [8067] M.A. Moret, *Self-organized critical model for protein folding*, Physica A **390**, 3055-3059 (2011).
- [8068] S. Thurner, N. Wick, R. Hanel, R. Sedivy and L. Huber, *Anomalous diffusion on dynamical networks: A model for interacting epithelial cell migration*, Physica A **320**, 475-484 (2003).
- [8069] T.S.V. Podesta, T.V. Rosembach, A.A. Santos and M.L. Martins, *Anomalous diffusion and q-Weibull velocity distributions in epithelial cell migration*, Plos One (2017) (19 pages), doi: 10.1371/journal.pone.0180777
- [8070] F. Safaeifard, S.P. Shariatpanahi and B. Goliaei, *A survey on random walk-based stochastic modeling in eukaryotic cell migration with emphasis on its application in cancer*, Multidisciplinary Cancer Investigation **2** (1), (2018).
- [8071] A. Sepehri, *An electromagnetic Antenna for induction of virtual T-cells within blood vessels and cancer treatment: Theoretical model*, preprint (2021).
- [8072] A. Sepehri, *An electromagnetic Antenna for induction of virtual T-cells within blood vessels and cancer treatment*, preprint (2021).
- [8073] T. Brochet, J. Lapuyade-Lahorgue, P. Vera and S. Ruan, *A quantitative comparison between Shannon and Tsallis-Havrda-Charvat entropies applied to cancer outcome prediction*, Entropy **24**, 436 (2022).
- [8074] M. Fioranelli, A. Sepehri, M.G. Rocchia, A. Beesham and D. Flavin, *A theoretical model for an electromagnetic antenna in induction of virtual T cells*, Network Modeling Analysis in Health Informatics and Bioinformatics (2021) **10**, 50 (2021), doi: 10.1007/s13721-021-00310-w
- [8075] O. Kayacan, F. Buyukkilic and D. Demirhan, *Generalization of the Maier-Saupe theory of the nematics within Tsallis thermostatistics*, Physica A **301**, 255 (2001).
- [8076] O. Kayacan, *A generalized molecular theory for nematic liquid crystals formed by non-cylindrically symmetric molecules*, preprint (2004) [cond-mat/0402343].
- [8077] O. Kayacan, *An investigation of MBBA nematic within generalized Maier-Saupe theory*, preprint (2003) [cond-mat/0303118].

- [8078] O. Kayacan, *The effects of the nonextensivity on the dimerization process and nematic ordering*, Physica A **328**, 205 (2003).
- [8079] O. Kayacan, *Orientalional ordering in the nematic phase of a thermotropic liquid crystal: A nonextensive approach*, Physica A **337**, 123 (2004).
- [8080] O. Kayacan, *Mean-field theory of anisotropic potential of rank $L = 4$ and nonextensive formalism*, Chem. Phys. **297**, 1 (2004).
- [8081] O. Kayacan, *Generalized mean-field theory relating helix tilt in a bilayer to lipid disorder*, Biophysical Chemistry **111**, 191 (2004).
- [8082] O. Kayacan and H. Cetinel, *A nonextensive statistical approach to the kinetics of phase transformation*, Physica A **348**, 223 (2005).
- [8083] O. Kayacan, *The influence of nonextensivity on orientational ordering in liquid crystal systems with variable molecular shape*, Physica A **354**, 344 (2005).
- [8084] O. Kayacan, *Nonextensive mean-field theory for ferroelectric nematic liquid crystal phases*, Chemical Physics **317**, 63-72 (2005).
- [8085] O. Kayacan, *Investigation of the phase transition at the nematic liquid crystal-wall interface within nonextensivity*, Physica A **383**, 391-400 (2007).
- [8086] O. Sotolongo-Costa, F. Guzman, J.C. Antoranz, G.J. Rodgers, O. Rodriguez, J.D.T. Arruda Neto and A. Deepman, *A non extensive approach for DNA breaking by ionizing radiation*, preprint (2002) [cond-mat/0201289].
- [8087] F.A.C. Smirnov, O. Rodriguez and J.D.T. Arruda Neto, *Present status of radiation interaction with DNA-strand-break cross-section and fragment-size distributions*, Radiation Effects and Defects in Solids **162**, 237-245 (2007).
- [8088] L. Sui, K. Zhao, M.N. Ni, J.Y. Guo, H.B. Luo, J.P. Mei, X.Q. Lu and P. Zhou, *Investigation of DNA strand breaks induced by Li-7 and C-12 ions*, High Energy Physics and Nuclear Physics - Chinese Edition **28**, 1126 (2004).
- [8089] G. Villani, *Affinity and correlation in DNA*, J **5**, 214-231 (2022), doi: 10.3390/j5020016
- [8090] M. Turmine, A. Mayaffe and P. Letellier, *Nonextensive approach to thermodynamics: Analysis and suggestions, and applications to chemical reactivity*, J. Phys. Chem. B **108**, 18980 (2004).
- [8091] P. Letellier, A. Mayaffe and M. Turmine, *Drop size effect on contact angle explained by nonextensive thermodynamics. Young's equation revisited*, J. Colloid and Interface Science **314**, 604-614 (2007).
- [8092] P. Letellier and M. Turmine, *Displacement of voltammetric peaks with nanoparticles size: a nonextensive thermodynamic approach*, Electrochimica Acta (2014), in press, doi: <http://dx.doi.org/doi:10.1016/j.electacta.2014.02.041>
- [8093] G. Guisbiers, *Advances in thermodynamic modelling of nanoparticles*, Advances in Physics: X, **4**, (1), 1668299 (2019), doi: [doi:10.1080/23746149.2019.1668299](https://doi.org/10.1080/23746149.2019.1668299)
- [8094] Y.A. Koksharov, *Application of Tsallis functions for analysis of line shapes in electron magnetic resonance spectra of magnetic nanoparticles*, Physics of the Solid State **57** (10), 2011-2015 (2015).
- [8095] P. Letellier and M. Turmine, *Non-applicability of the Gibbs-Duhem relation in nonextensive thermodynamics. Case of micellar solutions*, J. Physical Chemistry B **119** (10), 4143-4154 (2015).
- [8096] Z.H. Li and D.G. Truhlar, *Nanothermodynamics of metal nanoparticles*, Chem. Sci. (2014), in press, doi: 10.1039/C4SC00052H
- [8097] C. Tsallis, *Thermostatistically approaching living systems: Boltzmann-Gibbs or nonextensive statistical mechanics?*, Physics of Life Reviews **3**, 1-22 (2006).
- [8098] D. Juretic, *Bioenergetics: A bridge across life and universe*, (CRC, 2022)
- [8099] Th. Oikonomou and A. Provata, *Non-extensive trends in the size distribution of coding and non-coding DNA sequences in the human genome*, Eur. Phys. J. B **50**, 259-264 (2006).
- [8100] Th. Oikonomou, A. Provata and U. Tirnakli, *Nonextensive statistical approach to non-coding human DNA*, Physica A **387**, 2653-2659 (2008).
- [8101] T. Oikonomou, *Skepsis on the scenario of Biological Evolution provided by stochastic models*, preprint (2008), 0803.3471 [cond-mat.stat-mech].
- [8102] M.O. Costa, R. Silva, D.H.A.L. Anselmo and J.R.P. Silva, *Analysis of human DNA through power-law statistics*, Phys. Rev. E **99**, 022112 (2019).
- [8103] R. Silva, J.R.P. Silva, D.H.A.L. Anselmo, J.S. Alcaniz, W.J.C. da Silva, M.O. Costa, *An alternative description of power law correlations in DNA sequences*, Physica A (2019), in press.
- [8104] M.O. Costa, R. Silva and D.H.A.L. Anselmo, *Superstatistical and DNA sequence coding of the human genome*, Phys. Rev. E **106**, 064407 (2022).

- [8105] A.V. Khomenko and I.A. Lyoshenko, *Stochastic theory of ultrathin lubricant film melting in the stick-slip regime*, Technical Physics **50**, 1408-1416 (2005).
- [8106] P. Quarati and A.M. Scarfone, *Non-extensive thermostatistics approach to metal melting entropy*, Physica A **392** (24), 6512-6522 (2013), doi: <http://dx.doi.org/10.1016/j.physa.2013.08.020>
- [8107] P. Quarati, M. Lissia and A.M. Scarfone, *Negentropy in many-body quantum systems*, Entropy **18**, 63 (2016) (15 pages), doi:10.3390/e18020063
- [8108] J.A. Gonzalez and I. Rondon, *Cancer and nonextensive statistics*, Physica A **369**, 645-654 (2006).
- [8109] M.H. Tahir, M. Mansoor, M. Zubair and G.G. Hamedani, *McDonald log-logistic distribution with an application to breast cancer data*, J. Statistical Theory and Applications **13** (1), 65-82 (2014).
- [8110] R.H.O. Carvalho, A.S. Martins, L.A. Neves and M.Z. Nascimento, *Analysis of features for breast cancer recognition in different magnifications of histopathological images*, IEEE, Proceedings of the IWSSIP (2020).
- [8111] M. Hakala, L. Cozzi and E. Czeizler, *Two-step beam geometry optimization for volumetric modulated arc therapy gantry angles in breast treatments*, Med. Phys. 1-12 (2025).
- [8112] E. Ehsaeyan, *Rock-climbing group: An innovative meta-heuristic approach for efficiently tackling optimization problems*, International Journal of Engineering, Transactions B: Applications **38** (11), 2796-818 (2025).
- [8113] S. Dumencic, D. Pincic, D. Susanj and Z. Emersic, *Advancements in gait recognition: A study on gait energy images and gait entropy images*, Elektrotehnicki Vestnik **91** (1-2), 47-52 (2024).
- [8114] G.V. Biju, V. Rajagopalan and C.S. Kumar, *A new two parametric distribution with applications to cancer data*, Journal of Xi'an University of Architecture & Technology **XII** (IV), 5825-5839 (2020).
- [8115] P.C.A. da Silva, T.V. Rosembach, A.A. Santos, M.S. Rocha and M.L. Martins, *Normal and tumoral melanocytes exhibit q-Gaussian random search patterns*, Plos One **9** (9), e104253 (2014) (13 pages).
- [8116] R. Khordad and H.R. Rastegar Sedehi, *Modeling cancer growth and its treatment by means of statistical mechanics entropy*, Eur. Phys. J. Plus **131**, 291 (2016) (12 pages), doi: 10.1140/epjp/i2016-16291-3
- [8117] A. D'Onofrio, *Bounded-noise-induced transitions in a tumor-immune system interplay*, Phys. Rev. E **81**, 021923 (2010) (7 pages).
- [8118] L.M.S. Miranda and A.M.C. Souza, *Fractality in tumor growth at the avascular stage from a generalization of the logistic-Gompertz dynamics*, preprint (2022), 2208.00754 [physics.bio-ph].
- [8119] N. Derian, H.P. Pham, D. Nehar-Belaid, N. Tchitchek, D. Klatzmann, V. Eric and S. Adrien, *The Tsallis generalized entropy enhances the interpretation of transcriptomics datasets*, PLoS ONE **17** (4), e0266618 (2022).
- [8120] F.L. Ribeiro, R.V. dos Santos and A.S. Mata, *Fractal dimension and universality in avascular tumor growth*, preprint (2016), 1610.05789 [physics.bio-ph].
- [8121] C.J. Wang, *Effects of non-Gaussian noise on the dynamical properties of a logistic system*, Chin. Phys. B **22** (6), 060502 (2013) (5 pages).
- [8122] G.V. Biju, V. Rajagopalan and C.S. Kumar, *On weighted Rani distribution with applications to bladder cancer data*, High Technology Letters **26** (6), 546 (2020).
- [8123] C. Silambarasan and R. Elangovan, *Length biased weighted two parameters quasi Akash distribution and its applications to blood cancer*, Strad Research **7** (9), 188 (2020), doi:10.37896/sr7.9/026
- [8124] R. Erdem, *A non-extensive statistical mechanical approach to define the equilibrium value function in the kinetics of voltage-gated ion channels*, Physica A **373**, 417-424 (2007).
- [8125] D.O.C. Santos, M.A.S. Trindade and A.J. da Silva, *Nonextensive realizations in interacting ion channels: implications for mechano-electrical transducer mechanisms*, BioSystems **232**, 105005 (2023).
- [8126] J. Wlodarczyk and B. Kierdaszuk, *Fluorescence decay heterogeneity model based on electron transfer processes in an enzyme-ligand complex*, Acta Physica Polonica **107**, 883 (2005).
- [8127] J. Wlodarczyk and B. Kierdaszuk, *A new approach to interpretation of heterogeneity of fluorescence decay: Effect of induced tautomeric shift and enzyme \rightarrow ligand fluorescence resonance energy transfer*, Biophysical Chemistry **123**, 146-153 (2006).
- [8128] Z. Vosika, V.V. Mitic, A. Vasic, G. Lazovic, L. Matija and Lj. M. Kocic, *Multistep generalized transformation method applied to solving equations of discrete and continuous time-fractional enzyme kinetics*, Comm. Nonlinear Science and Numerical Simulation **44**, 373-389 (2017).
- [8129] Z. Vosika, G. Lazovic, V. Mitic and Lj. Kocic, *Multistep transformation method for discrete and continuous time enzyme kinetics*, Proceedings of the IV Advanced Ceramics and Applications Conference, 303-316 (17 January 2017).
- [8130] R.S. Mendes, L.R. Evangelista, S.M. Thomaz, A.A. Agostinho and L.C. Gomes, *A unified index to measure ecological diversity and species rarity*, Ecography **31**, 450-456 (2008).

- [8131] A.J. Daly, J.M. Baetens and B. De Baets, *Ecological diversity: Measuring the unmeasurable*, Mathematics **6**, 119 (2018), doi: 10.3390/math6070119
- [8132] H.B.A. Evangelista, S.M. Thomaz and L.R. Evangelista, *Comparison of diversity indices applied to macrophyte incidence-based data*, Brazilian Archives Biology Technology **55** (2), 277-282 (2012).
- [8133] J.M. Dimnik, K.H. Wilde and W.B. Edwards, *Optimization of the density-elasticity relationship for rabbit hindlimb bones*, Journal of the mechanical behavior of biomedical materials **163**, 106882 (2025).
- [8134] C.A. Souza-Filho, I.R.A.C. Lucena and J.G.G.S. Ramos, *Physical entropy and universal chaos in biological diversity*, preprint (2020).
- [8135] Z. Zhang and M. Grabchak, *Entropic representation and estimation of diversity indices*, J. Nonparametric Statistics **28** (3), 563-575 (2016).
- [8136] M. Grabchak, E. Marcon, G. Lang and Z. Zhang, *The generalized Simpson's entropy is a measure of biodiversity*, Plos One (2017) (11 pages), doi: 10.1371/journal.pone.0173305
- [8137] Z. Zhang, *Generalized species richness indices for diversity*, Entropy **24**, 1504 (2022).
- [8138] N. Riemer and M. West, *Quantifying aerosol mixing state with entropy and diversity measures*, Atmos. Chem. Phys. **13**, 11423-11439 (2013), doi:10.5194/acp-13-11423-2013
- [8139] M.T. Seweryn, M. Pietrzak and Q. Ma, *Application of information theoretical approaches to assess diversity and similarity in single-cell transcriptomics*, Computational and Structural Biotechnology Journal **18**, 1830-1837 (2020).
- [8140] D. Prenga and T. Kota, *Study of aerosol time series data using Tsallis statistics and fractal analyzes*, Internat. J. Geology, Agriculture and Environmental Sciences **02** (3), 32-34 (2014).
- [8141] D. Prenga, *Using q-distributions on the study of side inflows for Koman basin in the Drin River, Albania*, Internat. J. Engineering and Technical Research (IJETR) , **2** (10), ISSN: 2321-0869 (2014).
- [8142] E. Kushta, D. Prenga and F. Memaj, *Analysis of consumer behavior in a small size market entity: Case study for Vlora district, Albania*, Internat. J. Scientific Research and Management **6** (3), 17-24 (2018).
- [8143] D. Prenga and E. Vuka, *Complex systems method approach to the ECG analysis*, Internat. J. Engineering and Technical Research (IJETR) **2** (11), ISSN 2321-0869 (2014).
- [8144] C.E.C. Galhardo, B.C. Coutinho, T.J.P. Penna, M.A. de Menezes and P.P.S. Soares, *A Langevin model for complex cardiological time series*, preprint (2016), 1603.00397 [q-bio.NC].
- [8145] R.D. Simitev, A. Al Dawoud, M.H.N. Aziz, R. Myles and G.L. Smith, *Phenomenological analysis of simple ion channel block in large populations of uncoupled cardiomyocytes*, Mathematical Medicine and Biology: A Journal of the IMA (2023) (24 pages).
- [8146] Y. Wei, Q. Meng, H. Liu, M. Liu and H. Zhang, *A method to detecting ventricular tachycardia and ventricular fibrillation based on symbol entropy and wavelet analysis*, International Conference on Intelligent Computing 2017, Springer Series *Lecture Notes in Computer Science* **10361**, 155-164 (2017).
- [8147] J.J.C. Nicolet, J.F. Restrepo and G. Schlotthauer, *Classification of intracavitary electrograms in atrial fibrillation using information and complexity measures*, Biomedical Signal Processing and Control **57**, 101753 (2020).
- [8148] P.-H. Chavanis, *Nonlinear mean field Fokker-Planck equations. Application to the chemotaxis of biological population*, Eur. Phys. J. B **62**, 179-208 (2008).
- [8149] C. Sire and P.-H. Chavanis, *Critical dynamics of self-gravitating Langevin particles and bacterial populations*, Phys. Rev. E **78**, 061111 (2008) (22 pages).
- [8150] P.-H. Chavanis, *The Brownian mean field model*, preprint (2013), 1306.1203 [cond-mat.stat-mech].
- [8151] G. Kaniadakis, P. Quarati and A.M. Scarfone, *Generalized Brownian motion and anomalous diffusion*, Riv. Mat. Univ. Parma **6** (4), 171-189 (2001).
- [8152] B.A. Stickler and E. Schachinger, *The random walk and diffusion theory*, 251-273, in *Basic Concepts in Computational Physics* (Springer, Berlin, 2014).
- [8153] B.A. Stickler and E. Schachinger, *Stochastic optimization*, 299-314, in *Basic Concepts in Computational Physics* (Springer, Berlin, 2014).
- [8154] N. Komatsu, T. Kiwata and S. Kimura, *Transition of velocity distributions in collapsing self-gravitating N-body systems*, Phys. Rev. E **85** (2), 021132 (2012) (14 pages).
- [8155] D.A. Moreira, E.L. Albuquerque, L.R. da Silva and D.S. Galvao, *Low-temperature specific heat spectra considering nonextensive long-range correlated quasiperiodic DNA molecules*, Physica A **387**, 5477-5482 (2008).
- [8156] S. Sieniutycz, *A complexity-based approach in thermodynamic simulation of unstable evolutions in biosystems*, Int. J. Quantum Information **6**, 795-800, Suppl. 1 (2008).

- [8157] A. Luis and A. Rodil, *Alternative measures of uncertainty in quantum metrology: Contradictions and limits*, Phys. Rev. A **87**, 034101 (2013) (4 pages).
- [8158] V. Witkovsky, *Characteristic function of the Tsallis q -Gaussian and its applications in measurement and metrology*, preprint (2023), 2303.08615 [stat.CO].
- [8159] Y. Li, *Using the Tsallis distribution and the fractional differentiation to resolve the overlapping bands*, Anal. Bioanal. Chem. **394**, 637-645 (2009).
- [8160] D. Martini, O. Marti, M. Beil, T. Paust, C. Huang, M. Moosmann, J. Jin, T. Heiler, R. Groger, T. Schimmel and S. Walheim, *Interaction of epithelial cells with surfaces and surfaces decorated by molecules*, in *Self-Organized and Biofunctional Nanostructures*, 151-193 (2013).
- [8161] A.F. Villaverde, J. Ross and J.R. Banga, *Reverse engineering cellular networks with information theoretic methods*, Cells **2**, 306-329 (2013), doi: 10.3390/cells2020306
- [8162] T. Fla, F. Rupp and C. Woywod, *Bifurcation patterns in generalized models for the dynamics of normal and leukemic stem cells with signaling*, Mathematical Methods in the Applied Sciences (2014) (16 pages).
- [8163] A. de Morais, *Turing patterns in estuarine sediments by microbiological activity*, preprint (2014).
- [8164] A.J. Bechle and C.H. Wu, *An entropy-based surface velocity method for estuarine discharge measurement*, Water Resources Research 10.1002/2014WR015353,6106-6128 (2014).
- [8165] P.D. Martins and C. Poletto, *Principle of maximum entropy in the estimation of suspended sediment concentration*, Brazilian J. Water Resources **22-23**, (2017) (15 pages), doi: <http://dx.doi.org/10.1590/2318-0331.011716058>
- [8166] M. Kiani-Oshtorjani and C. Ancey, *Neural network to infer bed topography from velocity field: U-net architecture on huge experimental data*, preprint (2023).
- [8167] M. Kiani-Oshtorjani and C. Ancey, *Bed topography inference from velocity field using deep learning*, Water **15**, 4055 (2023).
- [8168] P.D. Martins and C. Poletto, *Entropy for determination of suspended sediment concentration: Parameter related to granulometry*, J. Environ. Eng. **144** (3), 04017111 (2018) (7 pages).
- [8169] A. Manabe, T. Yamakawa, S. Ohnishi, T. Akamine, Y. Narimatsu, H. Tanaka, T. Funamoto, Y. Ueda and T. Yamamoto, *A novel growth function incorporating the effects of reproductive energy allocation*, Plos One (2018) (18 pages), doi: 10.1371/journal.pone.0199346
- [8170] J.A. Gonzalez, M. Acanda, Z. Akhtar, D. Andrews, J.I. Azqueta, E. Bass, A. Bellorin, J. Couso, M.A. Garcia-Nustes, Y. Infante, S. Jimenez, L. Lester, L. Maldonado, J.F. Marin, L. Pineda, I. Rodriguez, C.C. Tamayo, D. Valdes and L. Vazquez, *New combinational therapies for cancer using modern statistical mechanics*, preprint (2019), 1902.00728 [physics.bio-ph].
- [8171] Y. Yang and T. Yamakawa, *Re-examination of stock-recruitment relationships: a meta-analysis*, ICES Journal of Marine Science, (2022), doi: 10.1093/icesjms/fsac061
- [8172] S. Lall, A. Ghosh, S. Ray and S. Bandyopadhyay, *sc-REnF: An entropy guided robust feature selection for clustering of single-cell rna-seq data*, preprint (2020), bioRxiv doi: 10.1101/2020.10.10.334573.
- [8173] A. Ghosh, *Optimal guessing under nonextensive framework and associated moment bounds*, Statistics and Probability Letters **197**, 109812 (2023).
- [8174] E.H. Colombo, R. Martinez-Garcia, J.M. Calabrese, C. Lopez and E. Hernandez-Garcia, *Pulsed interactions unify reaction-diffusion and spatial nonlocal models for biological pattern formation*, preprint (2023), 2311.07135 [q-bio.PE].
- [8175] M.M.F. de Lima, G.H.S. Nunes, U.L. Fulco, R. Silva, M.S. Vasconcelos and D.H.A.L. Anselmo, *Range of correlations in the size distributions of plant proteins*, Eur. Phys. J. Plus **138**, 1132 (2023).
- [8176] H.S. Wio and S. Bouzat, *Stochastic resonance: The role of potential asymmetry and nongaussian noise*, in *Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 136 (1999).
- [8177] H.S. Wio, *Some aspects of stochastic resonance with nongaussian noises*, communication at the IUPAP International Conference on "New Trends in the Fractal Aspects of Complex Systems", Maceio-Brazil, 16-20 October 2000.
- [8178] M.A. Fuentes, R. Toral and H.S. Wio, *Enhancement of stochastic resonance: The role of non Gaussian noises*, Physica A **295**, 114 (2001).
- [8179] R.R. Deza, H.S. Wio and M.A. Fuentes, *Noise-induced phase transitions: Effects of the noises' statistics and spectrum*, in *Nonequilibrium Statistical Mechanics and Nonlinear Physics*, eds. O. Descalzi, O.A. Rosso and H.A. Larrondo, American Institute of Physics Conference Proceedings **913**, 62-67 (2007).
- [8180] O. Descalzi, S. Curilef, L. Velazquez and V. Munoz, *Complex systems and inter/transdisciplinary research: A review*, Chaos **34**, 010401 (2024).

- [8181] H. Wio, *On the role of non-Gaussian noises in noise-induced phenomena*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [8182] H.S. Wio and R. Toral, *Effect of non-Gaussian noise sources in a noise induced transition*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, *Physica D* **193**, 161 (2004).
- [8183] H.S. Wio, *Noise induced phenomena and nonextensivity*, *Europhysics News* **36**, 197 (2005) [*Europhysics News Special Issue Nonextensive Statistical Mechanics: New Trends, new perspectives*, eds. J.P. Boon and C. Tsallis (November/December 2005)].
- [8184] M.A. Fuentes, H.S. Wio and R. Toral, *Effective Markovian approximation for non-Gaussian noises: A path integral approach*, *Physica A* **303**, 91 (2002).
- [8185] S. Bouzat and H.S. Wio, *Strong enhancement of current, efficiency and mass separation in Brownian motors driven by non Gaussian noises*, preprint (2001) [cond-mat/0112304].
- [8186] S. Bouzat and H.S. Wio, *Current and efficiency enhancement in Brownian motors driven by non Gaussian noises*, *Eur. Phys. J. B* **41**, 97 (2004).
- [8187] S. Bouzat and H.S. Wio, *New aspects on current enhancement in Brownian motors driven by non-Gaussian noises*, *Physica A* **351**, 69 (2005).
- [8188] S.E. Mangioni and H.S. Wio, *A random walker on a ratchet potential: Effect of a non Gaussian noise*, *Eur. Phys. J. B* **61**, 67-73 (2008).
- [8189] Y. Hasegawa and M. Arita, *Bistable stochastic processes in the q-exponential family*, *Physica A* **389**, 4450-4461 (2010).
- [8190] M.A. Fuentes, C. Tessone, H.S. Wio and R. Toral, *“Fuzzy” stochastic resonance: Robustness against noise tuning due to non Gaussian noises*, preprint (2001) [cond-mat/0103612].
- [8191] F.J. Castro, M.N. Kuperman, M. Fuentes and H.S. Wio, *Experimental evidence of stochastic resonance without tuning due to non Gaussian noises*, *Phys. Rev. E* **64**, 051105 (2001).
- [8192] J.A. Revelli, A.D. Sanchez and H.S. Wio, *Effect of non-Gaussian noises on the stochastic resonance-like phenomenon in gated traps*, *Physica D* **168-169**, 165 (2002).
- [8193] S.E. Mangioni and H.S. Wio, *Limit cycle induced by multiplicative noise in a system of coupled Brownian motors*, *Phys. Rev. E* **67**, 056616 (2003).
- [8194] D. Wu, X. Luo and S. Zhu, *Stochastic system with coupling between non-Gaussian and Gaussian noise terms*, *Physica A* **373**, 203-214 (2007).
- [8195] R.V. Bobryk and A. Chrzeszczyk, *Transitions induced by bounded noise*, *Physica A* **358**, 263-272 (2005).
- [8196] D. Wu and S. Zhu, *Stochastic resonance in a bistable system with time-delayed feedback and non-Gaussian noise*, *Phys. Lett. A* **363**, 202-212 (2007).
- [8197] C. Anteneodo, *Brownian motors in nonlinear diffusive media*, *Phys. Rev. E* **76**, 021102 (2007) (6 pages).
- [8198] C. Anteneodo, C. Tsallis and A.S. Martinez, *Risk aversion in economic transactions*, *Europhys. Lett.* **59**, 635 (2002).
- [8199] J.C. do Nascimento, *The time importance for prospect theory*, preprint (2019), 1908.01709 [econ.GN].
- [8200] S.M.D. Queiros, *Interplay between polarisation and plurality in a decision-making process with continuous opinions*, *J. Stat. Mech.* 063201 (2016) (18 pages).
- [8201] D. Prenga, M. Ifti and S. Kovaci, *Extended views on the study of out-of-equilibrium opinion and opinion-like systems*, *The International Physics Conference Tirana 2015*, 43-48 (University of Tirana, Faculty of Natural Sciences, Department of Physics, 2015).
- [8202] D. Prenga, *A two-stage opinion formation model based on the extended XY-magnet interaction and socio-dynamic update mechanism*, *J. Phys.: Conference Series* **1391**, 012056 (2019), doi: 10.1088/1742-6596/1391/1/012056
- [8203] D. Prenga, S. Kovaci and E. Kushta, *An Econo-physics view on the historical dynamics of the Albanian currency vs. Euro exchange rates*, *Acta Universitatis Danubius* **16** (1), 238-251 (2020).
- [8204] T. Takahashi, R. Han, H. Nishinaka, T. Makino and H. Fukui, *The q-exponential probability discounting of gain and loss*, *Applied Mathematics* **4**, 876-881 (2013), doi:10.4236/am.2013.46120
- [8205] T. Bhattacharyya, S. Shukla and R. Pandey, *A Tsallis-like effective exponential delay discounting model and its implications*, preprint (2021), 2109.01317 [physics.soc-ph].
- [8206] S. Shukla and T. Bhattacharyya, *A mathematical model of delay discounting with trait and state impulsivity*, preprint (2023), 2306.08479 [physics.soc-ph].
- [8207] B.A. Mello and D.O. Cajueiro, *A note on the connection between the Tsallis’ thermodynamics and cumulative prospect theory*, *R. Bras. Eco. de Emp.* **10** (1), 31-36 (2010).

- [8208] S. Cruz Rambaud, I.M. Parra Oller and M.C. Valls Martinez, *The amount-based deformation of the q -exponential discount function: A joint analysis of delay and magnitude effects*, Physica A **508**, 788-796 (2018), doi: 10.1016/j.physa.2018.05.152
- [8209] S.S. Rambaud and B.T. Jover, *An analysis of the algebraic structures in the context of intertemporal choice*, AIMS Mathematics **7** (6), 10315-10343 (2021).
- [8210] X.J. Feng, *The Tsallis Entropy Barrier or the Roundness Barrier Based Dynamic Stochastic Resonance – A New Family of SR?*, preprint (2008), 0808.2286 [cond-mat.stat-mech].
- [8211] R. Zhang, Z. Hou, and H. Xin, *Effects of non-Gaussian noise near supercritical Hopf bifurcation*, Physica A **390**, 147-153 (2011).
- [8212] R. Krishnan and H.S. Wio, *Brownian motors: Joint effect of non-Gaussian noise and time asymmetric forcing*, Physica **389**, 5563-5572 (2010).
- [8213] Y.H. Hao, Y.B. Gong and X. Lin, *Multiple resonances with time delays and enhancement by non-Gaussian noise in Newman-Watts networks of Hodgkin-Huxley neurons*, Neurocomputing **74**, 1748-1753 (2011).
- [8214] A.C. Carli, M.A.T. Figueiredo, M. Bicego and V. Murino, *Generative embeddings based on Rician mixtures for kernel-based classification of magnetic resonance images*, Neurocomputing **123**, 49-59 (2014), <http://dx.doi.org/10.1016/j.neucom.2013.02.037>
- [8215] V. Rajinikanth, N. Dey, S.C. Satapathy and A.S. Ashour, *An approach to examine magnetic resonance angiography based on Tsallis entropy and deformable snake model*, Future Generation Computer Systems **85**, 160-172 (2018), doi: 10.1016/j.future.2018.03.025
- [8216] M.A. El-Sayed, *Algorithm based on histogram and entropy for edge detection in gray level images*, Internat. J. Computers and Technology **11** (1), 2207-2215 (2013).
- [8217] M.A. El-Sayed and H.A.M. Sennari, *Multi-threshold algorithm based on Havrda and Charvat entropy for edge detection in satellite grayscale images*, J. Software Engineering and Applications **7**, 42-52 (2014).
- [8218] A.T. Jamal, A.B. Ishak and S. Abdel-Khalek, *Tumor edge detection in mammography images using quantum and machine learning approaches*, Neural Computing and Applications (2021), in press.
- [8219] A.V. Kolesnichenko and B.N. Chetverushkin, *Derivation of quasi-hydrodynamic equations for motor transport systems based on the formalism of nonadditive statistics*, Mathematica Montisnigri, Mathematical Modeling **XXXIV**, 32-59 (2015) [In Russian].
- [8220] M. Ishihara, *Effects of Tsallis distribution on parametric resonance in chiral phase transitions*, Internat. J. Modern Physics E **25** (8), 1650051 (2016). preprint (2016), 1604.00871 [hep-ph].
- [8221] Y.M. Kang, X. Chen, X.D. Lin and N. Tan, *Mean first passage time and stochastic resonance in a transcriptional regulatory system with non-Gaussian noise*, Fluctuation and Noise Letters **16** (1), 1750007 (2017) (17 pages), doi: 10.1142/S0219477517500079
- [8222] F.N. Nzoupe and A.M. Dikande, *Stochastic resonance in periodically driven bistable systems subjected to anomalous diffusion*, SN Applied Sciences **3**, 428 (2021), doi: 10.1007/s42452-021-04418-6
- [8223] C. Anteneodo and C. Tsallis, *Risk aversion in financial decisions: A nonextensive approach*, to appear in a special volume containing the invited conferences at the “International Public Seminar of the Year” (Jakarta, Indonesia, 27 August 2002), edited by Y. Surya [cond-mat/0306605].
- [8224] S. Bortot, R.A.M. Pereira and A. Stamatopoulou, *Shapley and superShapley aggregation emerging from consensus dynamics in the multicriteria Choquet framework*, Decisions in Economics and Finance (2020), in press, doi: [org/10.1007/s10203-020-00282-y](http://dx.doi.org/10.1007/s10203-020-00282-y)
- [8225] S. Bortot, R.A.M. Pereira and A. Stamatopoulou, *Optimal weights and feasible orness of ordered weighted averaging functions in the framework of Tsallis entropy*, Fuzzy Sets and Systems **517**, 109471 (2025).
- [8226] D. Sornette, *Gauge theory of finance?*, Int. J. Mod. Phys. C **9**, 505 (1998).
- [8227] B. Vandermarliere, J. Ryckebusch, K. Schoors, P. Cauwels and D. Sornette, *Discrete hierarchy of sizes and performances in the exchange-traded fund universe*, Physica A **469**, 111-123 (2017).
- [8228] J.-P. Bouchaud, M. Potters and J.-P. Aguilar, *Missing information and asset allocation*, preprint (1997) [cond-mat/9707042].
- [8229] F. Michael and M.D. Johnson, *Financial market decisions*, preprint (2001) [cond-mat/0108017].
- [8230] S. Cruz Rambaud, I.M. Parra Oller and M.C. Valls Martinez, *Una aplicacion del EM-index y del factor hiperbolico a la funcion de descuento q -exponencial deformada por la cuantia*, Estudios de Economia Aplicada **37** (2) (2019).
- [8231] F. Michael, J. Evans and M.D. Johnson, *Excess demand financial market model*, preprint (2002) [cond-mat/0207376].
- [8232] P. Zhao and Q. Xiao, *Variance-optimal hedging for the process based on non-extensive statistical mechanics and Poisson jumps*, Acta Physica Polonica A **126** (6), 1252-1256 (2016).

- [8233] F. Michael, *Interacting many-investor models, opinion formation and price formation with non-extensive statistics*, preprint (2010), 1004.1804 [q-fin.TR].
- [8234] L. Borland, *Closed form option pricing formulas based on a non-Gaussian stock price model with statistical feedback*, Phys. Rev. Lett. **89**, 098701 (2002).
- [8235] L. Borland, *The pricing of stock options*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [8236] L. Borland, *A theory of non-gaussian option pricing*, Quantitative Finance **2**, 415 (2002).
- [8237] L. Basnarkov, V. Stojkoski, Z. Utkovski and L. Kocarev, *Option pricing with heavy-tailed distributions of logarithmic returns*, preprint (2018), 1807.01756 [q-fin.PR].
- [8238] P. Carr and U. Cherubini, *Option pricing generators*, Frontiers of Mathematical Finance (2023), doi: 10.3934/fmf.2023012
- [8239] L. Borland and J.-P. Bouchaud, *A non-Gaussian option pricing model with skew*, Quant. Finance **4**, 499-514 (2004).
- [8240] P. Zhao, J. Pan, B. Zhou, J. Wang and Y. Song, *Hedging for the regime-switching price model based on non-extensive statistical mechanics*, Entropy **20**, 248 (2018), doi:10.3390/e20040248
- [8241] P. Zhao, B. Zhou and J. Wang, *Non-Gaussian closed form solutions for geometric average Asian options in the framework of non-extensive statistical mechanics*, Entropy **20**, 71 (2018) (12 pages), doi: 10.3390/e20010071
- [8242] J. Wang and Y. Zhang, *Geometric average Asian option pricing with paying dividend yield under non-extensive statistical mechanics for time-varying model*, Entropy **20**, 828 (2018), doi:10.3390/e20110828
- [8243] L. Borland, J. Eynine and B. Pochart, *A Merton-like approach to pricing debt based on a non-Gaussian asset model*, in *Complexity, Metastability and Nonextensivity*, Proc. 31st Workshop of the International School of Solid State Physics (20-26 July 2004, Erice-Italy), eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 306 [cond-mat/0501395].
- [8244] L. Borland, *A non-Gaussian model of stock returns: option smiles, credit skews, and a multi-time scale memory*, in *Noise and Fluctuations in Econophysics and Finance*, eds. D. Abbott, J.-P. Bouchaud, X. Gabaix and J.L. McCauley, Proc. of SPIE **5848**, 55 (SPIE, Bellingham, WA, 2005).
- [8245] L. Borland, *Exploring the dynamics of financial markets: from stock prices to strategy returns*, Chaos, Solitons and Fractals **88**, 59-74 (2016).
- [8246] H. Agahi and M. Alipour, *Tsallis-Mittag-Leffler distribution and its applications in gas prices*, Physica A **541**, 123675 (2020).
- [8247] W.O. Sosa-Correa, A.M.T. Ramos and G.L. Vasconcelos, *Investigation of non-Gaussian effects in the Brazilian option market*, Physica A **496**, 525-539 (2018).
- [8248] S.M.D. Queiros, *Trading volume in financial markets: An introductory review*, Chaos, Solitons and Fractals **88**, 24-37 (2016).
- [8249] J.C. Reboredo, M.A. Rivera-Castro and E. Machado de Assis, *Power-law behaviour in time durations between extreme returns*, Quantitative Finance **14** (12), 2171-2183 (2014).
- [8250] M. Vellekoop and H. Nieuwenhuis, *On option pricing models in the presence of heavy tails*, Quant. Finance **7**, 563-573 (2007).
- [8251] J. Arismendi and A. De Genaro, *A Monte Carlo multi-asset option pricing approximation for general stochastic processes*, Chaos, Solitons and Fractals **88**, 75-99 (2016), doi: <http://dx.doi.org/10.1016/j.chaos.2016.02.019>
- [8252] R. Pascoal and A.M. Monteiro, *Market efficiency, roughness and long memory in PSI20 index returns: Wavelet and entropy analysis*, Entropy **16**, 2768-2788 (2014), in press, doi:10.3390/e16052768
- [8253] J.A. Ganie and R. Jain, *An uncertainty principle for the basic wavelet transform*, International Journal of Wavelets, Multiresolution and Information Processing, 2150002 (2021) (17 pages), doi: 10.1142/S0219691321500028
- [8254] L. Borland, *Long-range memory and nonextensivity in financial markets*, Europhysics News **36**, 228 (2005) [Europhysics News Special Issue *Nonextensive Statistical Mechanics: New Trends, new perspectives*, eds. J.P. Boon and C. Tsallis (November/December 2005)]. A non-Gaussian stock price model: Options, credit and a multi-timescale memory
- [8255] L. Borland, *A non-Gaussian stock price model: Options, credit and a multi-timescale memory*, in *Complexity and Nonextensivity: New Trends in Statistical Mechanics*, eds. M. Sakagami, N. Suzuki and S. Abe, Prog. Theor. Phys. Suppl. **162**, 155-164 (2006).
- [8256] L. Moriconi, *Delta hedged option valuation with underlying non-Gaussian returns*, Physica A **380**, 343-350 (2007).
- [8257] S. Reimann, *Price dynamics from a simple multiplicative random process model - Stylized facts and beyond*, Eur. Phys. J. B, **56**, 381-394 (2007).

- [8258] V. Preda, S. Dedu and M. Sheraz, *New measure selection for Hunt-Devolder semi-Markov regime switching interest rate models*, Physica A **407**, 350-359 (2014), doi: <http://dx.doi.org/10.1016/j.physa.2014.04.011>
- [8259] V. Preda, S. Dedu and C. Gheorghie, *New classes of Lorenz curves by maximizing Tsallis entropy under mean and Gini equality and inequality constraints*, Physica A **436**, 925-932 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2015.05.092>
- [8260] A.K. Tanak, G.R.M. Borzadaran and J. Ahmadi, *Maximum Tsallis entropy with generalized Gini and Gini mean difference indices constraints*, Physica A **471**, 554-560 (2017).
- [8261] A.K. Tanak, G.R.M. Borzadaran and J. Ahmadi, *New functional forms of Lorenz curves by maximizing Tsallis entropy of income share function under the constraint on generalized Gini index*, Physica A **511**, 280-288 (2018), doi: [10.1016/j.physa.2018.07.050](https://doi.org/10.1016/j.physa.2018.07.050)
- [8262] I. Eliazar and G.M. Giorgi, *From Gini to Bonferroni to Tsallis: an inequality-indices trek*, Metron (2020) (35 pages), doi: [10.1007/s40300-020-00171-9](https://doi.org/10.1007/s40300-020-00171-9)
- [8263] B. Lu, *On variability of the mean inactivity time at random time*, Statistical Papers **66**, 94 (2025).
- [8264] J. Ahmadi, C. Cali and M. Longobardi, *Some properties of cumulative Tsallis entropy*, in Proc. of First Italian Meeting on Probability and Mathematical Statistics 138-139 (Torino, 19-22 June 2017).
- [8265] C. Cali, M. Longobardi and J. Ahmadi, *Some properties of cumulative Tsallis entropy*, Physica A **486**, 1012-1021 (2017), doi: [10.1016/j.physa.2017.05.063](https://doi.org/10.1016/j.physa.2017.05.063)
- [8266] C. Cali, M. Longobardi and G. Psarrakos, *A family of weighted distributions based on the mean inactivity time and cumulative past entropies*, Ricerche di Matematica (2019), doi: [10.1007/s11587-019-00475-7](https://doi.org/10.1007/s11587-019-00475-7)
- [8267] F. Buono and M. Longobardi, *Tsallis extropy*, preprint (2021).
- [8268] N. Balakrishnan, F. Buono and M. Longobardi, *On Tsallis extropy with an application to pattern recognition*, preprint (2021), 2103.07168 [math.PR].
- [8269] F. Buono and M. Kateri, *A link of extropy to entropy for continuous random variables via the generalized Φ -entropy*, Communications in Statistics - Theory and Methods (2024).
- [8270] S.K. Kattumannil, E.P. Sreedevi and N. Balakrishnan, *Relationships between cumulative entropy/extropy, Gini mean difference and probability weighted moments*, Probability in the Engineering and Informational Sciences **38** (1), 28-38 (2024).
- [8271] N. Balakrishnan, F. Buono and M. Longobardi, *A unified formulation of entropy and its application*, Physica A (2022), in press, doi: [10.1016/j.physa.2022.127214](https://doi.org/10.1016/j.physa.2022.127214).
- [8272] M.R. Irshad, R. Maya, F. Buono and M. Longobardi, *Kernel estimation of cumulative residual Tsallis entropy and Its dynamic version under ρ -mixing dependent data*, Entropy **24**, 9 (2022).
- [8273] Y. Xue and Y. Deng, *Tsallis eXtropy*, Communications in Statistics - Theory and Methods (2021), doi: [10.1080/03610926.2021.1921804](https://doi.org/10.1080/03610926.2021.1921804)
- [8274] M.S. Mohamed, *Some properties of cumulative extropy and its dynamic past version*, Filomat **36** (2), 539-556 (2022), doi: [10.2298/FIL2202539M](https://doi.org/10.2298/FIL2202539M)
- [8275] M.S. Mohamed, H.M. Barakat, A. Almutairi and M.S.A. Mustafa, *Further properties of Tsallis extropy and some of its related measures*, AIMS Mathematics **8** (12), 28219-28245 (2023).
- [8276] R.A. Aldallal, H.M. Barakat and M.S. Mohamed, *Exploring weighted Tsallis extropy: Insights and applications to human health*, AIMS Mathematics **10** (2), 2191-2222 (2025).
- [8277] M. Sheraz, *Modele GARCH si masuri ale entropiei in finante*, Doctor Thesis (Romania, 2014)
- [8278] F.D.R. Bonnet, J. van der Hoeck, A. Allison and D. Abbott, *Path integrals in fluctuating markets with a non-Gaussian option pricing model*, in *Noise and Fluctuations in Econophysics and Finance*, eds. D. Abbott, J.-P. Bouchaud, X. Gabaix and J.L. McCauley, Proc. of SPIE **5848**, 66 (SPIE, Bellingham, WA, 2005).
- [8279] G.F. Gu and W.X. Zhou, *On the probability distribution of stock returns in the Mike-Farmer model*, preprint (2008), 0805.3593 [physics.soc-ph].
- [8280] F. Michael and M.D. Johnson, *Black-Scholes-like derivative pricing with Tsallis non-extensive statistics*, preprint (2002) [cond-mat/0204261].
- [8281] F. Michael and M.D. Johnson, *Derivative pricing with non-linear Fokker-Planck dynamics*, Physica A **324**, 359 (2003).
- [8282] P. Jizba, H. Kleinert and P. Haener, *Perturbation expansion for option pricing with stochastic volatility*, Physica A **388**, 3503-3520 (2009).
- [8283] P. Jizba and H. Kleinert, *Superpositions of probability distributions*, Phys. Rev. E **78**, 031122 (2008) (10 pages).
- [8284] E.P. Borges, *Empirical nonextensive laws for the county distribution of total personal income and gross domestic product*, Physica A **334**, 255 (2004).

- [8285] S. Stavroyiannis, I. Makris and V. Nikolaidis, *On the closed form solutions for nonextensive value-at-risk*, Physica A **388** 3536-3542 (2009).
- [8286] M. Ausloos and J. Miskiewicz, *Introducing the q -Theil index*, Braz. J. Phys. **39**, 388-395 (2009).
- [8287] T. Kaizoji, *Inflation and deflation in financial markets*, Physica A **343**, 662 (2004).
- [8288] T. Kaizoji, *An interacting-agent model of financial markets from the viewpoint of nonextensive statistical mechanics*, Physica A **370**, 109-113 (2006).
- [8289] V. Gontis and A. Kononovicius, *Double stochastic model of return in financial markets*, preprint (2019).
- [8290] A. Kononovicius and V. Gontis, *Empirical analysis of Vilnius Stock Exchange absolute return time series*, preprint (2019).
- [8291] G. Ducournau-Voisin, *Etude spatio-temporelle de la dynamique des rendements boursiers au travers de la theorie d'information et de la Mecanique Statistique*, Doctoral Thesis (Ecole doctorale Economie et Gestion, Universite de Montpellier, 2021).
- [8292] E.N. Bahrami, *Efficiency test of Tehran stock exchange in weak form using the memory parameter and the deviation from the Gaussian hypothesis*, Master Thesis (in Iranian) (Faculty of Social and Economic Science, Alzahra University, Iran, 2012).
- [8293] H. Akeel, *Predicting the FTSE China A50 Index movements using sample entropy*, Journal of Asian Finance, Economics and Business **9** (3) (2022), doi: 10.13106/jafeb.2022.vol9.no3.0001
- [8294] T. Yamano, *Distribution of the Japanese posted land price and the generalized entropy*, Eur. Phys. J. B **38**, 665 (2004).
- [8295] Y. Fan, G. Yu, Z. He, H. Yu, R. Bai, L. Yang and D. Wu, *Entropies of the Chinese land use/cover change from 1990 to 2010 at a county level*, Entropy **19**, 51 (2017) (11 pages), doi:10.3390/e19020051
- [8296] N. Kozuki and N. Fuchikami, *Dynamical model of financial markets: Fluctuating "temperature" causes intermittent behavior of price changes*, Physica A **329**, 222 (2003).
- [8297] I. Matsuba and H. Takahashi, *Generalized entropy approach to stable Levy distributions with financial application*, Physica A **319**, 458 (2003).
- [8298] T. Takahashi, H. Ono and M.H.B. Radford, *Empirical estimation of consistency parameter in intertemporal choice based on Tsallis' statistics*, Physica A **387** (2008).
- [8299] T. Takahashi, H. Ono and M.H.B. Radford, *Psychophysics of time-perception and intertemporal choice models*, Physica A **387**, 2066-2074 (2008).
- [8300] T. Takahashi *A comparison of intertemporal choices for oneself versus someone else based on Tsallis' statistics*, Physica A **385**, 637-644 (2007).
- [8301] T. Takahashi, H. Oono, T. Inoue, S. Boku, Y. Kako, Y. Kitaichi, I. Kusumi, T. Masui, S. Nakagawa, K. Suzuki, T. Tanaka, T. Koyama and M.H.B. Radford, *Depressive patients are more impulsive and inconsistent in intertemporal choice behavior for monetary gain and loss than healthy subjects - An analysis based on Tsallis' statistics*, Neuroendocrinology Lett. **29**, 351-358 (2008); T. Takahashi, H. Oono, T. Inoue, S. Boku, Y. Kako, Y. Kitaichi, I. Kusumi, T. Masui, S. Nakagawa, K. Suzuki, T. Tanaka, T. Koyama and M.H.B. Radford, *Depressive patients are more impulsive and inconsistent in intertemporal choice behavior for monetary gain and loss than healthy subjects- an analysis based on Tsallis' statistics*, preprint (2011), 1111.6493 [q-bio.NC].
- [8302] S. Cruz Rambaud and M.J. Munoz Torrecillas, *Measuring impatience in intertemporal choice*, Plos One (2016) (17 pages) doi:10.1371/journal.pone.0149256
- [8303] S. Cruz Rambaud and V. Ventre, *Deforming time in a nonadditive discount function*, Internat. J. Intelligent Systems **32** (5), 467-480 (2017).
- [8304] S. Cruz Rambaud, M.J. Munoz Torrecillas and T. Takahashi, *Observed and normative discount functions in addiction and other diseases*, Frontiers Pharmacology **8**, 416 (2017) (10 pages).
- [8305] S. Cruz Rambaud, I. F. Gonzalez and V. Ventre, *Modeling the inconsistency in intertemporal choice: the generalized Weibull discount function and its extension*, Ann. Finance (2018) (12 pages), in press, doi: 10.1007/s10436-018-0318-3
- [8306] T. Takahashi, *A probabilistic choice model based on Tsallis' statistics*, Physica A **386**, 335-338 (2007).
- [8307] T. Takahashi, *A comparison between Tsallis' statistics-based and generalized quasi-hyperbolic discount models in humans*, Physica A **387**, 551-556 (2007).
- [8308] T. Takahashi, *A social discounting model based on Tsallis' statistics*, Physica A **389**, 3600-3603 (2010).
- [8309] R. Han and T. Takahashi, *Psychophysics of time-perception and valuation in temporal discounting of gain and loss*, Physica A (2012), in press.
- [8310] T. Takahashi, *Psychophysics of the probability weighting function*, Physica A **390**, 902-905 (2011).
- [8311] I. Kinley, J. Oluwasola and S. Becker, *Probabilistic models of delay discounting: "Fixed-endpoint" psychometric curves improve plausibility and performance*, Journal of Mathematical Psychology **124**, 102902 (2025).

- [8312] T. Takahashi, *Toward molecular neuroeconomics of obesity*, Medical Hypotheses **75**, 393-396 (2010).
- [8313] T. Takahashi, *Toward molecular neuroeconomics of obesity*, preprint (2011), 1111.6494 [q-bio.NC].
- [8314] H.H. Sakr and M.S. Mohamed, *Sharma-Taneja-Mittal entropy and its application of obesity in Saudi Arabia*, Mathematics **12**, 2639 (2024).
- [8315] T. Takahashi, *A neuroeconomic theory of rational addiction and nonlinear time-perception*, preprint (2011), 1107.0362 [physics.bio-ph].
- [8316] N. Destefano and A.S. Martinez, *The additive property of the inconsistency degree in intertemporal decision making through the generalization of psychophysical laws*, Physica A **390**, 1763-1772 (2011).
- [8317] L.S. dos Santos, N. Destefano and A.S. Martinez, *Decision making generalized by a cumulative probability weighting function*, Physica A **490**, 250-259 (2018).
- [8318] S. Dedu and A. Toma, *An integrated risk measure and information theory approach for modeling financial data and solving decision making problems*, 2nd International Conference 'Economic Scientific Research - Theoretical, Empirical and Practical Approaches' (ESPERA 2014, 13-14 November 2014, Bucharest, Romania), Procedia Economics and Finance **22**, 531-537 (2015).
- [8319] M. Sheraz, S. Dedu and V. Preda, *Entropy measures for assessing volatile markets*, 2nd International Conference 'Economic Scientific Research - Theoretical, Empirical and Practical Approaches' (ESPERA 2014, 13-14 November 2014, Bucharest, Romania), Procedia Economics and Finance **22**, 655-662 (2015).
- [8320] B.J. West and P. Grigolini, *A psychophysical model of decision making*, Physica A **389**, 3580-3587 (2010).
- [8321] T. Takahashi, *Tsallis' non-extensive free energy as a subjective value of an uncertain reward*, Physica A **388**, 715-719 (2009).
- [8322] T. Takahashi, S. Tokuda, M. Nishimura and R. Kimura, *The Q-exponential decay of subjective probability for future reward: A psychophysical time approach*, Entropy **16**, 5537-5545 (2014), doi:10.3390/e16105537
- [8323] T. Yokoyama and T. Takahashi, *Mathematical neurolaw of crime and punishment: The q-Exponential punishment function*, Appl. Math. **4**, 1371-1375 (2013), doi: <http://dx.doi.org/10.4236/am.2013.410185>
- [8324] T. Takahashi and R. Han, *Psychophysical neuroeconomics of decision making: Nonlinear time perception commonly explains anomalies in temporal and probability discounting*, Appl. Math. **4**, 1520-1525 (2013).
- [8325] R. Osorio, L. Borland and C. Tsallis, *Distributions of high-frequency stock-market observables*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [8326] C. Tsallis, C. Anteneodo, L. Borland and R. Osorio, *Nonextensive statistical mechanics and economics*, Physica A **324**, 89 (2003).
- [8327] F. Alonso-Marroquin, K. Arias-Calluari, M. Harre, M.N. Najafi and H.J. Herrmann, *Q-Gaussian diffusion in stock markets*, Phys. Rev. E **99**, 062313 (2019).
- [8328] K. Arias-Calluari, F. Alonso-Marroquin, M.N. Najafi and M. Harre, *Methods for forecasting the effect of exogenous risks on stock markets*, preprint (2020), 2005.03969 [q-fin.ST].
- [8329] F. Gharari, K. Arias-Calluari, F. Alonso-Marroquin and M.N. Najafi, *Local and non-local fractional porous media equations*, preprint (2020), 2010.06306 [cond-mat.stat-mech].
- [8330] K. Arias-Calluari, *Methods for forecasting stock markets*, Doctor Thesis (School of Civil Engineering, Faculty of Engineering, The University of Sydney, Australia, 2021).
- [8331] Y. Tang, F. Gharari, K. Arias-Calluari, F. Alonso-Marroquin, M.N. Najafi and M. Harre, *Non-linear fractional q-Gaussian diffusion model of stock market*, communicated at Statistical Mechanics for Complexity (Rio de Janeiro, 6 to 10 November 2023).
- [8332] A. Gerig, J. Vicente and M.A. Fuentes, *Model for non-Gaussian intraday stock returns*, Phys. Rev. E **80**, 065102 (2009) (4 pages).
- [8333] M.A. Fuentes, A. Gerig and J. Vicente, *Universal behavior of extreme price movements in stock markets*, Plos One **4** (12), e8243 (2009) (4 pages).
- [8334] T.S. Biro and R. Rosenfeld, *Microscopic origin of non-Gaussian distributions of financial returns*, Physica A **387**, 1603-1612 (2008).
- [8335] F. De Domenico, G. Livan, G. Montagna and O. Nicosini, *Modeling and simulation of financial returns under non-Gaussian distributions*, preprint (2023), 2302.02769 [q-fin.ST].
- [8336] S.M.D. Queiros, *On a possible dynamical scenario leading to a generalised Gamma distribution*, preprint (2004) [physics/0411111].
- [8337] S.M.D. Queiros, *On the emergence of a generalised Gamma distribution. Application to traded volume in financial markets*, Europhys. Lett. **71**, 339 (2005).
- [8338] J. de Souza, L.G. Moyano and S.M.D. Queiros, *On statistical properties of traded volume in financial markets*, Eur. Phys. J. B **50**, 165-168 (2006).

- [8339] J.K. Okutu, N.K. Frempong, S.K. Appiah and A.O. Adebajji, *A new generated family of distributions: Statistical properties and applications with real-life data*, Computational and Mathematical Methods 9325679 (2023), 18 pages.
- [8340] A.E. Biondo, A. Pluchino and A. Rapisarda, *Modeling financial markets by self-organized criticality*, Phys. Rev. E **92** (4), 042814 (2015).
- [8341] A.E. Biondo, A. Pluchino and A. Rapisarda, *Order book, financial markets, and self-organized criticality*, Chaos Solitons and Fractals **88**, 196-208 (2016).
- [8342] A.E. Biondo, A. Pluchino and A. Rapisarda, *A multilayer approach for price dynamics in financial markets*, Eur. Phys. J. Special Topics **226**, 477-488 (2017).
- [8343] A.E. Biondo, L. Mazzarino and A. Pluchino, *Noise and financial stylized facts: A stick balancing approach*, Entropy **25**, 557 (2023). 25, 557.
- [8344] S. Deep and P. Koutris, *The design of arbitrage-free data pricing schemes*, 20th International Conference on Database Theory (ICDT 2017), Eds. M. Benedikt and G. Orsi, Leibniz International Proceedings in Informatics 12 (2017) (18 pages).
- [8345] S.M.D. Queiros, *On non-Gaussianity and dependence in financial time series: A nonextensive approach*, Quant. Finance **5**, 475-487 (2005).
- [8346] S.M.D. Queiros, *On new conditions for evaluate long-time scales in superstatistical time series*, Physica A **385**, 191-198 (2007).
- [8347] E. Canessa, *Stock market and motion of a variable mass spring*, Physica A **388**, 2168-2172 (2009).
- [8348] N. Kozuki and N. Fuchikami, *Dynamical model of foreign exchange markets leading to Tsallis distribution*, in *Noise in Complex Systems and Stochastic Dynamics*, eds. L. Schimansky-Geier, D. Abbott, A. Neiman and C. Van den Broeck, Proc. of SPIE **5114**, 439 (2003).
- [8349] N. Gradojevic, *Brexit and foreign exchange market expectations: Could it have been predicted?*, Annals of Operations Research (2020), (23 pages), doi: doi.org/10.1007/s10479-020-03582-z
- [8350] G.L. Vasconcelos, L.R.C. Ribeiro, A.M.S. Macedo, I.R.R. Gonzalez, R. Ospina and A.A. Brum, *Turbulence hierarchy in foreign exchange markets*, Phys. Rev. E **109**, 044313 (2024).
- [8351] M. Ausloos and K. Ivanova, *Dynamical model and nonextensive statistical mechanics of a market index on large time windows*, Phys. Rev. E **68**, 046122 (2003).
- [8352] M. Ausloos, *Measuring complexity with multifractals in texts. Translation effects*, Chaos, Solitons and Fractals **45**, 1349-1357 (2012).
- [8353] G. Rotundo and M. Ausloos, *Complex-valued information entropy measure for networks with directed links (digraphs). Application to citations by community agents with opposite opinions*, Eur. Phys. J. B **86**, 169 (2013) (10 pages), DOI: 10.1140/epjb/e2013-30985-6
- [8354] R. Cerqueti, G. Rotundo and M. Ausloos, *Tsallis entropy for cross-shareholding network configurations*, Entropy **22**, 676 (2020), doi: 10.3390/e22060676
- [8355] D. Rajaonarison, D. Bolduc and H. Jayet, *The K-deformed multinomial logit model*, Economics Lett. **86**, 13 (2005).
- [8356] P. Richmond and L. Sabatelli, *Langevin processes, agent models and socio-economic systems*, Physica A **336**, 27 (2004).
- [8357] P. Richmond, J. Mimkes and S. Hutzler, *Econophysics and Physical Economics*, (2013, Oxford University Press).
- [8358] P. Richmond, M.B. Sexton, S.J. Hardiman and S. Hutzler, *Generalised diffusion model of asset price fluctuations*, Eur. Phys. J. B **87**, 63 (2014) (5 pages), doi: 10.1140/epjb/e2014-40599-1
- [8359] G. Malhotra, R. Srivastava and H.C. Taneja, *Calibration of the risk-neutral density function by maximization of a two-parameter entropy*, Physica A **513**, 45-54 (2019), doi: 10.1016/j.physa.2018.08.148
- [8360] E.P. Borges, *Empirical nonextensive laws for the county distribution of total personal income and gross domestic product*, Physica A **334**, 255 (2004).
- [8361] J.C. Ferrero, *A statistical analysis of stratification and inequity in the income distribution*, Eur. Phys. J. B **80**, 255-261 (2011).
- [8362] A.D. Soares, N.J. Moura Jr. and M.B. Ribeiro, *Tsallis statistics in the income distribution of Brazil*, Chaos, Solitons and Fractals **88**, 158-171 (2016).
- [8363] E.M.C. Abreu, N.J. Moura Jr., A.D. Soares and M.B. Ribeiro, *Oscillations in the Tsallis income distribution*, Physica A **533**, 121967 (2019).
- [8364] M.B. Ribeiro, *Income Distribution Dynamics of Economic Systems - An Econophysical Approach*, (Cambridge University Press, 2019).

- [8365] A.P. Mattedi, F.M. Ramos, R.R. Rosa and R.N. Mantegna, *Value-at-risk and Tsallis statistics: Risk analysis of the aerospace sector*, Physica A **344**, 554 (2004).
- [8366] L. Borland, *A multi-time scale non-Gaussian model of stock returns*, preprint (2004) [cond-mat/0412526].
- [8367] R. Rak, S. Drozd, J. Kwapien and P. Oswiecimka, *Stock returns versus trading volume: Is the correspondence more general?*, Acta Physica Polonica B **44** (10), 2035-2050 (2013).
- [8368] S.M.D. Queiros, *On a non-extensive dynamical proposal for financial returns*, preprint (2006).
- [8369] S.M.D. Queiros, *Analysing and modelling finance within nonextensive statistical mechanics formalism*, Brazilian Journal of Business Economics **8**, 7-29 (2008).
- [8370] C. Anteneodo and R. Riera, *Additive-multiplicative stochastic models of financial mean-reverting processes*, preprint (2005) [physics/0502119].
- [8371] C. Anteneodo and R. Riera, *Arbitrary-order corrections for finite-time drift and diffusion coefficients*, Phys. Rev. E **80**, 031103 (2009) (8 pages).
- [8372] S.M.D. Queiros, L.G. Moyano, J. de Souza and C. Tsallis, *A nonextensive approach to the dynamics of financial observables*, Eur. Phys. J. B **55**, 161-168 (2007).
- [8373] J. Ruseckas, V. Gontis and B. Kaulakys, *Nonextensive statistical mechanics distributions and dynamics of financial observables from the nonlinear stochastic differential equations*, Advances Complex Systems, **15** (1), 1250073 (2012) (13 pages).
- [8374] R. Axtell, *Firm sizes: Facts, formulae, fables and fantasies*, in *Power Laws in the Social Sciences*, ed. C. Cioffi-Revilla (Cambridge University Press, 2006), in press.
- [8375] E.M.S. Ribeiro and G.A. Prata, *Modeling empirical distributions of firm size with q-distributions*, Internat. J. Applied Mathematics **28** (6), 715-725 (2015), doi: <http://dx.doi.org/10.12732/ijam.v28i6.6>
- [8376] S.M.D. Queiros, *From time series to superstatistics: Upgrading the criterion for evaluating long-time scales*, preprint (2006).
- [8377] S.M.D. Queiros and L.G. Moyano, *Yet on statistical properties of traded volumes: Correlation and mutual information at different value magnitudes*, Physica A **383**, 10-15 (2007).
- [8378] N. Gradojevic and R. Gencay, *Overnight interest rates and aggregate market expectations*, Economics Lett. **100**, 27-30 (2008).
- [8379] R. Gencay and N. Gradojevic, *Crash of '87- Was it expected? Aggregate market fears and long-range dependence*, J. Empirical Finance **17** (2) Special Issue 270-282 (2010).
- [8380] J. Perello, J. Masoliver, A. Kasprzak and R. Kutner, *Model for interevent times with long tails and multifractality in human communications: An application to financial trading*, Phys. Rev. E **78**, 036108 (2008) (11 pages).
- [8381] M. Kozłowska and R. Kutner, *Modern rheology on a stock market: Fractional dynamics of indices*, Acta Physica Polonica A **118**, 677-687 (2010).
- [8382] V. Gontis, J. Ruseckas and A. Kononovicius, *A long-range memory stochastic model of the return in financial markets*, Physica A **389**, 100-106 (2010).
- [8383] A. Namaki, Z. Koochi Lai, G.R. Jafari, R. Raei and R. Tehrani, *Comparing emerging and mature markets during times of crises: a non-extensive statistical approach*, Physica A **392**, 3039-3044 (2013).
- [8384] V. Gontis, B. Kaulakys and J. Ruseckas, *Nonlinear stochastic differential equation as the background of financial fluctuations*, CP1129, *Noise and Fluctuations, 20th International Conference (ICNF 2009)*, eds. M. Macucci and G. Basso, American Institute of Physics 978-0-7354-0665-0/09, 563-566 (2009).
- [8385] J. Ruseckas and B. Kaulakys, *Tsallis distributions and 1/f noise from nonlinear stochastic differential equations*, Phys. Rev. E **84**, 051125 (2011) (7 pages).
- [8386] J. Ruseckas and B. Kaulakys, *Intermittency in relation with 1/f noise and stochastic differential equations*, Chaos **23**, 023102 (2013) (8 pages).
- [8387] B. Kaulakys, M. Alaburda, and V. Gontis, *Modeling scaled processes and clustering of events by the nonlinear stochastic differential equations*, AIP Conf. Proc. **1129**, 13-16 (2009).
- [8388] S. Romano, N.X. Vinh, J. Bailey and K. Verspoor, *Adjusting for chance clustering comparison measures*, J. Machine Learning Research **17**, 1-32 (2016).
- [8389] C. Wang, G. Shi, Y. Sheng and H. Ahmadzade, *Exponential entropy of uncertain sets and its applications to learning curve and portfolio optimization*, Journal of Industrial and Management Optimization (2024).
- [8390] K. Nakagawa and T. Tsuchiya, *Generalizing Risk Parity Portfolios with Weighted Tsallis Entropy Regularization*, preprint (2025).
- [8391] P.M. de Santana, T.A. Scher, J.J. Bazzo, A.A.M. de Medeiros and V.A. de Sousa Jr., *RF-based machine learning solution for indoor person detection*, preprint (2020).

- [8392] X. Li, D. Bi, L. Peng and Y. Xie, *Kernel-based online prediction algorithms for indoor localization in Internet of Things*, Expert Systems With Applications **217**, 119547 (2023).
- [8393] H. Tembine, *Data-driven vs model-driven imitative learning*, 6th Data Driven Control and Learning Systems (DDCLS), 22-29 (2017).
- [8394] H. Partaourides and S. Chatzis, *Deep learning with t-exponential Bayesian kitchen sinks*, Expert Systems with Applications **98**, 84-92 (2018).
- [8395] M.F. Balcan, K. Harris, M. Khodak and Z.S. Wu, *Meta-learning adversarial bandits*, preprint (2022), 2205.14128 [cs.LG].
- [8396] G. Chen and Y. Peng, *Off-policy actor-critic in an ensemble: Achieving maximum general entropy and effective environment exploration in deep reinforcement learning*, preprint (2019), 1902.05551 [cs.LG].
- [8397] L. Zhu, H. Shah and H. Wang, *q-Exponential family for policy optimization*, preprint (2024), 2408.07245 [cs.LG].
- [8398] J. Ruseckas, B. Kaulakys and V. Gontis, *Herding model and 1/f noise*, EPL **96**, 60007 (2011) (6 pages). [Noise and Fluctuations: 20th International Conference on Noise and Fluctuations (ICNF-2009)].
- [8399] V. Gontis and A. Kononovicius, *A consentaneous agent based and stochastic model of the financial markets*, Plos One **9** (7), e102201 (2014) (12 pages).
- [8400] J. Ruseckas and B. Kaulakys, *1/f noise and q-Gaussian distribution from nonlinear stochastic differential equations*, Les Journees du Campus d'Ilkirch 2013 (4-5 April 2013, Pole API, Illkirch).
- [8401] B. Kaulakys, R. Kazakevicius and J. Ruseckas, *Modeling Gaussian and non-Gaussian 1/f noise by the linear stochastic differential equations*, IEEE International Conference Noise and Fluctuations (2013) (4 pages).
- [8402] J. Ruseckas and B. Kaulakys, *1/f noise and q-Gaussian distribution from nonlinear stochastic differential equations*, IEEE International Conference on Noise and Fluctuations (Montpellier, France, 24-28 June 2013).
- [8403] J. Ruseckas and B. Kaulakys, *Intermittency generating 1/f noise*, International Conference on Noise and Fluctuations (2013).
- [8404] G.H. Mu, W. Chen, J. Kertesz and W.X. Zhou, *Preferred numbers and the distribution of trade sizes and trading volumes in the Chinese stock market*, Eur. Phys. J. B **68**, 145-152 (2009).
- [8405] C. Anteneodo and S.M. Duarte Queiros, *Statistical mixing and aggregation in Feller diffusion*, J. Stat. Mech. (2009) P10023.
- [8406] M. Vosvrda, *Capital market efficiency and Tsallis entropy*, Mathematical Methods in Economics, 340-345 (2009).
- [8407] L. Kristoufek and M. Vosvrda, *Measuring capital market efficiency with tools of statistical physics*, Proc. of 30th International Conference Mathematical Methods in Economics, PTS I and II, 496-501 (2012).
- [8408] X.H. Ni, Z.Q. Jiang, G.F. Gu, F. Ren, W. Chen and W.X. Zhou, *Scaling and memory in the non-Poisson process of limit order cancelation*, Physica A **389**, 2751-2761 (2010).
- [8409] T. Sei, *Infinitely imbalanced binomial regression and deformed exponential families*, J. Statistical Planning and Inference **149**, 116-124 (2014).
- [8410] E.F. de Souza, *Entropia de Tsallis e sua aplicacao em acoes da Bolsa de Valores*, Master Thesis [In Portuguese] (2009).
- [8411] K. Guhathakurta, S. Banerjee, B. Bhattacharya and A.R. Chowdhury, *An empirical examination of non Gaussian and Gaussian stock price distribution*, preprint (2010).
- [8412] K. Guhathakurta, B. Bhattacharya and A.R. Chowdhury, *Using empirical mode decomposition to compare Gaussian and Non-Gaussian model of stock price distribution*, Decision **37** (1) (April 2010).
- [8413] K. Guhathakurta, *Indian stock market: Examination of validity of the geometric brownian motion (GBM) model to stock price behaviour with particular emphasis on the Black Scholes option pricing model*, Doctor Thesis (Jadavpur University, Kolkata, 2012).
- [8414] T. Takaishi T.T. Chen and Z. Zheng, *Analysis of Realized Volatility in Two Trading Sessions of the Japanese Stock Market*, Progr.Theor. Phys. Suppl. **194**, 43-54 (2012).
- [8415] L. Zhang and X.J. Gou, *The research of returns distribution of chinese stock market with Tsallis theory*, Operations Research and Management Science **21** (3), 200-205 (2012) (in Chinese).
- [8416] P. Xiao and S. Zhou, *The derivation of Tsallis-q-Gauss distribution and its application*, preprint (in Chinese).
- [8417] D. Strzalka, P. Dymora and M. Mazurek, *Modified stretched exponential model of computer system resources management limitations – The case of cache memory*, Physica A **491**, 490-497 (2018), doi: 10.1016/j.physa.2017.09.012
- [8418] D. Strzalka, *Some preliminary results of memory cache analysis with the use of non-extensive*, Annales UMCS Informatica 43-47 (2017), doi: 10.17951/AI.2016.16.2.43

- [8419] J. Ludescher, C. Tsallis and A. Bunde, *Universal behaviour of interoccurrence times between losses in financial markets: An analytical description*, Europhys. Lett. **95**, 68002 (2011) (5 pages).
- [8420] J. Ludescher and A. Bunde, *Universal behavior of the interoccurrence times between losses in financial markets: Independence of the time resolution*, Phys. Rev. **90**, 062809 (2014) (6 pages).
- [8421] L. Liu and F. Hu, *Finescale clusterization intermittency of turbulence in the atmospheric boundary layer*, J. Atmospheric Sciences **77**, 2376 (2020).
- [8422] Z.Q. Jiang, G.J. Wang, A. Canabarro, B. Podobnik, C. Xie, H.E. Stanley and W.X. Zhou, *Short term prediction of extreme returns based on the recurrence interval analysis*, preprint (2016), 1610.08230 [q-fin.ST].
- [8423] M. Denys, T. Gubiec and R. Kutner, *Universality of Tsallis q -exponential of interoccurrence times within the microscopic model of cunning agents*, preprint (2014), 1411.1689 [q-fin.ST].
- [8424] P. Manshour, M. Anvari, N. Reinke, M. Sahim and M.R.R. Tabar, *Interoccurrence time statistics in fully-developed turbulence*, Scientific Reports **6**, 27452 (2016), doi: 10.1038/srep27452
- [8425] M. Denys, M. Jagielski, T. Gubiec, R. Kutner and H.E. Stanley, *Universality of market superstatistics*, Phys. Rev. E **94**, 042305 (2016) (14 pages).
- [8426] M.I. Bogachev, A.R. Kayumov and A. Bunde, *Universal internucleotide statistics in full genomes: A footprint of the DNA structure and packaging?*, PLoS ONE **9** (12), e112534 (2014), doi:10.1371/journal.pone.0112534
- [8427] M.I. Bogachev, N.S. Pyko, N. Tymchenko, S.A. Pyko and O.A. Markelov, *Approximate waiting times for queuing systems with variable cross-correlated arrival rates*, Physica A **654**,130152 (2024).
- [8428] F. Carbone, A.G. Bruno, A. Naccarato, F. De Simone, C.N. Gencarelli, F. Sprovieri, I.M. Hedgcock, M.S. Landis, H. Skov, K.A. Pfaffhuber, K.A. Read, L. Martin, H. Angot, A. Dommergue, O. Magand and N. Pirrone, *The superstatistical nature and interoccurrence time of atmospheric mercury concentration fluctuations*, J. Geophysical Research (2018), doi: 10.1002/2017JD027384
- [8429] M.I. Bogachev, O.A. Markelov, A.R. Kayumov and A. Bunde, *Superstatistical model of bacterial DNA architecture*, Scientific Reports **7**, 43034 (2017) (12 pages), doi: 10.1038/srep43034
- [8430] H. Moghaddasi, K. Khalifeh and A.H. Darooneh, *Distinguishing functional DNA words; A method for measuring clustering levels*, Scientific Reports **7**, 41543 (2017) (8 pages), doi: 10.1038/srep41543
- [8431] S. Sharma and S. Pemo, *Performance analysis of various entropy measures in categorical data clustering*, International Conference on Computational Performance Evaluation, ComPE 2020, 9200074, 592-595 (2020).
- [8432] H. Moghaddasi, S. Rezaei, A.H. Darooneh, E. Heshmati and K. Khalifeh, *A comparative analysis of dipeptides distribution in eukaryotes and prokaryotes by statistical mechanics*, Physica A (2020), in press.
- [8433] A. Mehri, H. Agahi and H. Mehri-Dehnavi, *A novel word ranking method based on distorted entropy*, Physica A **521**, 484-492 (2019), doi: 10.1016/j.physa.2019.01.080
- [8434] M. Lei and K.H. Cheong, *Node influence ranking in complex networks: A local structure entropy approach*, Chaos, Solitons and Fractals **160**, 112136 (2022).
- [8435] N. Nikbakhsh, Y. Baleghi and H. Agahi, *Maximum mutual information and Tsallis entropy for unsupervised segmentation of tree leaves in natural scenes*, Computers and Electronics in Agriculture **162**, 440-449 (2019).
- [8436] L. Masmoudi, S.S. El Joumani and M.S. Eddine, *Multi-objective optimization for worldview image segmentation funded on the entropies of Tsallis and Renyi*, International Journal of Advanced Trends in Computer Science and Engineering (2019) (16 pages), doi: 10.30534/ijatcse/2019/29862019
- [8437] S.M.D. Queiros and C. Anteneodo, *Complexity in quantitative finance and economics (Preface)*, Chaos, Solitons and Fractals (2016), in press.
- [8438] C. Tsallis, *Inter-occurrence times and universal laws in finance, earthquakes and genomes*, Chaos, Solitons and Fractals **88**, 254-266 (2016), doi: <http://dx.doi.org/10.1016/j.chaos.2015.12.025>
- [8439] L.P. Karakatsanis, M.N. Xenakis, E.G. Pavlos, G. Tsoulouhas and D.S. Monos, *The nonrandom and geometric role of retroviral DNA in genome*, preprint (2025).
- [8440] Y. Lu and X. Zhuang, *The impact of gender and working experience on intertemporal choices*, Physica A **409**, 146-153 (2014).
- [8441] J. Perello, M. Gutierrez-Roig and J. Masoliver, *Scaling properties and universality of first-passage-time probabilities in financial markets*, Phys. Rev. E **84**, 066110 (2011) (7 pages).
- [8442] A.Yu. Morozov, *Comment on 'Multifractal diffusion entropy analysis on stock volatility in financial markets' [Physica A 391 (2012) 5739-5745]*, Physica A **392**, 2442-2446 (2013).
- [8443] A. Pasqualini, *Approaching systemic risk with entropy—A new proposal for an early warning measure*, Master Thesis (University Ca' Foscari, Venezia, 2014).
- [8444] M. Billio, R. Casarin, M. Costola and A. Pasqualini, *An entropy-based early warning indicator for systemic risk*, J. Int. Financ. Markets Inst. Money **45**, 42-59 (2016). Working Papers, Depart-

- ment of Economics, Ca' Foscari University of Venice, No. 09/WP/2015, ISSN 1827-3580 (2015), http://www.unive.it/nqcontent.cfm?a_id=86302
- [8445] K. Gajowniczek, K. Karpio, P. Lukasiewicz, A. Orłowski and T. Zabkowski, *Q-entropy approach to selecting high income households*, Acta Physica Polonica A **127** (3A), 38-44 (2015).
- [8446] L. Borland, *The physics of finance: Collective dynamics in a complex world*, in *Selforganization in complex systems: The past, present, and future of synergetics*, 75-90 (2015).
- [8447] R. Manfrin, *Analisi del rischio sistemico con un approccio di teoria di network a frequenza multipla*, Tesi di Laurea in Economia e Finanza (Università Ca' Foscari, Venezia, 2015).
- [8448] C. Tsallis, *Economics and finance: q-statistical features galore*, in the Special Issue *Entropic Applications in Economics and Finance*, eds. M. Stutzer and S. Bekiros, Entropy **19**, 457 (2017) (17 pages), doi:10.3390/e19090457
- [8449] A. Jakimowicz, *The role of entropy in the development of economics*, Entropy **22**, 452 (2020), doi: 10.3390/e22040452
- [8450] N. Loukeris, *The evolving returns optimisation system, EROS*, International Conference on Data Analytics for Business and Industry (ICDABI, 2021).
- [8451] N. Loukeris, *Heterogenous ranking cummulative system - HERACLES*, 2024 5th International Conference on Data Analytics for Business and Industry (2024).
- [8452] A.M.I. Oikonomou, *Statistical information measures and financial indices*, Master Thesis (Department of Statistics and Insurance Science, School of Finance and Statistics, University of Piraeus, 2022).
- [8453] L. Bo, Y. Huang, X. Yu and T. Zhang, *Continuous-time q-learning for jump-diffusion models under Tsallis entropy*, preprint (2024), 2407.03888 [math.OC].
- [8454] V.N. Soloviev, A.O. Bielskiy and A.V. Matviychuk, *Crisis phenomena monitoring and prevention in complex socio-economic systems*, Monograph (Ukraine, 2024).
- [8455] T. Squartini, G. Caldarelli, G. Cimini, A. Gabrielli and D. Garlaschelli, *Reconstruction methods for networks: the case of economic and financial systems*, preprint (2018), 1806.06941 [physics.soc-ph].
- [8456] C. Tsallis, *Generalized entropy-based criterion for consistent testing*, Phys. Rev. E **58**, 1442 (1998).
- [8457] L. Bagnato, L. De Capitani and A. Punzo, *Testing serial independence via density-based measures of divergence*, Methodol. Comput. Appl. Probab. **16**, 627-641 (2014), doi: 10.1007/s11009-013-9320-4
- [8458] D.A. Cousin, *Identifying uniformity with entropy and divergence*, Draft NISTIR 8139 (2017).
- [8459] C. Tsallis, G. Deutscher and R. Maynard, *On probabilities and information - The envelope game*, REBRAPE-Brazilian Journal of Probability and Statistics **10**, 103 (1996).
- [8460] A.M.C. de Souza and C. Tsallis, *Student's t- and r-distributions: Unified derivation from an entropic variational principle*, Physica A **236**, 52 (1997).
- [8461] D. Senapati and Karmeshu, *Generation of cubic power-law for high frequency intra-day returns: Maximum Tsallis entropy framework*, Digital Signal Processing **48**, 276-284 (2016), doi: <http://dx.doi.org/10.1016/j.dsp.2015.09.018>
- [8462] C.C. Heyde and N.N. Leonenko, *Student processes*, Advances in Appl. Probability **37**, 342 (2005).
- [8463] D. Holste, I. Grosse and H. Herzel, *Bayes' estimators of generalized entropies*, J. Phys. A **31**, 2551 (1998).
- [8464] D. Holste, I. Grosse and H. Herzel, *Generalized entropies through Bayesian estimation*, preprint (1999) [Manuscript 267 of Interjournal-Complex Systems; <http://itb.biologie.hu-berlin.de/dir/subindex1.html>].
- [8465] D. Ferrari and D. La Vecchia, *On robust estimation via pseudo-additive information*, Biometrika **99** (1), 238-244 (2012).
- [8466] J.V.T. de Lima, S.L.E.F. da Silva, J.M. de Araujo, G. Corso and G.Z.S. Lima, *Nonextensive statistical mechanics for robust physical parameter estimation: the role of entropic index*, Eur. Phys. J. Plus **136**, 269 (2021), doi: 10.1140/epjp/s13360-021-01274-6 (2021).
- [8467] T.G. Dewey, *Stochastic complexity and statistical mechanics*, J. Chem. Phys. **109**, 10118 (1998).
- [8468] V.V. Uchaikin and V.M. Zolotarev, *Chance and Stability. Stable Distributions and Their Applications*, Series *Modern Probability and Statistics* (VSP International Science Publishers, Zeist, 1999), Chapter 13, pages 400-402.
- [8469] D.R. Bickel, *Time-series intermittency quantified by generalized entropy: An alternative to multifractal analysis*, communicated at the "International Workshop on Classical and Quantum Complexity and Nonextensive Thermodynamics" (Denton, Texas, 3-6 April 2000).
- [8470] M. Fernandes, *Non-parametric entropy-based tests of independence between stochastic processes*, PhD Thesis, preprint (Solvay Business School, Université Libre de Bruxelles, 2000) [<http://www.iue.it/Personal/Researchers/fernandes/Tsallis.html>].

- [8471] M. Fernandes and B. Neri, *Nonparametric entropy-based tests of independence between stochastic processes*, *Econometric Reviews* **29** (3), 276-306 (2010).
- [8472] M. Menard, *Extension of the objective functions in fuzzy clustering*, preprint Fuzz-IEEE (2002).
- [8473] M. Yasuda, *Tsallis entropy based fuzzy c-means clustering with parameter adjustment*, IEEE, Soft Computing and Intelligent Systems (SCIS) and 13th International Symposium on Advanced Intelligent Systems (ISIS) (2012).
- [8474] M. Yasuda, *Q-increment deterministic annealing fuzzy c-means clustering using Tsallis entropy*, 11th International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2014, Article number 6980802, Pages 31-35 (Xiamen, China, 19 to 21 August 2014).
- [8475] K. Tamada and M. Yasuda, *Determination of number of clusters for fuzzy C-means maximized with Tsallis entropy*, ICNC-FSKD 2020: Advances in Natural Computation, Fuzzy Systems and Knowledge Discovery, 446-456 (2020).
- [8476] J. Bonilla, J. Montero and J. Tinguaro Rodriguez, *A study of the influence of fuzzy variables on the economic analysis*, Doctoral Consortium 1399-1401 (Madrid University, 2018).
- [8477] Q. Li, Y. Ma, F. Smarandache and S. Zhu, *Single-valued neutrosophic clustering algorithm based on Tsallis entropy maximization*, *Axioms* **7**, 57 (2018), doi: 10.3390/axioms7030057
- [8478] F. Hermosillo-Reynoso, D. Torres-Roman, J. Santiago-Paz and J. Ramirez-Pacheco, *A novel algorithm based on the pixel-entropy for automatic detection of number of lanes, lane centers, and lane division lines formation*, *Entropy* **20**, 725 (2018), doi: 10.3390/e20100725
- [8479] Y. Kanzawa, *On possibilistic clustering methods based on Shannon/Tsallis-entropy for spherical data and categorical multivariate data*, Chapter Modeling
- [8480] Y. Kanzawa, *Fuzzy Clustering based on α -divergence for spherical data and for categorical multivariate data*, *Decisions for Artificial Intelligence, Lecture Notes in Computer Science* **9321**, 115-128 (Springer, Berlin, 2015).
- [8481] Y. Kanzawa, *Fuzzy co-clustering induced by q-multinomial mixture models*, IEEE 8015398 (2017) (6 pages).
- [8482] Y. Kanzawa, *On fuzzy clustering for categorical multivariate data induced by Polya mixture models*, *Modeling Decisions for Artificial Intelligence*, 89-102 (2017).
- [8483] Y. Kanzawa, *q-divergence-based relational fuzzy c-means clustering*, *J. Advanced Computational Intelligence and Intelligent Informatics* **22** (1), 34-43 (2018), doi: 10.20965/jaciii.2018.p0034
- [8484] Y. Kanzawa, *On Tsallis entropy-based and Bezdek-type fuzzy latent semantics analysis*, IEEE International Conference on Systems, Man and Cybernetics, 3685 (2018).
- [8485] Y. Kanzawa, *Generalization property of fuzzy classification function for Tsallis entropy-regularization of Bezdek-type fuzzy C-means clustering*, *International Conference on Modeling Decisions for Artificial Intelligence MDA*, 119-131 (2020).
- [8486] Y. Kanzawa, *Three fuzzy clustering algorithms for nominal data: Enhancement through Tsallis entropy-based feature weighting and q-divergence-based fuzzification*, IEEE International Conference on Fuzzy Systems (FUZZ-IEEE, 2024).
- [8487] Y. Kanzawa, *On parameter-extended fuzzy clustering for categorical multivariate data*, USB Proceedings, The 21th International Conference on Modeling Decisions for Artificial Intelligence (Tokyo, 2024).
- [8488] T. Hasuike and H. Katagiri, *An objective approach for constructing a membership function based on fuzzy Harvda-Charvat entropy and mathematical programming*, *Journal Intelligent Fuzzy Systems* **32** (6), 4443-4452 (2017).
- [8489] A. Ebrahimzadeh and Z. Eslami Giski, *Tsallis entropy of dynamical systems – a general scheme*, *J. Intelligent Fuzzy Systems* **35** (1), 1119-1126 (2018).
- [8490] A. Ebrahimzadeh and Z. Eslami Giski, *Tsallis entropy of partitions in quantum logics*, *Internat. J. Theoretical Physics* (2018) (14 pages), doi: 10.1007/s10773-018-3966-1
- [8491] F.Y. Nie, J. Li, Q.S. Rong, M.S. Pan and F. Zhang, *Human object extraction using nonextensive fuzzy entropy and chaos differential evolution*, *Internat. J. Signal Processing, Image Processing and Pattern Recognition* **6** (2), 43-54 (2013).
- [8492] Y. Liu, H. Liu, R.R. Martin, L. De Dominicis, R. Song and Y. Zhao, *Accurately estimating rigid transformations in registration using a boosting-inspired mechanism*, *Pattern Recognition* **60**, 849-862 (2016).
- [8493] J. Wu and J. Li, *System asymptotic stability analysis of a kind of complex production processes based on multi-dimensional moving pattern*, *SN Applied Sciences* **5**, 32 (2022).
- [8494] B. Cao, J. Li and F.Y. Nie, *Tri-level thresholding using invasive weed optimization based on nonextensive fuzzy entropy*, *Internat. J. Signal Processing, Image Processing and Pattern Recognition* **7** (6), 359-368 (2014), <http://dx.doi.org/10.14257/ijsp.2014.7.6.31>

- [8495] A.J. Mwambela, *Comparative performance evaluation of entropic thresholding algorithms based on Shannon, Renyi and Tsallis entropy definitions for electrical capacitance tomography measurement systems*, I.J. Intelligent Systems and Applications **4**, 41-49 (2018), doi: 10.5815/ijisa.2018.04.05
- [8496] R.K. Tuli, *A family of measures of fuzzy entropy through functional variants*, Int. J. Mathematical Sciences and Applications **5** (2), 485-492 (2015).
- [8497] F. Nie, *Image three-level thresholding based on nonextensive fuzzy entropy and harmony search*, ICIC Express Letters, Part B: Applications **6** (6), 1645-1651 (2015).
- [8498] T.M. Thanh and K. Tanaka, *Blind watermarking using QIM and the quantized SVD domain based on the q-logarithm function*, VISAPP 2015 - 10th International Conference on Computer Vision Theory and Applications; VISIGRAPP, Proceedings **3**, 14-25, Code 112690 (11-14 March 2015, Berlin).
- [8499] T.M. Thanh and N.T. Thanh, *Extended DCT domain for improving the quality of watermarked image*, IEEE, 2015 Seventh International Conference on Knowledge and Systems Engineering, 336-339 (2015).
- [8500] T.M. Thanh and K. Tanaka, *The novel and robust watermarking method based on q-logarithm frequency domain*, Multimed. Tools Appl. **75** (18), 11097-11125 (2016), doi: 10.1007/s11042-015-2836-6
- [8501] T.M. Thanh and K. Tanaka, *A proposal of novel q-DWT for blind and robust image watermarking*, IEEE 25th International Symposium on Personal, Indoor and Mobile Radio Communications 2061-2065 (2014).
- [8502] S. Dong, B. Tang and R. Chen, *Bearing running state recognition based on non-extensive wavelet feature scale entropy and support vector machine*, Measurement **46**, 4189-4199 (2013).
- [8503] Z. Liu, Y. Cui and W. Li, *Combined power quality disturbances recognition using wavelet packet entropies and S-transform*, Entropy **17**, 5811-5828 (2015), doi:10.3390/e17085811
- [8504] Z. Liu, Z. Han, Y. Zhang and Q. Zhang, *Multiwavelet packet entropy and its application in transmission line fault recognition and classification*, IEEE Transactions on Neural Networks and Learning Systems **25** (11), 2043-2052 (2014), doi: 0.1109/TNNLS.2014.2303086
- [8505] N.L. Georgijevic, M.V. Jankovic and Z. Radakovic, *The detection of series arc fault in photovoltaic systems based on the arc current entropy*, IEEE Transactions on Power Electronics **31** (8), 5917-5930 (2016).
- [8506] N.L. Georgijevic, *The detection of series arc fault in DC circuit of photovoltaic systems*, Doctor Thesis (University of Belgrade, School of Electrical Engineering, 2020).
- [8507] Y. Hou, T. Yan, P. Zhang, D. Song and W. Li, *On Tsallis entropy bias and generalized maximum entropy models*, preprint (2010), 1004.1061 [cs.LG].
- [8508] V. Jain and M. Whitmeyer, *Whose bias?*, preprint (2021), 2111.10335 [econ.TH].
- [8509] M. Tahir, M. Aslam, Z. Hussain and A. Ali Khan, *On finite 3-component mixture of exponential distributions: Properties and estimation*, Cogent Mathematics **3**, 1275414 (2016) (23 pages), doi: <http://dx.doi.org/10.1080/23311835.2016.1275414>
- [8510] D. Strzalka, *Initial results of testing some statistical properties of hard disks workload in personal computers in terms of non-extensive entropy and long-range dependencies*, Entropy **19**, 335 (2017) (19 pages), doi: 10.3390/e19070335
- [8511] R. Maya and M.R. Irshad, *Generalized Stacy-Lindley mixture distribution*, Afrika Statistika **12** (3), 1447-1465 (2017), doi: <http://dx.doi.org/10.16929/as/2017.1447.112>
- [8512] M.R. Irshad and R. Maya, *Extended version of generalised Lindley distribution*, South African Statistical Journal **51** (1), 19-44 (2017).
- [8513] M.R. Irshad, D.S. Shibu, R. Maya and V. D'cruz, *Binominal mixture Lindley distribution: Properties and applications*, J. Indian Society for Probability and Statistics (2020), doi: 10.1007/s41096-020-00090-y
- [8514] F.M. Alghamdi, M.A. Meraou, H.M. Aljohani, A. Alrumayh, F.H. Riad, S.M.A. Alsheikh and M.M. Alsolmi, *Inference for compound exponential XLindley model with applications to lifetime data*, Symmetry **16**, 625 (2024).
- [8515] P. Baudot, M. Tapia and J.M. Goillard, *Topological information data analysis: Poincare-Shannon Machine and statistical physic of finite heterogeneous systems*, preprint (2018).
- [8516] I. Bancescu, *q-log-distributions: Log-concavity and log-convexity*, Eur. Phys. J. Plus **133**, 163 (2018), doi: 10.1140/epjp/i2018-12005-3
- [8517] P. Tarkhamtham, W. Yamaka and S. Sriboonchitta, *The generalize maximum Tsallis entropy estimator in kink regression model*, J. Phys. Conf. Series **1053**, 012103 (2018).
- [8518] W. Srichaikul, W. Yamaka, P. Maneejuk and S. Sriboonchitta, *Comparison of entropy measures in generalized maximum entropy estimation*, J. Phys. Conf. Series **1053**, 012021 (2018).
- [8519] P. Tarkhamtham and W. Yamaka, *High-order generalized maximum entropy estimator in kink regression model*, Thai Journal of Mathematics, 185-200 (2019) [Special Issue: Structural Change Modeling and Optimization in Econometrics 2018].

- [8520] J. Sarika, K. Vijay and S. Arti, *Generalized fuzzy information entropy measure: A case study for the selection of diamond among various brands*, Recent Patents on Engineering **12** (3) 223-229 (2018), doi: 10.2174/1872212112666180301143158
- [8521] J. Ahmadi and M. Fashandi, *Characterization of symmetric distributions based on some information measures properties of order statistics*, Physica A **517**, 141-152 (2019).
- [8522] J. Ahmadi, *Characterization of continuous symmetric distributions using information measures of records*, Statistical Papers (2020), doi: 10.1007/s00362-020-01206-z
- [8523] M.I. Riffi, S.I. Ansari and M.S. Hamdan, *A generalized transmuted uniform distribution*, Sao Paulo Journal of Mathematical Sciences (2021), (16 pages), doi: 10.1007/s40863-021-00217-4
- [8524] K.I. Koike and Y. Shimegi, *On log-q-Gaussian distribution*, Calcutta Statistical Association Bulletin **70** (2), 105-121 (2018).
- [8525] B. Li, H. Zhang and J. He, *Some characterizations and properties of COM-Poisson random variables*, Communications in Statistics -Theory and Methods (2019), doi: 10.1080/03610926.2018.1563164
- [8526] C.T. Li, *A Poisson decomposition for information and the information-event diagram*, IEEE Explore (2025).
- [8527] N. Sebastian, R.S. Rasin and P.O. Silviya, *Topp-Leone generated q-exponential distribution and its applications*, preprint (2019), 1903.07028 [math.ST].
- [8528] J. Ahmadi and M. Fashandi, *Characterization of symmetric distributions based on concomitants of ordered variables from FGMs family of bivariate distributions*, Filomat **33** (13), 4239-4250 (2019), doi: doi.org/10.2298/FIL1913239A
- [8529] N. Sebastian, J. Joseph and S. Santhosh, *Topp-Leone generated q-Weibull distribution and its applications*, Statistics and Applications **21** (2), 279-297 (2023).
- [8530] A.M. Almarashi, M.M. Badr, M. Elgarhy, F. Jamal and C. Chesneau, *Statistical inference of the half-logistic inverse Rayleigh distribution*, Entropy **22**, 449 (2020), doi: 10.3390/e22040449
- [8531] M.M.A. El-Raouf and M. AbaOud, *A novel extension of generalized Rayleigh model with engineering applications*, Alexandria Engineering Journal **73**, 269-283 (2023).
- [8532] R.A.R. Bantan, M. Elgarhy, C. Chesneau and F. Jamal, *Estimation of entropy for inverse Lomax distribution under multiple censored data*, Entropy **22**, 601 (2020), doi: 10.3390/e22060601
- [8533] A.A. Ogunde, A.U. Chukwu and I.O. Oseghale, *The Kumaraswamy generalized inverse Lomax distribution and applications to reliability and survival data*, Scientific African **19**, e01483 (2023).
- [8534] S. Pakhare, *Q-deformation in Gaussian map*, International Journal for Research in Applied Science & Engineering Technology **6** Issue VI (2018).
- [8535] A. Goldenshluger? and O. V. Lepski, *Minimax estimation of norms of a probability density: I. Lower bounds*, preprint (2020), 2008.10979 [math.ST].
- [8536] A.S. Martinez, *Fisica Matematica II Aulas 02-07 Modelagem Matematica*, course (2020) [In Portuguese].
- [8537] V. Simic, R. Sousek and S. Jovicic, *Picture fuzzy MCDM approach for risk assessment of railway infrastructure*, Mathematics **8**, 2259 (2020), doi: 10.3390/math8122259
- [8538] B.P. Singh, U.D. Das and S. Singh, *A Compounded probability model for decreasing hazard and its inferential properties*, RTA **16** (2) (62), 230-246 (2021).
- [8539] B.S. Nahla and M. Afif, *The confidence interval of q-Gaussian distributions*, Communications in Statistics - Theory and Methods (2021).
- [8540] E. Ruli, L. Ventura and M. Musio, *Robust confidence distributions from proper scoring rules*, preprint (2021), 2109.01219 [stat.ME].
- [8541] A.M. Almarashi, *Sine power Lindley distribution with applications*, Intelligent Automation and Soft Computing Tech Science Press (2021), doi: 10.32604/iasc.2022.018043
- [8542] S.U. Enogwe and G.C. Ibeh, *Beta-exponentiated Ishita distribution and its applications*, Open Journal of Statistics **11**, 690-712 (2021), doi: 10.4236/ojs.2021.115041
- [8543] S.A. Lone, T.N. Sindhu and F. Jarad, *Additive trinomial Frechet distribution with practical application*, Results in Physics (2021), in press, doi: 10.1016/j.rinp.2021.105087.
- [8544] M. Mohiuddin, S.A. Dar, A.A. Khan, M. Ahajeeth and H. Al Bayatti, *On weighted Nwikepe distribution: Properties and applications*, Inf. Sci. Lett. **11** (1), 85-96 (2022).
- [8545] N. Saud, A. Rafique, M. Ijaz, N. Amjad, M. El-Morshedy and S.H. Shah, *Characterizations and entropy measures of the exponentiated generalized Frechet geometric distribution*, Advances in Mathematical Physics, ID 2717894 (2022), doi: 10.1155/2022/2717894
- [8546] R. Vila, V. Serra, M.N. Cankaya and F. Quintino, *A General class of trimodal distributions: Properties and inference*, preprint (2022), 2204.03602 [stat.ME].

- [8547] F. Vindrola and V. Crupi, *Bayesians too should follow Wason - A comprehensive accuracy-based analysis of the selection task*, preprint (2022).
- [8548] I. Elbatal, N. Alotaibi, E.M. Almetwally, S.A. Alyami and M. Elgarhy, *On odd Perks-G class of distributions: Properties, regression model, discretization, Bayesian and Non-Bayesian estimation, and applications*, *Symmetry* **14**, 883 (2022), doi: 10.3390/sym14050883
- [8549] A.M. Gemeay, N. Alsadat, C. Chesneau and M. Elgarhy, *Power unit inverse Lindley distribution with different measures of uncertainty, estimation and applications*, *AIMS Mathematics* **9** (8), 20976-21024 (2024).
- [8550] M. Elgarhy, M. Kayid, A. Johannssen and M. Elsehetry, *Survival analysis based on an enhanced Rayleigh-inverted Weibull model*, *Heliyon* (2024), in press.
- [8551] P. Zhang, W.D. Li and W.S. Dai, *Renormalization of divergent moment in probability theory*, preprint (2022), 2205.09119 [math.PR].
- [8552] H.K. Miyamoto, *Geometria, estatistica e aplicacoes a comunicacoes e aprendizado*, Master Thesis (University of Campinas, Brazil, 2022).
- [8553] A.K. Gaire, *Skew Lomax distribution, parameter estimation, its properties, and applications*, *JScE* **10**, (2022) (11 pages).
- [8554] A.K. Gaire and Y.B. Gurung, *Skew log-logistic distribution: properties and application*, *Statistics in Transition (new series)*, **25** (1), 43-62 (2024).
- [8555] R.A.H. Mohamed, M. Elgarhy, M.H. Alabdulhadi, E.M. Almetwally and T. Radwan, *Statistical inference of truncated Cauchy power-inverted Topp-Leone distribution under hybrid censored scheme with applications*, *Axioms* **12**, 148 (2023).
- [8556] A. Almutairi, M.E. Ghitany, A. Allothman and R.C. Gupta, *Double Inverse-Gaussian Distributions and Associated Inference*, *Journal of the Indian Society for Probability and Statistics* (2023), doi: 10.1007/s41096-023-00150-z
- [8557] A. Al Mutairi, *A new alpha logarithmic-generated class to model precipitation data with theory and inference*, *Heliyon* (2023), in press.
- [8558] S. Chakraborty, *On cumulative information measures : Properties, inferences and applications*, Doctor Thesis (Indian Statistical Institute, 2023).
- [8559] A.G. Al-Kilany, A.S. Hassan, L.S. Diab and E.S. El-Atfy, *A novel asymmetric compound class of distributions with estimation and application*, *RT&A* **19**(3) (79) (2024).
- [8560] V. Singh, S.K. Sharma, O. Parkash, R.Sharma and S. Bhardwaj, *A newfangled isolated entropic measure in probability spaces and its applications to queueing theory*, *AIMS Mathematics* **9** (10), 27293-27307 (2024).
- [8561] H.M. Alkhezi, M.E. Ghitany, M.F. Alfahad and J. Mazucheli, *A new bimodal double distribution on the real line and its application*, *International Journal of Applied Mathematics* **37** (6), 627-648 (2024).
- [8562] L. Alzoubi, *Length-biased Loai distribution: Statistical properties and application*, *Electronic Journal of Applied Statistical Analysis* **17** (2), 278-301 (2024).
- [8563] K. Kim and B. Sim, *PLADIS: Pushing the limits of attention in diffusion models at inference time by leveraging sparsity*, preprint (2025), 2503.07677 [cs.LG].
- [8564] P. Kumari and N. Kumari, *A new discrete entropic model and its application to contingency table inference*, *RT&A* **20** (2) (84) (2025).
- [8565] J. Latha, M. Vijayakumar and D. Shibu, *A new length biased exponential-exponential distribution and its applications to cancer data*, *RT&A* **20** (2) (84) (2025).
- [8566] E.P. Borges, *On a q-generalization of circular and hyperbolic functions*, *J. Phys. A* **31**, 5281 (1998).
- [8567] A.C. Sparavigna, *Graphs of q-exponentials and q-trigonometric functions*, HAL hal-01377262 (2016), doi: hal.archives-ouvertes.fr/hal-01377262
- [8568] S. Marinkovic, M. Stankovic and E. Mulalic, *The deformed trigonometric functions of two variables*, *Mathematica Balkanica New Series* **26**, (1-2) (2012).
- [8569] W.S. Chung and H. Hassanabadi, *The q-boson algebra and $su_q(2)$ algebra based on q-deformed binary operations*, *Internat. J. Theoretical Physics* (2021), doi:10.1007/s10773-021-04828-7
- [8570] N. Heidari, H. Hassanabadi and W.S. Chung, *Scattering state study of fermions due to q-deformed Dirac delta potential*, *Europhys. Lett.* (2022), in press, doi: 10.1209/0295-5075/ac6066
- [8571] R.S. Meghwal and V.K. Pancholi, *q-Generalization and merging of hyperbolic functions with circular functions*, *IOSR Journal of Mathematics* **17** (1), Ser. I, 27-31 (2021).
- [8572] M. Chikaraishi and S. Nakayama, *Discrete choice models with q-product random utilities*, *Transportation Research B* **93**, 576-595 (2016).
- [8573] S.M.D. Queiros, *On generalisations of the log-Normal distribution by means of a new product definition in the Kaypten process*, *Physica A* **391**, 3594-3606 (2012).

- [8574] S.M.D. Queiros, *Generalised cascades*, Braz. J. Phys. **39**, 448-452 (2009).
- [8575] I. Bataineh, A.D. Al-Nasser and M. Al-Talib, *Exponentiated q -exponential distribution*, Proceedings of 6th International Arab Conference on Mathematics and Computations (IACMC2019), 199-204 (24-26 April 2019, Zarqa University, Jordan).
- [8576] S. Aldamen, A.D. Al-Nasser and M. Al-Talib, *Information-theoretic estimation approach: Tutorial and illustration*, Proceedings of 6th International Arab Conference on Mathematics and Computations (IACMC2019), 205-209 (24-26 April 2019, Zarqa University, Jordan).
- [8577] V. Schwammle and C. Tsallis, *Two-parameter generalization of the logarithm and exponential functions and Boltzmann-Gibbs-Shannon entropy*, J. Math. Phys. **48**, 113301 (2007) (7 pages).
- [8578] R. Chandrashekar and J. Segar, *Adiabatic thermostatics of the two parameter entropy and the role of Lambert's W -function in its applications*, Physica A **392**, 4299-4315 (2013).
- [8579] C.B. Corcino and R.B. Corcino, *Three-parameter logarithm and entropy*, Journal of Function Spaces ID 9791789 (2020) (10 pages), doi: 10.1155/2020/9791789
- [8580] C.B. Corcino and R.B. Corcino, *Logarithmic generalization of the Lambert W function and its applications to adiabatic thermostatics of the three-parameter entropy*, Advances in Mathematical Physics, 6695559 (2021) (16 pages), doi: 10.1155/2021/6695559
- [8581] C.B. Corcino and R.B. Corcino, *Translated logarithmic Lambert function and its applications to three-parameter entropy*, European Journal of Pure and Applied Mathematics **14** (2), 506-520 (2021).
- [8582] C.B. Corcino, R.B. Corcino and J.P. Picardal, *Generalized core functions of maximum entropy theory of ecology*, European Journal of Pure and Applied Mathematics **17** (3), 1674-1684 (2024).
- [8583] R. Chandrashekar, C. Ravikumar and J. Segar, *A fractional entropy in fractal phase space: properties and characterization*, preprint (2013), 1301.2779 [cond-mat.stat-mech].
- [8584] M.S. Stankovic, S.D. Marinkovic and P.M. Rajkovic, *The deformed exponential functions of two variables in the context of various statistical mechanics*, Appl. Math. and Computation **218**, 2439-2448 (2011).
- [8585] P.M. Rajkovic, M.S. Stankovic and S.D. Marinkovic, *The Laplace transform induced by the deformed exponential function of two variables*, Fractional Calculus and Applied Analysis **21** (3) (2018) (11 pages).
- [8586] S. Asgarani and B. Mirza, *Probability distribution of (Schwammle and Tsallis) two-parameter entropies and the Lambert W -function*, Physica A **387**, 6277-6283 (2008).
- [8587] B. Mirza, Z. Mirzaiyan and H. Nadi, *Maximum rate of entropy emission*, Annals of Physics **415**, 168117 (2020), doi: 10.1016/j.aop.2020.168117
- [8588] R.V. Ramos and G.B. da Silva, *The Lambert-Tsallis W_q function*, Physica A **525**, 164-170 (2019).
- [8589] J.L.M. da Silva, F.V. Mendes and R.V. Ramos, *Radial basis function network using Lambert-Tsallis W_q function*, Physica A **534**, 122168 (2019).
- [8590] I.K.A. da Silva, F.A. Mendonca and R.V. Ramos, *Dynamic multi-photon number resolving detector with fiber ring and single-photon detector*, Optical and Quantum Electronics **55**, 1063 (2023).
- [8591] J.S. de Andrade, *Aplicacoes da funcao de Lambert-Tsallis e da disentropia em distribuicao quantica de chaves*, Doctor Thesis (Universidade Federal do Ceara, Centro de Tecnologia, Departamento de Engenharia de Teleinformatica, 2023).
- [8592] J.L.E. da Silva, G.B. da Silva and R.V. Ramos, *Applications of Lambert-Tsallis and Lambert-Kaniadakis functions in differential and difference equations with deformed exponential decay*, preprint (2020), arxiv 2001.11955.
- [8593] J.R. da Silva and R.V. Ramos, *Applications of the Lambert-Tsallis $W - q$ function in X-ray free electron laser*, IEEE Transactions on Plasma Science **50** (10) (2022).
- [8594] J.S. de Andrade, K.Z. Nobrega and R.V. Ramos, *Analytical solution of the current-voltage characteristics of circuits with power law dependence of the current on the applied voltage using the Lambert-Tsallis W_q function*, IEEE Transactions on Circuits and Systems-II: Express Briefs **69** (3), (2022).
- [8595] R.L.C. Damasceno, J.S. de Andrade and R.V. Ramos, *Applications of the Lambert-Tsallis W function in QKD*, Journal of the Optical Society of America B **40** (9), 2280-2286 (2023).
- [8596] I.R. Sousa, K.Z. Nobrega and G.A. Barreto, *An analytical approach to the stability conditions of a new class of fractional-order control systems by the Lambert-Tsallis function*, IEEE Access **12**, 175006-175018 (2024).
- [8597] R. Konlechner, A. Allagui, V.N. Antonov and D. Yudin, *A superstatistics approach to the modelling of memristor current-voltage responses*, Physica A (2023), in press.
- [8598] J.L.E. da Silva, G.B. da Silva and R.V. Ramos, *The Lambert-Kaniadakis W_κ function*, Phys. Lett. A (2019), in press.
- [8599] J.L.E. da Silva, *Stieltjes integral using the Lambert-Tsallis function*, preprint (2020).

- [8600] S. Asgarani, *A set of new three-parameter entropies in terms of generalized incomplete Gamma function*, Physica A **392** (9), 1972-1976 (2013).
- [8601] S. Asgarani and B. Mirza, *Two-parameter entropies, $S_{k,r}$, and their dualities*, Physica A **417**, 185-192 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2014.09.045>
- [8602] A. El Kaabouchi, L. Nivanen, Q.A. Wang, J.P. Badiali, and A. Le Mehaute, *A mathematical structure for the generalization of the conventional algebra*, Central Eur. J. Phys. **7**, 549-554 (2009).
- [8603] P.G.S. Cardoso, E.P. Borges, T.C.P. Lobao and S.T.R. Pinho, *Non-distributive algebraic structures derived from nonextensive statistical mechanics*, J. Math. Phys. **49**, 093509 (2008) (10 pages).
- [8604] T.C.T. Lobao, P.G.S. Cardoso, S.T.R. Pinho and E.P. Borges, *Some properties of deformed q -numbers*, Braz. J. Phys. **39**, 402-407 (2009).
- [8605] E.P. Borges, *Some deformations in mathematical structures derived from nonextensive statistical mechanics*, communicated at the *7th International Conference in Nonextensive Statistical Mechanics: Foundations and Applications* (27-31 October 2008, Iguacu-Brazil).
- [8606] E.P. Borges, *A possible deformed algebra and calculus inspired in nonextensive thermostatics*, Physica A **340**, 95-101 (2004); E.P. Borges, *Corrigenda to "A possible deformed algebra and calculus inspired in nonextensive thermostatics" [Physica A 340 (2004) 95]*, Physica A **581**, 126206 (2021).
- [8607] M. Czachor, *Unifying aspects of generalized calculus*, Entropy **22**, 1180 (2020), doi: 10.3390/e22101180
- [8608] J. Weberszpil, M.J. Lazo and J.A. , *On a connection between a class of q -deformed algebras and the Hausdorff derivative in a medium with fractal metric*, Physica A **436**, 399-404 (2015).
- [8609] Y. Zheng, G. Li, Y. Li, W. Zhang, X. Pan and Y. Lin, *An optimization approach with weighted SCiForest and weighted Hausdorff distance for noise data and redundant data*, Applied Intelligence (2021), doi: 10.1007/s10489-021-02685-9
- [8610] J. Weberszpil and J.A. Helayel-Neto, *Variational approach and deformed derivatives*, Physica A **450**, 217-227 (2016).
- [8611] J. Weberszpil, C.M. Dias, R.M. Gregorio and E.F. Arruda, *O modelo presa-predador por derivadas deformadas*, Proceeding Series of the Brazilian Society of Applied and Computational Mathematics **5** (1) (2017).
- [8612] J. Weberszpil and J.A. Helayel-Neto, *Axiomatic local metric derivatives for low-level fractionality with Mittag-Leffler eigenfunctions*, preprint (2016), 1605.08097 [math-ph].
- [8613] J. Weberszpil and J.A. Helayel-Neto, *Structural scale q -derivative and the LLG equation in a scenario with fractionality*, EPL **117**, 50006 (2017), doi: 10.1209/0295-5075/117/50006
- [8614] J. Weberszpil and W. Chen, *Generalized Maxwell relations in thermodynamics with metric derivatives*, Entropy **19**, 407 (2017) (12 pages), doi: 10.3390/e19080407
- [8615] Y. Zheng, X. Liu, X. Zhang and G. Qi, *Parallel Maxwellian relations and their correlations in nonextensive thermodynamics*, Physica A **527**, 121304 (2019).
- [8616] W. Rosa and J. Weberszpil, *Dual conformable derivative: definition, simple properties and perspectives for applications*, Chaos, Solitons and Fractals **117**, 137-141 (2018).
- [8617] J. Weberszpil, C.F.L. Godinho and Y. Liang, *Dual conformable derivative: Variational approach and nonlinear equations*, EPL **128**, 31001 (2019), doi: 10.1209/0295-5075/128/31001
- [8618] A. Balankin, J. Bory-Reyes and M. Shapiro, *Towards a physics on fractals: Differential vector calculus in three-dimensional continuum with fractal metric*, Physica A (2016) (15 pages), in press, doi: <http://dx.doi.org/10.1016/j.physa.2015.10.035>
- [8619] F. Pennini, A. Plastino and G.L. Ferri, *Fisher information, Borges operators, and q -calculus*, Physica A **387**, 5778-5785 (2008).
- [8620] L.S. Souza, E.P. Borges and F.L.P. Pessoa, *q -Quadratic mixing rule for cubic equations of state*, Chem. Engineering Science **132**, 150-158 (2015).
- [8621] R.C. Venkatesan and A. Plastino, *Generalized statistics variational perturbation approximation using q -deformed calculus*, Physica A **389**, 1159-1172 (2010) [Corrigendum: **389**, 2155-2156 (2010)].
- [8622] A.S. Araujo, H.C.M. Furtado and H.F. de Campos Velho, *q -Calculus formalism for non-extensive particle filter*, in *Integral Methods in Science and Engineering*, 25-35 (Springer, 2019).
- [8623] H.F. de Campos Velho and H.C. Morais Furtado, *Adaptive particle filter for stable distribution*, *CONSTANDA CHAPTER6 $_{\delta}$* (2011).
- [8624] P.G.S. Cardoso, *Uma algebra bi-parametrizada advinda da mecanica estatistica nao-extensiva*, communicated at the XXV EFNNE, Encontro de Fisicos do Norte e Nordeste (Natal, 15-20 October 2007).
- [8625] L. Nivanen, A. Le Mehaute and Q.A. Wang, *Generalized algebra within a nonextensive statistics*, Rep. Math. Phys. **52**, 437 (2003).

- [8626] L. Nivanen, Q.A. Wang, A. Le Mehaute, A. El Kaabouchi, P. Basillais, J.D. Donati, A. Lacroix, J. Paulet, S. Perriau, S.S. Chuisse, E.S. Kamdem and A. Thery, *Hierarchical structure of operations defined in nonextensive algebra*, Rep. Math. Phys. **63**, 279-288 (2009).
- [8627] N. Kalogeropoulos, *Algebra and calculus for Tsallis thermostatics*, Physica A **356**, 408 (2005).
- [8628] N. Kalogeropoulos, *Distributivity and deformation of the reals from Tsallis entropy*, Physica A **391**, 1120-1127 (2012).
- [8629] N. Kalogeropoulos, *Weak chaos from Tsallis entropy*, preprint (2011), 1104.4869 [math-ph].
- [8630] N. Kalogeropoulos, *Tsallis entropy induced metrics and $CAT(k)$ spaces*, Physica A **391**, 3435-3445 (2012).
- [8631] N. Kalogeropoulos, *Vanishing largest Lyapunov exponent and Tsallis entropy*, preprint (2012), 1203.2707 [cond-mat.stat-mech].
- [8632] N. Kalogeropoulos, *Tsallis entropy composition and the Heisenberg group*, Internat. J. Geometric Methods Mod. Phys. **10** (7), 1350032 (2013) (24 pages), doi: 10.1142/S0219887813500321
- [8633] N. Kalogeropoulos, *Convexity and the Euclidean metric of space-time*, Universe **3**, 8 (2017) (26 pages), doi:10.3390/universe3010008
- [8634] A.J. Creaco and N. Kalogeropoulos, *Nilpotence in physics: the case of Tsallis entropy*, J. Phys. Conference Series **410**, 012148 (2013) (4 pages).
- [8635] A.J. Creaco and N. Kalogeropoulos, *Power-law entropies for continuous systems and generalized operations*, Modern Phys. Lett. B, 1850338 (2018). 1807.01746 [cond-mat.stat-mech].
- [8636] N. Kalogeropoulos, *Generalized diffusion and asymptotics induced by Tsallis entropy*, preprint (2012), 1211.3516 [cond-mat.stat-mech].
- [8637] N. Kalogeropoulos, *Tsallis entropy and hyperbolicity*, AIP Conference Proceedings **1558** (1), 1784-1786 (2013) (3pages), doi: 10.1063/1.4825870.
- [8638] N. Kalogeropoulos, *Long-range interactions, doubling measures and Tsallis entropy*, Eur. Phys. J. B **87**, 56 (2014) (11 pages), doi: 10.1140/epjb/e2014-41095-4
- [8639] N. Kalogeropoulos, *Almost additive entropy*, Internat. J. Geometric Methods Modern Physics **11** (5), 1450040 (2014) (14 pages), doi: 10.1142/S0219887814500406
- [8640] N. Kalogeropoulos, *Groups, non-additive entropy and phase transitions*, Internat. J. Mod. Phys. B **28** (24), 1450162 (2014) (20 pages), doi: 10.1142/S0217979214501628
- [8641] N. Kalogeropoulos, *Ricci curvature, isoperimetry and a non-additive entropy*, Entropy **17**, 1278-1308 (2015), doi:10.3390/e17031278
- [8642] N. Kalogeropoulos, *Entropies from coarse-graining: Convex polytopes vs. ellipsoids*, Entropy **17**, 6329-6378 (2015), doi:10.3390/e17096329
- [8643] N. Kalogeropoulos, *Moduli of curve families and (quasi-) conformality of power-law entropies*, Internat. J. Geometric Methods Modern Phys. **13** (5), 1650063 (2016) (30 pages).
- [8644] N. Kalogeropoulos, *Convexity and the "Pythagorean" metric of space(-time)*, preprint (2016), 1606.05528 [physics.gen-ph].
- [8645] N. Kalogeropoulos, *An entropy for groups of intermediate growth*, Advances in Mathematical Physics 2863614 (2017) (8 pages), doi: 10.1155/2017/2863614
- [8646] N. Kalogeropoulos, *The τ_q -Fourier transform: covariance and uniqueness*, Modern Phys. Lett. B **32** (14) (2018), doi: 10.1142/S021798491850149X
- [8647] N. Kalogeropoulos, *Time irreversibility from symplectic non-squeezing*, preprint (2017), 1710.04550 [cond-mat.stat-mech].
- [8648] N. Kalogeropoulos, *Toward a relative q -entropy*, Physica A (2020), in press, doi: doi.org/10.1016/j.physa.2019.123270,1905.01672 [cond-mat.stat-mech].
- [8649] N. Kalogeropoulos, *Non-linear Fokker-Planck equations from conformal metrics and scalar curvature*, preprint (2019), 1911.06626 [cond-mat.stat-mech].
- [8650] N. Kalogeropoulos, *Riemannian submersions for q -entropies*, Internat. J. of Geometric Methods in Modern Physics, 2150229 (2021).
- [8651] N. Kalogeropoulos, *Composition of q -entropies and hyperbolic orthogonality*, preprint (2024), 2407.03933 [cond-mat.stat-mech].
- [8652] T. Yamano, *Some properties of q -logarithm and q -exponential functions in Tsallis statistics*, Physica A **305**, 486 (2002).
- [8653] A.M. Mathai, *A pathway to matrix-variate gamma and normal densities*, Linear Algebra and its Applications **396**, 317-328 (2005).
- [8654] A.M. Mathai and H.J. Haubold, *Pathway model, superstatistics, Tsallis statistics, and a generalized measure of entropy*, Physica A **375**, 110-122 (2007).

- [8655] A.M. Mathai and H.J. Haubold, *On generalized entropy measures and pathways*, Physica A **385**, 493-500 (2007).
- [8656] A.M. Mathai and H.J. Haubold, *Pathway parameter and thermonuclear functions*, Physica A **387**, 2462-2470 (2008).
- [8657] A.M. Mathai and H.J. Haubold, *On generalized distributions and pathways*, Phys. Lett. A **372**, 2109-2113 (2008).
- [8658] N. Sebastian, *A generalized gamma model associated with a Bessel function*, Integral Transforms and Special Functions **22** (9), 631-645 (2011).
- [8659] N. Sebastian, D.P. Joseph and S.S. Nair, *An overview of the pathway idea in statistical and physical sciences*, Axioms **4**, 530-553 (2015), doi:10.3390/axioms4040530
- [8660] N. Sebastian, *Generalized pathway entropy and its applications in diffusion entropy analysis and fractional calculus*, Comm. in Applied and Industrial Mathematics **6** (2) (2015), doi: 10.1685/journal.caim.537 2015
- [8661] N. Sebastian, S.S. Nair and D.P. Joseph, *An overview of the pathway idea and its applications in statistical and physical sciences*, Axioms **4**, 530-553 (2015), doi: 10.3390/axioms4040530
- [8662] A.M. Mathai, H.J. Haubold and C. Tsallis, *Pathway model and nonextensive statistical mechanics*, Sun and Geosphere **10** (2), 157-162 (2015), ISSN 1819-0839
- [8663] A.M. Mathai, *Mellin convolutions, statistical distributions and fractional calculus*, Fract. Calc. Appl. Anal. **21** (2), 376-398 (2018), doi: 10.1515/fca-2018-0022
- [8664] A.M. Mathai and H.J. Haubold, *Matrix-variate statistical distributions and fractional calculus*, Fractional Calculus and Applied Analysis **14** (1), 138-155 (2011).
- [8665] A.M. Mathai and H.J. Haubold, *A Pathway from Bayesian statistical analysis to superstatistics*, Applied Mathematics and Computation **218**, 799-804 (2011).
- [8666] H.J. Haubold and D. Kumar, *Fusion yield: Guderley model and Tsallis statistics*, preprint (2010), 1011.5660 [physics.plasm-ph].
- [8667] D. Kumar and H.J. Haubold, *Analytic representations of standard and extended non-resonant thermonuclear functions with depleted tail through the pathway model*, preprint (2011), 1109.5610 [astro-ph.SR].
- [8668] D. Kumar and H.J. Haubold, *Analytic representation of Maxwell-Boltzmann and Tsallis thermonuclear functions with depleted tail*, Axioms **10**, 115 (2021), doi: 10.3390/axioms10020115
- [8669] P.S. Sehiq Uduman and S. Singhal, *On a class of extended pathway integral transform*, Global Journal of Pure and Applied Mathematics (GJPAM) ISSN 0973-1768 **12** (2), 99-102 (2016).
- [8670] D. Kumar, *Solution of fractional kinetic equation by a class of integral transform of pathway type*, J. Math. Phys. **54**, 043509 (2013) (13 pages).
- [8671] G. Sumit, *Review of the exponential-integral and associated special function*, International Journal of Engineering, Science and Mathematics **12** (1), 100 (2023).
- [8672] S. Kumar and D. Kumar, *Exponential integration and examination of related special functions for general q-exponentials and missing gamma functions*, International Journal of Engineering, Science and Mathematics **12** (4), 5500 (2023).
- [8673] D.O. Cajueiro, *A note on the relevance of the q-exponential function in the context of intertemporal choices*, Physica A **364**, 385- 388 (2006).
- [8674] S. Cruz Rambaud and M.J. Munoz Torrecillas, *A generalization of the q-exponential discounting function*, Physica A **392**, 3045-3050 (2013).
- [8675] R.S. Mendes and I.T. Pedron, *Nonlinear differential equations based on nonextensive Tsallis entropy and physical applications*, preprint (1999). [cond-mat/9904023].
- [8676] E.K. Lenzi, E.P. Borges and R.S. Mendes, *A q-generalization of Laplace transforms*, J. Phys. A **32**, 8551 (1999). cus.cls. Date: 24 April 2014
- [8677] R.A. Treumann and W. Baumjohann, *Fractional Laplace transforms - A perspective*, Annales Geophysicae (2014), in press, 1404.5897 [physics.data-an].
- [8678] R.A. Treumann and W. Baumjohann, *Olbertian partition function in scalar field theory*, Front. Phys. **8**, 610625 (2020), doi: 10.3389/fphy.2020.610625
- [8679] R.A. Treuman and W. Baumjohann, *Olbert-Fermi and -Bose distributions*, 2103.08905 [cond-mat.stat-mech].
- [8680] R.A. Treumann and W. Baumjohann, *Olbert's kappa Fermi and Bose distributions*, Frontiers in Physics **9**, 672836 (2021).
- [8681] W.S. Chung, *On the q-Laplace transform in the non-extensive statistical physics*, preprint (2013), 1301.5480 [math-ph].
- [8682] W.S. Chung, *Deformation of the classical mechanics by using the q-derivative emerging in the non-extensive statistical mechanics*, Int. J. Theor. Phys. **52**, 3762-3770 (2013), DOI 10.1007/s10773-013-1681-5

- [8683] A. Plastino and M.C. Rocca, *The Tsallis-Laplace transform*, Physica A **392**, 5581-5591 (2013).
- [8684] A. Plastino and M.C. Rocca, *Possible divergences in Tsallis' thermostatics*, EPL **104**, 60003 (2014).
- [8685] M.C. Rocca, A. Plastino and G.L. Ferri, *Dimensional regularization in non-extensive statistical mechanics*, preprint (2014), 1404.0418 [cond-mat.stat-mech].
- [8686] M. Hameeda, B. Pourhassan, M.C. Rocca and A.B. Brzo, *Gravitational partition function modified by superlight braneworld perturbative modes*, Phys. Rev. D **103**, 106019 (2021).
- [8687] M. Hameeda, B. Pourhassan, M. C. Rocca and A.B. Brzo, *Two approaches that prove divergence free nature of non-local gravity*, Eur. Phys. J. C **81**, 146 (2021), doi: 10.1140/epjc/s10052-021-08940-0
- [8688] M. Hameeda, B. Pourhassan, M.C.Rocca and M. Faizal, *Finite Tsallis gravitational partition function for a system of galaxies*, General Relativity and Gravitation **53**, 41 (2021), doi: 10.1007/s10714-021-02813-3
- [8689] M. Hameeda, Q. Gani, B. Pourhassan and M.C.Rocca, *Boltzmann and Tsallis statistical approaches to study quantum corrections at large distances and clustering of galaxies*, preprint (2020), 2012.05714 [gr-qc] 9 Dec 2020
- [8690] M. Rocca, A. Plastino and G. Ferri, *Physical peculiarities of divergences emerging in q-deformed statistics*, Eur. Phys. J. B **89**, 150 (2016) (6 pages), doi: 10.1140/epjb/e2016-70185-4
- [8691] A. Plastino and M.C.Rocca, *Peculiarities of some classical variational treatments using the maximum entropy principle*, Revista Mexicana de Fisica **64**, 603-607 (2018).
- [8692] I. Sason, *On data-processing and majorization inequalities for f-divergences*, International Zurich Seminar on Information and Communication (IZS), 101-105 (February 26-28, 2020).
- [8693] J.P. Boon and J.F. Lutsko, *Comment on "Possible divergences in Tsallis' thermostatics"*, EPL **107**, 10003 (2014) (2 pages), doi: 10.1209/0295-5075/107/10003
- [8694] A. Plastino and M.C. Rocca, *Reply to Comment on "Possible divergences in Tsallis' thermostatics" by Plastino and Rocca*, EPL (2014), in press.
- [8695] J.F. Lutsko and J.P. Boon, *New comments on "Possible divergences in Tsallis' thermostatics"*, preprint (2014), 1402.0088 [cond-mat.stat-mech].
- [8696] I.T. Pedron, *Integrais, equacoes diferenciais e entropia de Tsallis*, Master Thesis (Universidade Estadual de Maringa - Brazil, 1999).
- [8697] D. Prato and C. Tsallis, *Functions of linear operators: Parameter differentiation*, J. Math. Phys. **41**, 3278 (2000).
- [8698] S. de Picoli Junior, *Distribuicao q-exponencial de Tsallis e distribuicao de S.Loudon@elsevier.com: Uma analise empirica*, Master Thesis (Universidade Estadual de Maringa, 2001).
- [8699] S. Picoli Jr., R.S. Mendes and L.C. Malacarne, *q-exponential, Weibull, and q-Weibull distributions: An empirical analysis*, Physica A **324**, 678 (2003).
- [8700] S. Picoli Jr., R.S. Mendes and L.C. Malacarne, *Statistical properties of the circulation of magazines and newspapers*, Europhys. Lett. **72**, 865-871 (2005).
- [8701] S. Picoli Jr. and R.S. Mendes, *Scaling behavior in the impact factor of scientific journals*, preprint (2005).
- [8702] S. Picoli, R.S. Mendes, L.C. Malacarne and E.K. Lenzi, *Scaling behavior in the dynamics of citations to scientific journals*, Europhys. Lett. **75**, 673-679 (2006).
- [8703] U.M.S. Costa, V.N. Freire, L.C. Malacarne, R.S. Mendes, S. Picoli Jr., E.A. de Vasconcelos and E.F. da Silva Jr., *An improved description of the dielectric breakdown in oxides based on a generalized Weibull distribution*, Physica A **361**, 209-215 (2006).
- [8704] S. Picoli Jr., R.S. Mendes, L.C. Malacarne and R.P.B. Santos, *q-distributions in complex systems: a brief review*, Braz. J. Phys. **39**, 468-474 (2009).
- [8705] J.C. Baez, T. Fritz and T. Leinster, *A characterization of entropy in terms of information loss*, Entropy **13**, 1945-1957 (2011).
- [8706] I. Klein, *Some technical remarks on negations of discrete probability distributions and their information loss*, Mathematics **10**, 3893 (2022).
- [8707] T. Leinster and C.A. Cobbold, *Measuring diversity: the importance of species similarity*, Ecology **93** (3), 477-489 (2012).
- [8708] T. Leinster and M.W. Meckes, *Maximizing diversity in biology and beyond*, Entropy **18**, 88 (2016) (23 pages), doi:10.3390/e18030088
- [8709] T. Leinster, *A short characterization of relative entropy*, J. Math. Phys. **60**, 023302 (2019), doi: 10.1063/1.5026999
- [8710] T. Leinster, *Entropy and diversity - The axiomatic approach*, preprint (2020), 2012.02113 [q-bio.PE].
- [8711] C.H. Chiu, L. Jost and A. Chao, *Phylogenetic beta diversity, similarity, and differentiation measures based on Hill numbers*, preprint (2013), Ecological Society of America.

- [8712] S. Milani, M. Fontana, P. Bestagini and S. Tubaro, *Phylogenetic analysis of near-duplicate images using processing age metrics*, IEEE International Conference ICASSP, 2054-2058 (2016).
- [8713] A. Chao and L. Jost, *Estimating diversity and entropy profiles via discovery rates of new species*, Methods in Ecology and Evolution **6** (8), 873-882 (2015), doi: 10.1111/2041-210X.12349
- [8714] A. Chao, L. Jost, T.C. Hsieh, K.H. Ma, W.B. Sherwin and L.A. Rollins, *Expected Shannon entropy and Shannon differentiation between subpopulations for neutral genes under the finite island model*, Plos One (June 11, 2015) (24 pages), doi: 10.1371/journal.pone.0125471
- [8715] E. Marcon and B. Herault, *Decomposing phylodiversity*, Methods in Ecology and Evolution **6** (3), 333-339 (2015).
- [8716] E. Marcon, I. Scotti, B. Herault, V. Rossi and G. Lang, *Generalization of the Partitioning of Shannon Diversity*, PLoS ONE **9** (3), e90289 (2014), doi:10.1371/journal.pone.0090289
- [8717] E. Marcon and B. Herault, *Entropy partitioning to measure diversity - Measurement and partitioning of diversity, based on Tsallis entropy*, Package Version 1.1.3 (2014-03-20).
- [8718] E. Marcon, *Practical estimation of diversity from abundance data*, (2015), HAL Id: hal-01212435 hal-agroparistech.archives-ouvertes.fr/hal-01212435
- [8719] E. Marcon and B. Herault, *entropart: An R package to measure and partition diversity*, J. Statistical Software **67** (8), (2015) (26 pages), doi: 10.18637/jss.v067.i08
- [8720] K. Gajowniczek and T. Zabkowski, *ImbTreeEntropy: An R package for building entropy-based classification trees on imbalanced datasets*, SoftwareX **16**, 100841 (2021).
- [8721] K. Gajowniczek and M. Dudzinski, *Influence of explanatory variable distributions on the behavior of the impurity measures used in classification tree learning*, Entropy **26**, 1020 (2024).
- [8722] D. Zhu, J. Li, F. Wang, X. Gong, W. Cong, P. Wang and Y. Liu, *A method for extracting contours of building facade hollowing defects using polarization thermal images based on improved canny algorithm*, Buildings **13**, 2563 (2023).
- [8723] E. Marcon, *Tsallis (HCDT) Entropy of a community*, (2021).
- [8724] R. Gorelick, *Measures of diversity should include both matrix and vector inputs*, Ecological Economics **86**, 211-212 (2013).
- [8725] H. Suyari and M. Tsukada, *Law of error in Tsallis statistics*, IEEE Transactions on Information Theory **51**, 753 (2005).
- [8726] A.M. Scarfone, H. Suyari and T. Wada, *Gauss' law of error revisited in the framework of Sharma-Taneja-Mittal information measure*, Central Eur. J. Phys. **7**, 414-420 (2009).
- [8727] Y. Hasegawa and M. Arita, *Properties of the maximum q -likelihood estimator for independent random variables*, Physica A **388**, 3399-3412 (2009).
- [8728] Y. Hasegawa and M. Arita, *Maximum q -likelihood estimator inspired by the nonextensive statistics*, communicated at the Research Institute of Mathematical Science Workshop on Mathematical Aspects of Generalized Entropies and their Applications (7-9 July 2009, Kyoto).
- [8729] V. Crupi, *Generalized confirmation and relevance measures*, EPSA15 Selected Papers, 285-295 (2018).
- [8730] M. Giuzio, D. Ferrari and S. Paterlini, *Sparse and robust normal and t -portfolios by penalized L_q -likelihood minimization*, Eur. J. Operational Research **250**, 251-261 (2016), doi: 10.1016/j.ejor.2015.08.056
- [8731] N. Xing, *Maximum L_q -likelihood estimation for Gamma distributions*, Master Thesis (University of Calgary, 2015).
- [8732] J. Wu, N. Xing and S. Liu, *Maximum L_q -likelihood estimation for Gamma distributions*, J. Advanced Statistics **2** (1), 54-70 (2017), doi: 10.22606/jas.2017.21007
- [8733] Karmeshu and S. Sharma, *Queue length distribution of network packet traffic: Tsallis entropy maximization with fractional moments*, IEEE Communications Letters **10**, 34-36 (2006).
- [8734] D.D. Kouvatsos and I.A. Mageed, *Formalismes de maximum d'entropie non extensive et inference inductive d'une file d'attente $M/G/1$ stable a queues lourdes*, in *Theorie des files d'attente 2: Theorie et pratique*, V. Anisimov and N. Limnios, eds. (2020).
- [8735] A. Tamazian, O. Markelov and M. Bogachev, *Traffic analysis on the WIDE backbone link: From transport level to end user activity*, IEEE 356-359 (2016), 978-1-5090-0445-4/16/
- [8736] O. Markelov, V.N. Duc and M. Bogachev, *Statistical modeling of the Internet traffic dynamics: To which extent do we need long-term correlations?*, Physica A **485**, 48-60 (2017), doi: <http://dx.doi.org/10.1016/j.physa.2017.05.023>
- [8737] E.L.C. Macedo, *Uma nova abordagem de dois niveis para obtencao de metricas de confianca e avaliacao da seguranca na comunicacao entre dispositivos da internet das coisas*, Doctor Thesis (2022, Engenharia de Sistemas e Computacao, COPPE, Universidade Federal do Rio de Janeiro).

- [8738] A. Tamazian, V.D. Nguyen, O.A. Markelov and M.I. Bogachev, *Universal model for collective access patterns in the Internet traffic dynamics: A superstatistical approach*, EPL **115**, 10008 (2016) (7 pages).
- [8739] M. Xu, P. Shang and J. Xia, *Traffic signals analysis using qSDiff and qHDiff with surrogate data*, Commun. Nonlinear Sci. Numer. Simulat. **28**, 98-108 (2015).
- [8740] D. Shang, M. Xu and P. Shang, *Generalized sample entropy analysis for traffic signals based on similarity measure*, Physica A **474**, 1-7 (2017).
- [8741] D. Shang and P. Shang, *Analysis of time series in the cumulative residual entropy plane based on oscillation roughness exponent*, Nonlinear Dyn. (2020), doi: doi.org/10.1007/s11071-020-05646-y(0123456789
- [8742] X. Mao, P. Shang, J. Wang and Y. Yin, *Fractional cumulative residual Kullback-Leibler information based on Tsallis entropy*, Chaos, Solitons and Fractals **139**, 110292 (2020).
- [8743] B. Tellenbach, M. Burkhart, D. Schatzmann, D. Gugelmann and D. Sornette, *Accurate network anomaly classification with generalized entropy metrics*, Computer Networks **55**, 3485-3502 (2011).
- [8744] F. Grabowski, A. Paszkiewicz and M. Bolanowski, *Computer networks as complex systems in nonextensive approach*, J. Appl. Comp. Science **21** (2), 31-44 (2013).
- [8745] B. Tellenbach, M. Burkhart, D. Sornette and T. Maillart, *Beyond Shannon: Characterizing internet traffic with generalized entropy metrics*, PAM 2009, LNCS 5448, eds. S.B. Moon et al, 239-248 (Springer, Berlin, 2009).
- [8746] X. Ma and Y. Chen, *DDoS detection method based on chaos analysis of network traffic entropy*, IEEE Communications Letters **18** (1), 114-117 (2014) (4 pages).
- [8747] A.M.Y. Koay, A. Chen, I. Welch and W.K.G Seah, *A new multi classifier system using entropy-based features in DDoS attack detection*, IEEE (2018).
- [8748] A.M.Y. Koay, *Detecting high and low intensity distributed denial of service (DDoS) attacks*, Doctor Thesis in Engineering (Victoria University of Wellington, 2019).
- [8749] R. Biswas, *Mitigation of different network attacks and optimization in software defined network*, Doctor Thesis (Temple University, 2021).
- [8750] T. Nandy, R.M. Noor, R. Kolandaisamy, M.Y.I. Idris and S. Bhattacharyya, *A review of security attacks and intrusion detection in the vehicular networks*, Journal of King Saud University - Computer and Information Sciences (2024).
- [8751] I. Basicovic, S. Ocovaj and M. Popovic, *Use of Tsallis entropy in detection of SYN flood DoS attacks*, Security and Communications Networks **8** (18), 3634-3640 (2015), doi: 10.1002/sec.1286
- [8752] I. Basicovic and S. Ocovaj, *Application of entropy formulas in detection of denial-of-service attacks*, Int. J. Commun. Syst. e4067 (2019), doi: doi.org/10.1002/dac.4067
- [8753] F.L. Moro, A. Amaral, A.P. Amaral and R. Nogueira, *Deteccao e mitigacao de um ataque DoS em seu estagio inicial em uma rede definida por software*, preprint (Instituto Federal Catarinense, 2018).
- [8754] O. Subasi, J. Manzano and K. Barker, *Denial-of-service attack detection via differential analysis of generalized entropy progressions*, preprint (2021), 2109.08758 [cs.CR].
- [8755] C. Callegari, S. Giordano and M. Pagano, *Entropy-based network anomaly detection*, 2017 International Conference on Computing, Networking and Communications (ICNC), Communications and Information Security Symposium, IEEE, 7876150, 334-340 (2017) (7 pages).
- [8756] C. Callegari, S. Giordano and M. Pagano, *An information-theoretic method for the detection of anomalies in network traffic*, Computers & Security **70**, 351-365 (2017), doi: http://dx.doi.org/doi:10.1016/j.cose.2017.07.004
- [8757] C. Callegari, S. Giordano and M. Pagano, *Anomaly Detection: an overview of selected methods*, IEEE SIBIRCON 52-57 (2017).
- [8758] P. Jia, S. Cai, B.C. Ooi, P. Wang and Y. Xiong, *Robust and transferable log-based anomaly detection*, Proc. ACM Manag. Data **1** (1), 64 (2023).
- [8759] J. Santiago-Paz and D. Torres-Roman, *Characterization of worm attacks using entropy, Mahalanobis distance and K-nearest neighbors*, IEEE (2015) (6 pages).
- [8760] A. Singhal and D.K. Sharma, *New generalized 'useful' entropies using weighted quasi-linear mean for efficient networking*, Mobile Networks and Applications (2022), doi: 10.1007/s11036-021-01858-7
- [8761] Q. Shafi, *A robust security framework for combating malicious attacks for internet of things*, Doctor Thesis (School of Electrical Engineering and Computer Science, National University of Sciences and Technology, Islamabad, Pakistan, 2019).
- [8762] J. Hu, W.W. Tung and J. Gao, *Detection of low observable targets within sea clutter by structure function based multifractal analysis*, IEEE Transactions on Antennas and Propagation **54**, 136-143 (2006).

- [8763] X. Gao and Y. Deng, *The generalization negation of probability distribution and its application in target recognition based on sensor fusion*, *Internat. J. Distributed Sensor Networks* **15** (5) (2019), doi: 10.1177/1550147719849381
- [8764] V.T. Vakily and M. Vahedi, *Sea clutter modeling improvement and target detection by Tsallis distribution*, *International Conference on Advanced Computer Control - ICACC*, Proceedings 715-719 (IEEE Computer Society, Los Alamitos-California, 2009).
- [8765] S. Chen, F. Luo and X. Luo, *Multiview feature-based sea surface small target detection in short observation time*, *IEEE Geoscience and Remote Sensing Letters* (2020) (5 pages).
- [8766] J.R. Machado Fernandez and J.C. Bacallao Vidal, *Distribuciones estadísticas para modelar clutter marino: una revision*, *RIELAC/Revista Ingenieria Electronica, Automatica y Comunicaciones*, Vol. XXXVIII, 12-35 (2017).
- [8767] F. Totir, E. Radoi, L. Anton, C. Ioana, A. Serbanescu and S. Stankovic, *Advanced sea clutter models and their usefulness for target detection*, *MTA Review* **18** (3), 257-272 (2008).
- [8768] D. Chen, Y. Gong, Y. Liu, J. Su, Y. Fan and X. Liu, *Target detection within sea clutter based on combined time-frequency characteristics*, *IEEE 5th International Conference on Electronic Information and Communication Technology (ICEICT)*, 2022).
- [8769] T. Wada and H. Suyari, κ -generalization of Gauss' law of error, *Phys. Lett. A* **348**, 89-93 (2006).
- [8770] H. Suyari and T. Wada, *Scaling property and the generalized entropy uniquely determined by a fundamental nonlinear fundamental equation*, preprint (2006) [cond-mat/0608007].
- [8771] T. Wada and H. Suyari, *A generalization of the log-likelihood function and weighted average in Gauss law of error*, *International Symposium on Information Theory and its Applications, ISITA2008*, **1-3**, 1311-1315 (Auckland, New Zealand, 7-10 December 2008).
- [8772] H. Suyari, *q-Stirling's formula in Tsallis statistics*, preprint (2004) [cond-mat/0401541].
- [8773] T. Wada and H. Suyari, *The κ -generalizations of Stirling approximation and multinomial coefficients*, *Entropy* **15**, 5144-5143 (2013), doi:10.3390/e15125144
- [8774] H. Suyari, H. Matsuzoe and A.M. Scarfone, *Advantages of q-logarithm representation over q-exponential representation from the sense of scale and shift on nonlinear systems*, *Eur. Phys. J. Special Topics* **229**, 773-785 (2020).
- [8775] H. Suyari, *Mathematical structures derived from the q-multinomial coefficient in Tsallis statistics*, *Physica A* **368**, 63-82 (2006).
- [8776] H. Suyari, *On the central limit theorem in Tsallis statistics*, in *Complexity, Metastability and Nonextensivity*, Proc. 31st Workshop of the International School of Solid State Physics (20-26 July 2004, Erice-Italy), eds. C. Beck, G. Benedek, A. Rapisarda and C. Tsallis (World Scientific, Singapore, 2005), page 61.
- [8777] H. Suyari, *Refined formalism of the maximum entropy principle in Tsallis statistics*, preprint (2005) [cond-mat/0502298].
- [8778] H. Suyari, *Tsallis entropy as a lower bound of average description length for the q-generalized code tree*, *Proceedings of the 2007 IEEE International Symposium on Information Theory (ISIT2007, Nice, 24 to 29 June 2007)*, pages 901-905.
- [8779] H. Suyari and T. Wada, *Multiplicative duality, q-triplet and (μ, ν, q) -relation derived from the one-to-one correspondence between the (μ, ν) -multinomial coefficient and Tsallis entropy S_q* , *Physica A* **387**, 71-83 (2007).
- [8780] H. Suyari, *How can we obtain the mathematical structure in Tsallis statistics?*, communicated at the Research Institute of Mathematical Science Workshop on Mathematical Aspects of Generalized Entropies and their Applications (7-9 July 2009, Kyoto).
- [8781] H. Suyari, *Law of multiplicative error and Its generalization to the correlated observations represented by the q-product*, *Entropy* **15**, 4634-4647 (2013), doi:10.3390/e15114634
- [8782] C. Shen and H. Li, *On the dual formulation of boosting algorithms*, *IEEE Transactions on Pattern Analysis and Machine Intelligence* **32** (12), 2216-2231 (2010).
- [8783] Y. Sevim and A. Atasoy, *Performance comparison of new nonparametric independent component analysis algorithm for different entropic indexes*, *Turk. J. Elec. Eng. Comp. Sci.* **20** (3), (2012).
- [8784] M. Tanaka, *A sequence of q-normal distributions obtained by successive τ -transformations*, communicated at the Research Institute of Mathematical Science Workshop on Mathematical Aspects of Generalized Entropies and their Applications (7-9 July 2009, Kyoto).
- [8785] P.J. Szablowski, *Moments of q-Normal and conditional q-Normal distributions*, *Statistics and Probability Letters* **106**, 65-72 (2015).

- [8786] M. Tanaka, *Meaning of an escort distribution and τ -transformation*, J. Phys. C Series **201**, 012007 (2010) (9 pages).
- [8787] G.R. Vakili-Nezhaad, *Euler's homogeneous functions can describe non-extensive thermodynamic systems*, Int. J. Pure & Appl. Math. Sci. **1**, 7-8 (2004).
- [8788] M. Tanaka, *Generalized distribution*, Proceedings of SPIE - The International Society for Optical Engineering **4117**, 251 (2000).
- [8789] D. Levi, J. Negro and M.A. del Olmo, *Discrete q -derivatives and symmetries of q -difference equations*, J. Phys. A **37**, 3459-3473 (2004).
- [8790] A.M. Mathai and S.B. Provost, *On q -logistic and related models*, IEEE Transactions on Reliability **55**, 237-244 (2006).
- [8791] F. Zhang, Y. Shi and R. Wang, *Tsallis statistics in reliability analysis: Theory and method*, Eur. Phys. J. Plus **131**, 379 (2016).
- [8792] A.M. Mathai and S.B. Provost, *Generalized Boltzmann factors induced by Weibull-type distributions*, Physica A **392**, 545-551 (2013).
- [8793] S. Nakayama, *q -Generalized logit route choice and network equilibrium model*, Procedia - Social and Behavioral Sciences **80**, 753-763 (2013).
- [8794] S. Nakayama and M. Chikaraishi, *A unified closed-form expression of logit and weibit and its application to a transportation network equilibrium assignment*, 21st International Symposium on Transportation and Traffic Theory, Transportation Research Procedia **7**, 59-74 (2015).
- [8795] S. Nakayama and M. Chikaraishi, *Unified closed-form expression of logit and weibit and its extension to a transportation network equilibrium assignment*, Transportation Research Part B **81**, 672-685 (2015), doi: 10.1016/j.trb.2015.07.019
- [8796] S. Nakayama and M. Chikaraishi, *Doubly generalized logit: A closed-form discrete choice model system with multivariate generalized extreme value distributed utilities*, Transportation Research Part C **132**, 103315 (2021).
- [8797] F. Tinessa, *Closed-form random utility models with mixture distributions of random utilities: Exploring finite mixtures of q GEV models*, Transportation Research Part B **146**, 262-288 (2021).
- [8798] B. Tadic, V. Gligorijevic, M. Mitrovic and M. Suvakov, *Co-evolutionary mechanisms of emotional bursts in online social dynamics and networks*, Entropy **15**, 5084-5120 (2013), doi:10.3390/e15125084
- [8799] G. Bormetti, E. Cisana, G. Montagna and O. Nicosini, *Risk measures with non-Gaussian fluctuations*, Proc. Apfa5 Conference [physics/0607247].
- [8800] G. Bormetti, E. Cisana, G. Montagna and O. Nicosini, *A non-Gaussian approach to risk measures*, Physica A **376**, 532-542 (2007).
- [8801] R.C. Venkatesan, *Generalized statistics framework for rate distortion theory with Bregman divergences*, preprint (2007) [cond-mat/0701218].
- [8802] H. Suyari, *A rooted tree whose lower bound of average description length is given by Tsallis entropy*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 80-83 (New York, 2007).
- [8803] T. Maszczyk and W. Duch, *Comparison of Shannon, Renyi and Tsallis entropy used in decision trees*, ICAISC 2008 Lecture Notes in Computer Science, Artificial Intelligence and Soft Computing **5097**, 643 (2008), doi: 10.1007/978-3-540-69731-2-62.
- [8804] J.S. De la Cruz-Garcia, J. Bory-Reyes and A. Ramirez-Arellano, *A two-parameter fractional Tsallis decision tree*, Entropy **24**, 572 (2022).
- [8805] K. Gajowniczek, T. Zabkowski and A. Orłowski, *Comparison of decision trees with Renyi and Tsallis entropy applied for imbalanced churn dataset*, Federated Conference on Computer Science and Information Systems, **5**, 39-44 (2015).
- [8806] Y. Wang, C. Song and S.T. Xia, *Improving decision trees by Tsallis entropy information metric method*, International Joint Conference on Neural Networks - IEEE, 4729-4734, (2016).
- [8807] K. Gajowniczek and T. Zabkowski, *Generalized entropy loss function in neural network: Variable's importance and sensitivity analysis*, International Conference on Engineering Applications of Neural Networks, Proceedings of the 21st EANN (Engineering Applications of Neural Networks) 2020 Conference pp 535-545 (2020).
- [8808] Y. Wang and S.T. Xia, *Unifying attribute splitting criteria of decision trees by Tsallis entropy*, IEEE, ICASSP, 2507-2511 (2017).
- [8809] Y. Wang, S.T. Xia and J. Wu, *A less-greedy two-term Tsallis entropy information metric approach for decision tree classification*, Knowledge-Based Systems **120**, 34-42 (2017).

- [8810] Z. Chen and X. Luo, *Uncertainty measure of basic probability assignment based on Renyi entropy and its application in decision-making*, IEEE Access **16**, (2016).
- [8811] K.V. Uma and S.A.A. Balamurugan, *Decision tree model using Tsallis entropy and association function for general and medical dataset*, Intelligent Automation and Soft Computing **26** (1), 61-70 (2020), doi: 10.31209/2019.100000153
- [8812] A. Ramirez-Arellano, J. Bory-Reyes and L.M. Hernandez-Simon, *Statistical entropy measures in C4.5 trees*, Internat. J. Data Warehousing and Mining **14** (1) (2018).
- [8813] A. Ramirez-Arellano, J.M. Sigarreta Almira and J. Bory-Reyes, *Fractional information dimensions of complex networks*, Chaos **30**, 093125 (2020), doi: 10.1063/5.0018268
- [8814] A. Ramirez-Arellano, L.M. Hernandez-Simon and J. Bory-Reyes, *Two-parameter fractional Tsallis information dimensions of complex networks*, Chaos, Solitons and Fractals **150**, 111113 (2021).
- [8815] J. Juniper, *The Tsallis distribution and generalised entropy: Prospects for future research into decision-making under uncertainty*, Working Paper No. 07-10, Centre of Full Employment and Equity (The University of Newcastle, Australia, 2007).
- [8816] P. Kim, *Invariantization of numerical schemes using moving frames*, BIT Numerical Mathematics **47**, 525-546 (2007).
- [8817] H. Konno and F. Watanabe, *Maximum likelihood estimators for generalized Cauchy processes*, J. Math. Phys. **48**, 103303 (2007) (19 pages).
- [8818] H. Konno, Y. Uchiyama and T. Kadoya, *A fractional generalized Cauchy process*, preprint (2018), 1811.10417 [cond-mat.stat-mech].
- [8819] Y. Uchiyama, T. Kadoya and H. Konno, *Fractional generalized Cauchy process*, Phys. Rev. E **99**, 032119 (2019).
- [8820] Y. Ide, N. Konno and J. Shikata, *Asymptotic analysis of the one-dimensional quantum walks by the Tsallis and Renyi entropies*, preprint (2014), 1412.7338 [quant-ph].
- [8821] C.B. Naves, M.A. Pires, D.O. Soares-Pinto and S.M.D. Queiros, *Enhancing entanglement with the generalized elephant quantum walk from localized and delocalized states*, Phys. Rev. A **106**, 042408 (2022).
- [8822] T.J. Arruda, R.S. Gonzalez, C.A.S. Tercariol and A.S. Martinez, *Arithmetical and geometrical means of generalized logarithmic and exponential functions: Generalized sum and product operators*, Phys. Lett. A **307**, 2578-2582 (2008).
- [8823] A.S. Martinez, *Modelos da econo- e psico-fisica com funcoes exponencial e logaritmo generalizadas*, communicated at the 2nd Workshop of the National Institute of Science and Technology for Complex Systems (Rio de Janeiro, 1-5 March 2010).
- [8824] D. Strzalka and F. Grabowski, *Towards possible q-generalizations of the Malthus and Verhulst growth models*, Physica A **387**, 2511-2518 (2008).
- [8825] D. Strzalka and F. Grabowski, *A short review of elementary properties and possible applications of deformed q-algebra derived from non-extensive Tsallis entropy*, Mod. Phys. Lett. B **22**, 1525-1534 (2008).
- [8826] M.O. de Almeida, E.T.F. Santos and J.M. Araujo, *Improved performance phase detector for multiplicative second-order PLL systems using deformed algebra*, J. Circuits, Systems, and Computers **23** (1), 1450008 (2014) (7 pages), doi: 10.1142/S021812661450008X
- [8827] V. Aguiar, I. Guedes and I.A. Pedrosa, *Tsallis, Renyi, and Shannon entropies for time-dependent mesoscopic RLC circuits*, Prog. Theor. Exp. Phys. **113A01** (2015) (11 pages), doi: 10.1093/ptep/ptv146
- [8828] L.S. Lima and L.G.A. Arruda, *Feynman-Vernon influence functional approach for the damped driven oscillator in RLC circuit*, Eur. Phys. J. Plus **138**, 284 (2023).
- [8829] F. Grabowski, *Logistic equation of arbitrary order*, Physica A **389**, 3081-3093 (2010).
- [8830] D. Strzalka and F. Grabowski, *Processes in Systems with Limited Resources in the Context of Non-extensive Thermodynamics*, Fundamenta Informaticae **85**, 455-464 (2008).
- [8831] F. Grabowski, *Nonextensive model of self-organizing systems*, Complexity **18** (5), 28-36 (2013, WileyPeriodicals), doi: 10.1002/cplx.21438.
- [8832] D. Strzalka, *Non-extensive statistical mechanics - A possible basis for modelling processes in computer memory system*, Acta Physica Polonica A **117** (4), 652-657 (2010).
- [8833] D. Strzalka, *Long-range dependencies and statistical self-similarity in computer memory system*, J. Circuits, Systems, and Computers **24** (3) 1550031 (2015) (13 pages), doi: 10.1142/S0218126615500310
- [8834] Th. Oikonomou, *How random are random models?*, preprint (2008).
- [8835] F. Buyukkilic and D. Demirhan, *Cumulative diminutions with Fibonacci approach, golden section and physics*, Int. J. Theor. Phys. **47**, 606-616 (2008).

- [8836] F. Buyukkilic and D. Demirhan, *Cumulative growth with Fibonacci approach, golden section and physics*, Chaos, Solitons and Fractals **42**, 24-32 (2009).
- [8837] A. Algin, *Non-extensive entropy of bosonic Fibonacci oscillators*, JSTAT P04007 (2009).
- [8838] A. Algin and W.S. Chung, *Two-parameter deformed quantum mechanics based on Fibonacci calculus and Debye crystal model of two-parameter deformed quantum statistics*, Eur. Phys. J. Plus **139**, 198 (2024).
- [8839] A.A. Marinho, F.A. Brito and C. Chesman, *Fibonacci oscillators in the Landau diamagnetism problem*, preprint (2014), 1403.0272 [cond-mat.stat-mech].
- [8840] A.A. Marinho, F.A. Brito and C. Chesman, *Thermal and electrical properties of a solid through Fibonacci oscillators*, Physica A **443**, 324-332 (2016).
- [8841] B. Avinab, *Nonextensive electrical and thermostistical parametric dependency on temperature and Tsallis factor by the formulation of Q-exponential integrals*, J. Phys. Math. **8** (3), 1000244 (2017) (7 pages), doi: 10.4172/2090-0902.1000244
- [8842] B. Avinab, *Generalization of optoelectronic parameters with the configurational entropy of certain photon confining structures by the regulation of Tsallis factor using q-exponential integrals*, accepted for communication at the European Conference on Lasers, Optics and Photonics (2018).
- [8843] A. Algin and E. Ilik, *Low-temperature thermostistics of Tamm-Dancoff deformed boson oscillators*, Phys. Lett. A **377**, 1797-1803 (2013).
- [8844] R. Diaz and E. Pariguan, *On the Gaussian q-distribution*, J. Math. Analysis Applic. **358**, 1-9 (2009).
- [8845] I.T. Pedron and R.S. Mendes, *Equacoes nao lineares, metodo WKB generalizado e aplicacao a equacao de Thomas-Fermi*, Rev. Bras. Ensino Fisica **30**, 1309 (2008) (5 pages).
- [8846] K. Ourabah and M. Tribeche, *The nonextensive Thomas-Fermi theory in an n-dimensional space*, Physica A **92**, 4477-4480 (2013).
- [8847] K. Ourabah and M. Tribeche, *Nonextensive approach to the Thomas-Fermi model for an atom within a large magnetic field*, Phys. Scr. **88**, 035303 (2013) (6 pages).
- [8848] K. Ourabah and M. Tribeche, *Weakly nonlinear dust ion- acoustic double- layers in a dusty plasma with nonextensive electrons*, Astrophys. Space Sci. (2013), in press, DOI 10.1007/s10509-013-1594-z
- [8849] K. Ourabah, L.A. Gougam and M. Tribeche, *Nonthermal and suprathermal distributions as a consequence of superstatistics*, Phys. Rev. E **91**, 012133 (2015) (4 pages).
- [8850] K. Ourabah and M. Tribeche, *Fractional superstatistics from a kinetic approach*, Phys. Rev. **97**, 032126 (2018).
- [8851] M.A. Khaled, *On the head-on collision between two ion acoustic solitary waves in a weakly relativistic plasma containing nonextensive electrons and positrons*, Astrophys. Space Sci. **350**, 607-614 (2014), in press, doi: 10.1007/s10509-014-1790-5
- [8852] M.A.H. Khaled, *Two-dimensional dust acoustic solitary waves in a dusty plasma in the presence of polarization force with a nonextensive ion distribution*, Indian J. Phys. (2022), doi: 10.1007/s12648-021-02229-4
- [8853] M.A.H. Khaled, *?Effects of a nonextensive dust charge variation on an oblique collision of dust acoustic solitons in a dusty plasma*, J. Amr. Uni. **2**, 85 (2022).
- [8854] M.G. Hafez, M.R. Talukder and R. Sakthivel, *Ion acoustic solitary waves in plasmas with nonextensive distributed electrons, positrons and relativistic thermal ions*, Indian J. Phys. **90** (5), 603-611 (2016), doi: 10.1007/s12648-015-0782-9
- [8855] M.G. Hafez, M.R. Talukder and M.H. Ali, *Ion acoustic shock and solitary waves in highly relativistic plasmas with nonextensive electrons and positrons*, Phys. Plasmas **23**, 012902 (2016) (9 pages).
- [8856] M.G. Hafez, M.R. Talukder and M.H. Ali, *Two-dimensional nonlinear propagation of ion acoustic waves through KP and KP equations in weakly relativistic plasmas*, Advances Mathematical Physics, 9352148 (2016) (12 pages), doi: <http://dx.doi.org/10.1155/2016/9352148>
- [8857] M.G. Hafez, M.R. Talukder and M.H. Ali, *Nonlinear propagation of weakly relativistic ion-acoustic waves in electron-positron-ion plasma*, Pramana – J. Phys. **87**, 70 (2016) (10 pages), doi: 10.1007/s12043-016-1275-x
- [8858] M.G. Hafez, P. Akter and S.A.A. Karim, *Overtaking collisions of ion acoustic N-shocks in a collisionless plasma with pair-ion and (α, q) -distribution function for electrons*, Appl. Sci. **10**, 6115 (2020), doi: 10.3390/app10176115
- [8859] P. Akter and M.G. Hafez, *Dust-ion-acoustic shock wave excitations at super-critical points with quartic nonlinearity*, Contributions to Plasma Physics (2023), doi: 10.1002/ctpp.202300048
- [8860] H.B. Qiu and S.B. Liu, *Weibel instability with nonextensive distribution*, Phys. Plasmas **20**, 102119 (2013) (4 pages).
- [8861] W.J. Garbett, *Sensitivity of ICF ignition conditions to non-Maxwellian DT fusion reactivity*, EPJ Web Conferences **59**, 02019 (2013) (4 pages), doi: 10.1051/epjconf/20135902019

- [8862] S. Davis and G. Gutierrez, *Estimation of Tsallis' q-index in non-extensive systems*, AIP Conference Proceedings **1558**, 1779-1783 (2013), doi: 10.1063/1.4825869
- [8863] K. Ourabah and M. Tribeche, *Relativistic formulation of the generalized nonextensive Thomas-Fermi model*, Physica A **393**, 470-474 (2013), doi: <http://dx.doi.org/10.1016/j.physa.2013.08.051>
- [8864] K. Ourabah and M. Tribeche, *Implication of Tsallis entropy in the Thomas-Fermi model for self-gravitating fermions*, Annals of Physics **342**, 78-82 (2013), doi: <http://dx.doi.org/10.1016/j.aop.2013.11.016>
- [8865] S.M.D. Queiros, *Generalised cascades*, preprint (2009).
- [8866] R.K. Niven and H. Suyari, *The q-gamma and (q, q)-polygamma functions of Tsallis statistics*, Physica A **388**, 4045- 4060 (2009).
- [8867] C. Miron, *Optimisation par recuit simulé généralisé*, DEA de Physique Statistique et Phénomènes Non Linéaires, Ecole Normale Supérieure de Lyon-France (1994).
- [8868] T.J.P. Penna, *Traveling salesman problem and Tsallis statistics*, Phys. Rev. E **51**, R1 (1995).
- [8869] J. Benes, J. Langer and A. Slaby, *Costs optimization of the search for goods and accompanied route planning based on algorithms of Traveling salesman problem*, Hadrec Economic Days (2024).
- [8870] R. Shi, L. Ma and T. Watanabe, *Efficient placement algorithm for the interposer-based multi-FPGAs systems*, preprint (2018).
- [8871] K.C. Barros, A. Dal Pino Junior and M.R. Lemes, *Computational intelligence: trailing Mendeleyev's footsteps*, preprint (2014).
- [8872] L.S. Sacramento, B. Ordonez and J.M. Araujo, *Communication delay robustness improvement of linear consensus protocol in undirected graphs inspired on deformed algebra*, Internat. J. Innovative Computing, Information and Control **13** (6), 2089-2098 (2017).
- [8873] D.A. Stariolo and C. Tsallis, *Optimization by simulated annealing: recent progress*, Ann. Rev. Comp. Phys., vol. II, ed. D. Stauffer (World Scientific, Singapore, 1995), p. 343.
- [8874] S. Liu, J. Zhang, Y. Zhang, S. Zhang, S. Yang, G. Zou and L. Liu, *Overall study of solar simulation optical system with large irradiated surface using free-form concentrator to improve uniformity*, iScience **26**, 107781 (2023).
- [8875] S.W. Kim, H. Cho, Y. Lee, C.H. Lyoo and J.K. Seong, *Data-driven simulation of network-based tau spreading tailored to individual Alzheimer's patients*, Engineering with Computers (2024).
- [8876] F.M. Chmielewski and K.P. Gotz, *Towards a physiological modeling of sweet cherry blossom*, Horticulturae **9**, 1207 (2023).
- [8877] A.L. Vishart, *Accelerating catalysis simulations using surrogate machine learning models*, Doctor Thesis (2023, Technical University of Denmark).
- [8878] S. Audet, W. Beaulieu, K. Zerouali, D. Guillet, H. Bouchard and A. Lalonde, *Physics-based energy spectrum optimization (PESO): a new method to model the energy spectrum of a compact ultra-high dose rate electron linac for Monte Carlo dose calculation*, Phys. Med. Biol. **70**, 085002 (2025).
- [8879] M.X. Luo and X. Wang, *Unified catalytic entropy principles of general states*, Eur. Phys. J. Plus **139**, 160 (2024).
- [8880] R.A. Paula Jr., I. Aldaya, T. Sutili, R.C. Figueiredo, J.L. Pita and Y.R.R. Bustamante, *Design of a silicon Mach-Zehnder modulator via deep learning and evolutionary algorithms*, Scientific Reports **13**, 14662 (2023).
- [8881] G.R. Palma, W.A.C. Godoy, E. Engel, D. Lau, E. Galvan, O. Mason, C. Markham and R.A. Moral, *Pattern-based prediction of population outbreaks*, Ecological Informatics **77**, 102220 (2023).
- [8882] S. Kim, J.B. Yuan, W.S. Woods, D.A. Newton, P. Perez-Pinera and J.S. Song, *Chromatin structure and context-dependent sequence features control prime editing efficiency*, Front. Genet. **14**, 1222112 (2023), doi: 10.3389/fgene.2023.1222112
- [8883] J.F. Goncalves and E.C.N. Silva, *An adaptive material interpolation for the reconstruction of P-wave velocity models with sharp interfaces using the topology optimization method*, Journal of Theoretical and Computational Acoustics **30** (4), 2150016 (2022).
- [8884] M.C. da Silva, *Estudo dos comportamentos anômalos dos Espectros de Ressonância Paramagnética Eletrônica de Gd diluído em $Y_{1-x}Gd_xPb_3$ e $Sm_{1-x}Gd_xB_6$ em função da temperatura e da concentração*, Doctor Thesis (2023, Faculdade de Ciências, Universidade Estadual Paulista "Julio de Mesquita Filho", Campus de Bauru, Brazil).
- [8885] G.R. Palma, *New confidence interval methods for diversity indices*, Bachelor Thesis (University of Sao Paulo, College of Agriculture Luiz de Queiroz, 2021).
- [8886] D. Li, Y. Zhu, M. Chen and J. Wang, *Minipatch: Undermining DNN-based website fingerprinting with adversarial patches*, Journal of Latex Class Files **14** (8), (2021).

- [8887] T. Feuillet, *Les effets de contexte en géographie - Des fondements théoriques à la modélisation statistique*, Habilitation à diriger des recherches, Volume 1 (Université de Lyon 3, 2021).
- [8888] M.J.A. Schuetz, J.K. Brubaker, H. Montagu, Y. van Dijk, J. Klepsch, P. Ross, A. Luckow, M.G.C. Resende and H.G. Katzgraber, *Optimization of robot trajectory planning with nature-inspired and hybrid quantum algorithms*, Phys. Rev. Applied **18**, 054045 (2022).
- [8889] L. Ye, Z. Wu and S.M. Fei, *Coherence dynamics in quantum algorithm for linear systems of equations*, Phys. Scr. **98**, 125104 (2023).
- [8890] Y. Shen and A.P. Willard, *Using directed walks in state space to generate mean field solutions to spin models*, preprint (2022), 2206.03616 [cond-mat.stat-mech].
- [8891] Z. Liu, Q. Li and F. Zhu, *Semiparametric integer-valued autoregressive models on Z* , Canadian Journal of Statistics (2021).
- [8892] L. Spafford, A. MacDougall and J. Steenberg, *Climate-driven shifts in leaf senescence are greater for boreal species than temperate species in the Acadian Forest region in contrast to leaf emergence shifts*, (Wiley, 2023), doi: 10.1002/ece3.10362
- [8893] J.C.B. Souza, N.P. Vizarim and P.A. Venegas, *Clogging, diode and collective effects of skyrmions in funnel geometries*, New J. Phys. **24**, 103030 (2022).
- [8894] E. Luedeling, K. Schiffrers, T. Fohrmann and C. Urbach, *PhenoFlex - an integrated model to predict spring phenology in temperate fruit trees*, Agricultural and Forest Meteorology **307**, 108491 (2021).
- [8895] C. Dlaska, K. Ender, G.B. Mbeng, A. Kruckenhauser, W. Lechner and R. van Bijnen, *Quantum optimization via four-body Rydberg gates*, preprint (2021), 2106.02663 [quant-ph].
- [8896] A.M. Elsayah, L.M. Hua and K.T. Fang, *A novel algorithm for generating minimum energy points from identically charged particles in 1D, 2D and 3D unit hypercubes*, Communications in Statistics - Simulation and Computation (2021), doi: 10.1080/03610918.2021.1938121
- [8897] H. Senjaliya, P. Gajjar, B. Vaghasiya, P. Shah and P. Gujarati, *Optimization of Rocker-Bogie mechanism using heuristic approaches*, preprint (2022), 2209.06927 [cs.NE].
- [8898] T. Castro, S. Borgani, J. Dakin, V. Marra, R.C. Batista and L. Salvati, *DUCA: Dynamic universe cosmological analysis - II. The impact of clustering dark energy on the halo mass function*, preprint (2025), 2505.02762 [astro-ph.CO].
- [8899] T. Castro, S. Borgani and J. Dakin, *DUCA: Dynamic Universe Cosmological Analysis I. The halo mass function in dynamical dark energy cosmologies*, Astronomy and Astrophysics, 697, A194 (2025).
- [8900] J. Wang, X. Zhao, Q. Yu and C. Zhao, *Inverse modeling of thermal decomposition of flame-retardant PET fiber with model-free coupled with particle swarm optimization algorithm*, ACS Omega (2021), in press.
- [8901] B.O. Volkov, O.V. Morzhin and A.N. Pechen, *Quantum control landscape for ultrafast generation of single-qubit phase shift quantum gates*, preprint (2021), 2104.12699 [quant-ph].
- [8902] R. Donnelly and S. Jaimungal, *Exploratory control with Tsallis entropy for latent factor models*, SIAM Journal on Financial Mathematics **15** (1) (2024).
- [8903] O.V. Morzhin and A.N. Pechen, *Generation of density matrices for two qubits using coherent and incoherent controls*, Lobachevskii Journal of Mathematics **42** (10), 2401-2412 (2021).
- [8904] T.J.P. Penna, *Fitting curves by simulated annealing*, Computers in Physics **9**, 341 (1995).
- [8905] C. Tsallis and D.A. Stariolo, *Generalized simulated annealing*, Physica A **233**, 395 (1996); a preliminary version appeared (in English) as Notas de Física/CBPF 026 (June 1994). Made available by Scipy (Python): https://docs.scipy.org/doc/scipy/reference/generated/scipy.optimize.dual_annealing.html
- [8906] M. van den Diepstraten, *More efficient electric water heater models for demand response optimization*, Bachelor Thesis Econometrics and Operations Research (Erasmus School of Economics, Erasmus University Rotterdam, 2024).
- [8907] D.S. Aguero-Martinez, T.B. Murari and M.A. Moret, *Analysis of the infiltration complex system using a novel GSA-hybrid for automatic calibration focused at civil construction*, preprint (2022), doi: 10.20944/preprints202205.0351.v1
- [8908] X. Cao and P. Tian, *"Dividing and conquering" and "caching" in molecular modeling*, preprint (2020), doi: 10.20944/preprints202012.0081.v1
- [8909] P.A. Wicaksono, D. Puspitasari, S. Ariyandanu and R. Hidayanti, *Comparison of simulated annealing, nearest neighbour, and tabu search methods to solve vehicle routing problems*, The 3rd International Conference on Eco Engineering Development, IOP Conf. Series: Earth and Environmental Science **426**, 012138 (2020), doi: 10.1088/1755-1315/426/1/012138
- [8910] K.S. Ghandeshtani and H.R. Mashhadi, *An entropy-based self-adaptive simulated annealing*, Engineering with Computers (2019), doi: doi.org/10.1007/s00366-019-00887-x

- [8911] J.H. Wilches Visbal and A.M. Da Costa, *Algoritmo de recocido simulado generalizado para Matlab*, *Ingenieria y Ciencia* **15** (30), 117-140 (2019).
- [8912] S. Majchrowska, I. Giannakis, C. Warren and A. Giannopoulos, *Modelling Arbitrary Complex Dielectric Properties - an automated implementation for gprMax*, preprint (2021), 2109.01928 [math.NA].
- [8913] D. Mayor, D. Panday, H.K. Kandel, T. Steffert and D. Banks, *CEPS: An open access MATLAB graphical user interface (GUI) for the analysis of complexity and entropy in physiological signals*, *Entropy* **23**, 321 (2021), doi: 10.3390/e23030321
- [8914] M. Arora, R.M. Yennamalli and T.Z. Sen, *Application of molecular simulations toward understanding cellulase mechanisms*, *BioEnergy Research* (2018) (18 pages), doi: 10.1007/s12155-018-9944-x
- [8915] F. Ming, Y. Yang, A. Zeng and B. Zhao, *Decomposition of geodetic time series: A combined simulated annealing algorithm and Kalman filter approach*, *Advances in Space Research* (2019), in press.
- [8916] Y. Feng, Y. Liu and X. Tong, *Comparison of metaheuristic cellular automata models: A case study of dynamic land use simulation in the Yangtze River Delta*, *Computers, Environment and Urban Systems* **70**, 138-150 (2018).
- [8917] Z. Zhu, J. Yu, J. Dou and D. Peng, *An expression for velocity lag in sediment-laden open-channel flows based on Tsallis entropy together with the principle of maximum entropy*, *Entropy* **21**, 522 (2019), doi: 10.3390/e21050522
- [8918] D. Mirauda and M.G. Russo, *Modeling bed shear stress distribution in rectangular channels using the entropic parameter*, *Entropy* **22**, 87 (2020), doi: 10.3390/e22010087
- [8919] O.H. Menin and C.T. Bauch, *Solving the patient zero inverse problem by using generalized simulated annealing*, *Physica A* **490**, 1513-1521 (2018).
- [8920] J.H. Wilches Visbal and A.M. da Costa, *Determinacao da dose dos fotons contaminantes de feixes de eletrons clinicos usando o metodo de Recozimento Simulado Generalizado [Determination of photon contamination dose of clinical electron beams using the Generalized Simulated Annealing method]*, *Revista Brasileira de Fisica Medica* **11** (2), 2-6 (2017).
- [8921] J.W. Visbal, A.M. Costa, *Inverse reconstruction of energy spectra of clinical electron beams using the generalized simulated annealing method*, *Radiation Physics and Chemistry* (2019), in press, doi: doi.org/10.1016/j.radphyschem.2019.04.022
- [8922] N.P. Vizairim, M. Carlone, L.G. Verga and P.A. Venegas, *Critical forces at fractional matching fields in superconducting thin films with triangular pinning lattice*, *Materials Research* (2017) (5 pages), doi: http://dx.doi.org/10.1590/1980-5373-MR-2016-0696
- [8923] N.P. Vizairim, *Dynamic behavior of Skyrmions under the influence of periodic pinning in chiral magnetic infinite thin films*, Doctor Thesis (Ciencia e Tecnologia de Materiais, Universidade Estadual Paulista Julio de Mesquita Filho and Universiteit Antwerpen, 2023).
- [8924] S.A. Jacobs and R.A. Marsland, *Constellation recovery and impairment evaluation through minimization of the blind EVM*, *Optics Express* **24** (19), 21708 (2016) (14 pages).
- [8925] K.L. Du and M.N.S. Swamy, *Simulated annealing*, in *Search and Optimization by Metaheuristics*, 29-36 (2016, Springer).
- [8926] A.A. Chaves, M.G.C. Resende and R.M.A. Silva, *A continuous-GRASP random-key optimizer*, *Lecture Notes in Computer Science* **14753**, 15-20 (2024).
- [8927] A.A. Chaves, M.G.C. Resende and R.M.A. Silva, *A random-key GRASP for combinatorial optimization*, *J. Nonlinear Var. Anal.* **8** (6), 855-881 (2024).
- [8928] T. Fukui, S. Sato and A. Takahashi, *Estimating style weights of mutual funds by Monte Carlo filter with Generalized Simulated Annealing*, preprint CARF-F-383 (2016).
- [8929] K. Lurz, *Confidence and Prediction under Covariates and Prior Information*, Doctor Thesis (Julius-Maximilians-Universitat Wurzburg, 2015).
- [8930] D. Stosic, D. Stosic and T. Ludermir, *Voting based q-generalized extreme learning machine*, *Neurocomputing* **174**, 1021-1030 (2016), doi: http://dx.doi.org/10.1016/j.neucom.2015.10.028
- [8931] Z.Y. Li, Y.L. Gao, Z.X. Niu, S.S. Yuan, C.H. Zheng and J.X. Liu, *An integrated extreme learning machine based on kernel risk-sensitive loss of q-Gaussian and voting mechanism for sample classification*, *IEEE International Conference on Bioinformatics and Biomedicine-BIBM*, 2088-2094 (2022).
- [8932] H. Bonakdari, S.N. Qasem, I. Ebtehaj, A.H. Zaji, B. Gharabaghi and M. Moazamnia, *An expert system for predicting the velocity field in narrow open channel flows using self-adaptive extreme learning machines*, *Measurement* (2019), in press.
- [8933] E.G. Mansoori and M. Sara, *Extreme ensemble of extreme learning machines*, *Stat Anal Data Min: The ASA Data Sci Journal*, 1-13 (2020), doi: 10.1002/sam.11493

- [8934] S. Atsawaraungsuk, *Majority voting based on q -Gaussian activation function circular extreme learning machine*, IEEE 9th International Conference on Knowledge and Smart Technology 56-60 (2017).
- [8935] S. Atsawaraungsuk and N. Thipayang, *q -sine circular extreme learning machine for high dimensional data*, IEEE 19-23 (2018).
- [8936] Y.D. Zhang, G. Zhao, J. Sun, X. Wu, Z.H. Wang, H.M. Liu, V.V. Govindaraj, T. Zhan and J. Li, *Smart pathological brain detection by synthetic minority oversampling technique, extreme learning machine, and Jaya algorithm*, Multimed. Tools Appl. (2017) (20 pages), doi: 10.1007/s11042-017-5023-0
- [8937] D. Stosic, D. Stosic, C. Zanchettin, T. Ludermir and B. Stosic, *QRNN: q -generalized random neural network*, IEEE Transactions on Neural Networks and Learning Systems **28** (2), 383-390 (2017), doi: 10.1109/TNNLS.2015.2513365
- [8938] D. Stosic, D. Stosic, T.B. Ludermir and T. Stosic, *Nonextensive triplets in cryptocurrency exchanges*, Physica A **505**, 1069-1074 (2018).
- [8939] L. Grilli and D. Santoro, *Cryptocurrencies markets and entropy: A statistical ensemble based approach*, Applied Mathematical Sciences **15** (7), 297-320 (2021).
- [8940] L. Grilli and S. Domenico, *A statistical ensemble based approach for entropy in cryptocurrencies markets*, (2021).
- [8941] A. Rey, A.C. Frery, J. Gambini and M. Lucini, *Asymptotic distribution of entropies and Fisher information measure of ordinal patterns with applications*, Chaos, Solitons and Fractals **188**, 115481 (2024).
- [8942] A. Rey and J. Gambini, *Distinguishing samples from the G_0^I distribution by using Tsallis entropy*, IEEE (2024).
- [8943] H. Danylchuk, L. Kibalnyk, O. Kovtun, A. Kiv, O. Pursky and G. Berezhna, *Modelling of cryptocurrency market using fractal and entropy analysis in COVID-19*, CEUR Workshop Proceedings **2713**, 352-371 (2020).
- [8944] P.I. Zitis, S. Kakinaka, K. Umeno, S.G. Stavrinides, M.P. Haniyas and S.M. Potirakis, *The impact of COVID-19 on weak-form efficiency in cryptocurrency and forex markets*, Entropy **25**, 1622 (2023).
- [8945] F. Serban and B.P. Vranceanu, *Mean-variance-entropy framework for cryptocurrency portfolio optimization*, Mathematics **13**, 1693 (2025).
- [8946] F. Serban and S. Dedu, *Portfolio construction in crypto markets using generalized maximum entropy models*, preprint (2025).
- [8947] D. Giannopoulos, F. Vallianatos, A. Lois and G. Hloupis, *Non-extensive statistical physics analysis of high-frequency anthropogenic seismic noise with relation to COVID-19 pandemic lockdown measures: Preliminary observations*, communication at the 3rd European Conference on Earthquake Engineering and Seismology (Bucharest, Romania, 2022).
- [8948] S. Sharma and K. Tshering, *Statistical analysis of returns from cryptocurrencies at varying frequencies: Failure of cubic law*, 6th International Conference for Convergence in Technology, IEEE, 9418096 (2021).
- [8949] Z. Wang, X. Rui, G. Yuan, J. Cui and T. Hadzibeganovic, *Endemic information-contagion outbreaks in complex networks with potential spreaders based recurrent-state transmission dynamics*, Physica A (2021), in press, doi: 10.1016/j.physa.2021.125907
- [8950] M.V. Jankovic, *Quantum low entropy based associative reasoning – QLEAR learning*, preprint (2017), arxiv 1705.10503
- [8951] J.D.L. Dutra, N.B.D. Lima, R.O. Freire and A.M. Simas, *Europium luminescence: Electronic densities and superdelocalizabilities for a unique adjustment of theoretical intensity parameters*, Scientific Reports **5**, 13695 (2015) (12 pages), doi: 10.1038/srep13695
- [8952] G. Georgiev, *Towards universal neural nets: Gibbs machines and ACE*, preprint (2015), 1508.06585 [cs.CV].
- [8953] K. Toliaas and S.P. Chatzis, *t -Exponential memory networks for question-answering machines*, preprint (2018, 1809.01229 [cs.LG]).
- [8954] J.P. Oyardo, A.M. Costa, and L.L. Amaral, *Reconstruccion de espectros de aceleradores lineales clinicos*, X Congreso Regional Latinoamericano IRPA de Proteccion y Seguridad Radiologica “Radioproteccion: Nuevos Desafios para un Mundo en Evolucion ” (Buenos Aires, 12 al 17 de abril, 2015, Sociedad Argentina de Radioproteccion)
- [8955] J.A.. Englander and A.C. Englander, *Tuning monotonic basin hopping: Improving the efficiency of stochastic search as applied to low-thrust trajectory optimization*, preprint (2014).
- [8956] P. Ngom and B.D.B Diatta, *Model selection of stochastic simulation algorithm based on generalized divergence measures*, preprint (2014), 1401.5015 [stat.ME].
- [8957] D. Hamza, P. Ngom and P. Mendy, *Comparison between the two models: New approach using the α -divergence*, preprint, (2014), 1401.5285 [stat.ME].

- [8958] M. Plasencia, A. Pedersen, A. Arnaldsson, J-C Berthet and H. Jonsson, *Geothermal model calibration using a global minimization algorithm based on finding saddle points and minima of the objective function*, Computers and Geosciences (2013), in press, <http://dx.doi.org/10.1016/j.cageo.2013.09.007>
- [8959] F. Vallianatos, *A Non-extensive statistical mechanics view on Easter island seamounts volume distribution*, Geosciences 8, 52 (2018) (9 pages), doi: 10.3390/geosciences8020052
- [8960] V.B. Nascimento and E.W. Plummer, *Differential evolution: Global search problem in LEED-IV surface structural analysis*, Materials Characterization **100**, 143-151 (2014).
- [8961] W. Wang, A. Ghate and Z.B. Zabinsky, *Adaptive parameterized improving hit-and-run for global optimization*, Optimization Methods and Software **24**, 569-594 (2009).
- [8962] K.C. Mundim and C. Tsallis, *Geometry optimization and conformational analysis through generalized simulated annealing*, Int. J. Quantum Chem. **58**, 373 (1996).
- [8963] T. Tanaka, *Information geometry of mean field theory*, IEICE Trans. Fundamentals E **79**, 709 (1996).
- [8964] J. Schulte, *Nonpolynomial fitting of multiparameter functions*, Phys Rev E **53**, R1348 (1996).
- [8965] J. Schulte, J. Ushio and T. Maruizumi, *Non-equilibrium molecular orbital calculations of Si/SiO₂ interfaces*, Thin Solid Films **369**, 285 (2000).
- [8966] G.M. Lombardo, *Tsallis q-exponentials as atomic orbitals in two-electron systems*, Internat. J. Quantum Chemistry (2020), doi: 10.1002/qua.26489
- [8967] I. Andricioaei and J.E. Straub, *Generalized simulated annealing algorithms using Tsallis statistics: Application to conformational optimization of a tetrapeptide*, Phys. Rev. E **53**, R3055 (1996).
- [8968] T. Nagai, G.A. Pantelopulos, T. Takahashi and J.E. Straub, *On the use of mass scaling for stable and efficient simulated tempering with molecular dynamics*, J. Computational Chemistry **37** (21), 2017-2028 (2016), doi: 10.1002/jcc.24430
- [8969] S.W. Rick, *Replica exchange with dynamical scaling*, J. Chem. Phys. **126**, 054102 (2007) (8 pages).
- [8970] M. Goncalves, *Modelagem molecular classica usando o metodo estocastico: simulacao por termalizacao - GSA*, Master Thesis (Universidade Federal da Bahia, 1996).
- [8971] K.C. Mundim, T. Lemaire and A. Bassrei, *Optimization of nonlinear gravity models through Generalized Simulated Annealing*, Physica A **252**, 405 (1998).
- [8972] M.A. Moret, P.G. Pascutti, P.M. Bisch and K.C. Mundim, *Stochastic molecular optimization using generalized simulated annealing*, J. Comp. Chemistry **19**, 647 (1998).
- [8973] D.E. Ellis, K.C. Mundim, V.P. Dravid and J.W. Rylander, *Hybrid classical and quantum modeling of defects, interfaces and surfaces*, in *Computer aided-design of high-temperature materials*, 350 (Oxford University Press, Oxford, 1999).
- [8974] Ch.C. Moustakidis and C.P. Panos, *Information and complexity measures in the interface of a metal and a superconductor*, Phys. Lett. A **382**, (23), 1563-1570 (2018).
- [8975] Y. Zheng and J. Du, *Thermodynamic properties of the solid and metal electrons in the nonextensive quantum statistics with a nonextensive parameter transformation*, Eur. Phys. J. Plus **135**, 134 (2020), doi: doi.org/10.1140/epjp/s13360-020-00113-4
- [8976] K.C. Mundim and D.E. Ellis, *Stochastic classical molecular dynamics coupled to functional density theory: Applications to large molecular systems*, in *Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 199 (1999).
- [8977] D.E. Ellis, K.C. Mundim, D. Fuks, S. Dorfman and A. Berner, *Interstitial carbon in copper: Electronic and mechanical properties*, Philosophical Magazine B, **79**, 1615 (1999).
- [8978] L. Guo, D.E. Ellis and K.C. Mundim, *Macrocycle-macrocycle interactions within one-dimensional Cu phthalocyanine chains*, Journal of Porphyrins and Phthalocyanines **3**, 196 (1999).
- [8979] D.E. Ellis and K.C. Mundim, *An embedded cluster approach to computational materials science*, Proc. of World Ceramics Congress and Forum on New Materials - CIMTEC1998 (14-19 June 1998, Florence, Italy).
- [8980] J.W. Rylander, *Using classical molecular dynamics along with quantum mechanics in large molecular systems*, Monograph, Department of Chemistry, Northwestern University, Evanston (1997).
- [8981] M. Moret, P.G. Pascutti, P.M. Bisch and K.C. Mundim, *Determinacao de estrutura de peptideos por otimizacao estocastica (GSA)*, communicated at XX Encontro Nacional de Fisica da Materia Condensada (10-14 June 1997, Caxambu, Brazil).
- [8982] M.A. Moret, P.M. Bisch and F.M.C. Vieira, *Algorithm for multiple minima search*, Phys. Rev. E **57**, R2535 (1998).
- [8983] M. Moret, L.E. Dardenne, P. Pascutti and P.M. Bisch, *Analise conformacional estocastica de inibidores usando Generalized Simulated Annealing-GSA*, communicated at XX Encontro Nacional de Fisica da Materia Condensada (10-14 June 1997, Caxambu, Brazil).

- [8984] M.A. Moret, P.G. Pascutti, K.C. Mundim, P.M. Bisch and E. Nogueira Jr., *Multifractality, Levinthal paradox, and energy hypersurface*, Phys. Rev. E **63**, 020901(R) (2001).
- [8985] F.P. Agostini, D.D.O. Soares-Pinto, M.A. Moret, C. Osthoff and P.G. Pascutti, *Generalized simulated annealing applied to protein folding studies*, J. Comp. Chem. **27**, 1142-1155 (2006).
- [8986] L.J. Yang, M.P. Grubb and Y.Q. Gao, *Application of the accelerated molecular dynamics simulations to the folding of a small protein*, J. Chem. Phys. **126**, 125102 (2007) (7 pages).
- [8987] K.C. Mundim, T.J. Lemaire and A. Bassrei, *A new simulated annealing technique for non-linear optimization*, Proc. 5th International Congress of the Brazilian Geophysical Society (Sao Paulo, 28 September to 2 October 1997), page 669.
- [8988] K.C. Mundim and V.C.T. Delavy, *Otimização global de processos usando o método Generalized Simulated Annealing*, Processos Químicos **2** (4), 9-23 (2008) [Special issue of Processos Químicos dedicated to Generalized Simulated Annealing].
- [8989] D.E. Ellis, K.C. Mundim, D. Fuks, S. Dorfman and A. Berner, *Simulations of defect and diffusion properties in the interstitial Cu-C solid solutions*, Proceedings of MRS (1997).
- [8990] A. Berner, K.C. Mundim, D.E. Ellis, S. Dorfman, D. Fuks and R. Evenhaim, *Microstructure of Cu-C interface in Cu-based metal matrix composite*, Sensors and Actuators **74**, 86 (1999).
- [8991] C.J. Wang and X.F. Wang, *Nonextensive thermostistical investigation of free electronic gas in metal*, Acta Physica Sinica **55**, 2138-2143 (2006).
- [8992] D. Fuks, K.C. Mundim, L.A.C. Malbouisson, A. Berner, S. Dorfman and D.E. Ellis, *Carbon in copper and silver: Diffusion and mechanical properties*, J. Mol. Structure **539**, 199 (2001).
- [8993] A. Berner, D. Fuks, D.E. Ellis, K.C. Mundim and S. Dorfman, *Formation of nano-crystalline structure at the interface in Cu-C composite*, Applied Surface Science **144-145**, 677 (1999).
- [8994] M.A. Moret, *Uma nova proposta para predicao de estruturas secundarias de polipeptideos por metodos estocasticos*, PhD Thesis project (Universidade Federal do Rio de Janeiro, 1998).
- [8995] P. Serra, A.F. Stanton and S. Kais, *Pivot method for global optimization*, Phys. Rev. E **55**, 1162 (1997).
- [8996] P. Serra, A.F. Stanton, S. Kais and R.E. Bleil, *Comparison study of pivot methods for global optimization*, J. Chem. Phys. **106**, 7170 (1997).
- [8997] A. Ferron, P. Serra and O. Osenda, *Understanding the propagation of excitations in quantum spin chains with different kind of interactions*, Phys. Scr. **97**, 115103 (2022).
- [8998] Y. Xiang, D.Y. Sun, W. Fan and X.G. Gong, *Generalized simulated annealing algorithm and its application to the Thomson model*, Phys. Lett. A **233**, 216 (1997).
- [8999] I. Andricioaei and J.E. Straub, *On Monte Carlo and molecular dynamics inspired by Tsallis statistics: Methodology, optimization and applications to atomic clusters*, J. Chem. Phys. **107**, 9117 (1997).
- [9000] J. Kim and J.E. Straub, *Optimal replica exchange method combined with Tsallis weight sampling*, J. Chem. Phys. **130**, 144114 (2009) (11 pages).
- [9001] J. Kim and J.E. Straub, *Generalized simulated tempering for exploring strong phase transitions*, J. Chem. Phys. **133**, 154101 (2010) (12 pages).
- [9002] U.H.E. Hansmann, *Simulated annealing with Tsallis weights: A numerical comparison*, Physica A **242**, 250 (1997).
- [9003] U.H.E. Hansmann and Y. Okamoto, *Generalized-ensemble Monte Carlo method for systems with rough energy landscape*, Phys. Rev. E **56**, 2228 (1997).
- [9004] U.H.E. Hansmann, M. Masuya and Y. Okamoto, *Characteristic temperatures of folding of a small peptide*, Proc. Natl. Acad. Sci. USA **94**, 10652 (1997).
- [9005] U.H.E. Hansmann, *Parallel tempering algorithm for conformational studies of biological molecules*, Chem. Phys. Lett. **281**, 140 (1997).
- [9006] R. Silva, J.R. Drugowich de Felicio and A.S. Martinez, *Generalized Metropolis dynamics with a generalized master equation: An approach for time-independent and time-dependent Monte Carlo simulations of generalized spin systems*, Phys. Rev. E **85**, 066707 (2012) (9 pages).
- [9007] M.R. Lemes, C.R. Zacharias and A. Dal Pino Jr., *Generalized simulated annealing: Application to silicon clusters*, Phys. Rev. B **56**, 9279 (1997).
- [9008] P. Serra and S. Kais, *Symmetry breaking and - of binary clusters*, Chem. Phys. Lett. **275**, 211 (1997).
- [9009] B.J. Berne and J.E. Straub, *Novel methods of sampling phase space in the simulation of biological systems*, Current Opinion in Structural Biology **7**, 181 (1997).
- [9010] I. Andricioaei and J.E. Straub, *An efficient Monte Carlo algorithm for overcoming broken ergodicity in the simulation of spin systems*, Physica A **247**, 553 (1997).

- [9011] Y. Okamoto, *Protein folding problem as studied by new simulation algorithms*, Recent Res. Devel. in Pure and Applied Chem. **2**, 1 (1998).
- [9012] J.P. Dal Molin, M.A.A. da Silva, I.R. da Silva and A. Caliri, *Nonextensive statistical mechanics applied to protein folding problem: kinetic aspects*, Braz. J. Phys. **39**, 435-438 (2009).
- [9013] J.P. Dal Molin, M.A.A. da Silva and A. Caliri, *Effect of local thermal fluctuations on the folding kinetics: A study from the perspective of nonextensive statistical mechanics*, Phys. Rev. E **84**, 041903 (2011) (10 pages).
- [9014] J.P. Dal Molin and A. Caliri, *The early events of the protein folding process*, Special issue *Quantum Nanobiology and Biophysical Chemistry*, commemorating 60th Anniversary of Henrik Bohr, Current Physical Chemistry (Bentham Science, 2012).
- [9015] J.P. Dal Molin, *O papel do código estereoquímico e das flutuações térmicas locais no processo de folding de proteínas*, Doctor Thesis (University of Sao Paulo, Ribeirao Preto, 2011).
- [9016] J.P. Dal Molin and A. Caliri, *Entropic formulation for the protein folding process: hydrophobic stability correlates with folding rates*, Physica A **490**, 1111-1124 (2018).
- [9017] A. Caliri e J.P. Dal Molin, *Folding de proteínas - Os fatores determinantes do processo de busca pela estrutura nativa de pequenas proteínas globulares*, preprint (2018).
- [9018] H. Nishimori and J. Inoue, *Convergence of simulated annealing using the generalized transition probability*, J. Phys. A **31**, 5661 (1998).
- [9019] J.I. Inoue and K. Tabushi, *A generalization of the deterministic annealing EM algorithm by means of non-extensive statistical mechanics*, Int. J. Mod. Phys. B **17**, 5525 (2003).
- [9020] A. Linhares and J.R.A. Torrao, *Microcanonical optimization applied to the traveling salesman problem*, Int. J. Mod. Phys. C **9**, 133 (1998).
- [9021] R.F. Gutterres, M. A. de Menezes, C.E. Fellows and O. Dulieu, *Generalized simulated annealing method in the analysis of atom-atom interaction*, Chem. Phys. Lett. **300**, 131 (1999).
- [9022] U.H.E. Hansmann, F. Eisenmenger and Y. Okamoto, *Stochastic dynamics in a new generalized ensemble*, Chem. Phys. Lett. **297**, 374 (1998).
- [9023] J.L. Du, *Power-law distributions and fluctuation-dissipation relation in the stochastic dynamics of two-variable Langevin equations*, J. Stat. Mech. P02006 (2012) (12 pages).
- [9024] I. Andricioaei, *Computer methods for enhanced sampling and global minimization for biomolecular systems*, PhD Thesis (Boston University, 1999).
- [9025] T. Morishita and M. Mikami, *Enhanced sampling via strong coupling to a heat bath: Relationship between Tsallis and multicanonical algorithms*, J. Chem. Phys. **127**, 034104 (2007) (7 pages).
- [9026] J.E. Straub and I. Andricioaei, *Computational methods inspired by Tsallis statistics: Monte Carlo and molecular dynamics algorithms for the simulation of classical and quantum systems*, in *Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 179 (1999).
- [9027] J. E. Straub and I. Andricioaei, *Exploiting Tsallis statistics*, in *Algorithms for Macromolecular Modeling*, eds. P. Deuffhard, J. Hermans, B. Leimkuhler, A. Mark, S. Reich and R. D. Skeel, *Lecture Notes in Computational Science and Engineering* **4**, 189 (Springer-Verlag, Berlin, 1998).
- [9028] I. Andricioaei and J. E. Straub, *Computational methods for the simulation of classical and quantum many body systems sprung from the non-extensive thermostatics*, in *Nonextensive Statistical Mechanics and Its Applications*, eds. S. Abe and Y. Okamoto, *Series Lecture Notes in Physics* (Springer-Verlag, Heidelberg, 2001) [ISBN 3-540-41208-5].
- [9029] J.E. Straub, *Protein folding and optimization algorithms*, in *The Encyclopedia of Computational Chemistry*, eds. P.v. R. Schleyer, N.L. Allinger, T. Clark, J. Gasteiger, P.A. Kollman, H.F. Schaefer III and P.R. Schreiner, Vol. **3** (John Wiley and Sons, Chichester, 1998) p. 2184.
- [9030] I. Andricioaei and J.E. Straub, *Simulated annealing methods in protein folding*, in *Encyclopedia of Optimization* (Kluwer Academic Publishers), in press.
- [9031] I. Andricioaei, J. Straub and M. Karplus, *Simulation of quantum systems using path integrals in a generalized ensemble*, Chem. Phys. Lett. **346**, 274 (2001).
- [9032] J. Kim, T. Keyes and J.E. Straub, *Generalized replica exchange method*, J. Chem. Phys. **132**, 224107 (2010).
- [9033] J. Kim, T. Keyes, and J.E. Straub, *Communication: Iteration-free, weighted histogram analysis method in terms of intensive variables*, J. Chem. Phys. **135**, 061103 (2011) (4 pages).
- [9034] R.K. Niven, *q-exponential structure of arbitrary-order reaction kinetics*, Chem. Engineering Science **61**, 3785-3790 (2006).
- [9035] T. Kadowaki and H. Nishimori, *Quantum annealing in the transverse Ising model*, Phys. Rev. E **58**, 5355 (1998).

- [9036] J.P.K. Doye, *Thermodynamics and the global optimization of Lennard-Jones clusters*, J. Chem. Phys. **109**, 8143 (1998).
- [9037] J.P.K. Doye and C.P. Massen, *Characterization of the network topology of the energy landscapes of atomic clusters*, J. Chem. Phys. **122**, 084105 (2005).
- [9038] U.H.E. Hansmann and Y. Okamoto, *Tackling the protein folding problem by a generalized-ensemble approach with Tsallis statistics*, in *Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 187 (1999).
- [9039] M.A. Moret, P.M. Bisch, K.C. Mundim and P.G. Pascutti, *New stochastic strategy to analyze helix folding*, Biophys. J. **82**, 1123-1132 (2002).
- [9040] M.A. Moret, P.G. Pascutti, P.M. Bisch, M.S.P. Mundim and K.C. Mundim, *Classical and quantum conformational analysis using Generalized Genetic Algorithm*, Physica A **363**, 260-268 (2006).
- [9041] J. Lassig and K.H. Hoffmann, *On the structure of a best possible crossover selection strategy in genetic algorithms*, eds. M. Bramer, R. Ellis and M. Petridis, Research and Development in Intelligent Systems XXVI - Incorporating Applications and Innovations in Intelligent Systems XVII, 263-276 (2010).
- [9042] C.E.M. Hill and P.G. Pascutti, *Implementacao de novos metodos estocasticos no estudo estrutural de proteinas e complexos proteicos*, preprint (Instituto de Biofisica Carlos Chagas Filho, Universidade Federal do Rio de Janeiro, 2006).
- [9043] J.E.S. de Cursi and M.B.D.S. Cortes, *Approximate Gaussian distributions in optimization by random perturbation methods*, Appl. Numer. Math. **30**, 23 (1999).
- [9044] U.H.E. Hansmann, Y. Okamoto and J.N. Onuchic, *The folding funnel landscape of the peptide met-enkephalin*, Proteins **34**, 472 (1999).
- [9045] U.H.E. Hansmann and Y. Okamoto, *New Monte Carlo algorithms for protein folding*, Curr. Opin. Struc. Biol. **9**, 177 (1999).
- [9046] Y. Okamoto and U.H.E. Hansmann, *Protein folding simulations by a generalized-ensemble algorithm based on Tsallis statistics*, in *Nonextensive Statistical Mechanics and Its Applications*, eds. S. Abe and Y. Okamoto, Series *Lecture Notes in Physics* (Springer-Verlag, Heidelberg, 2001) [ISBN 3-540-41208-5].
- [9047] Y. Pak and S.M. Wang, *Folding of a 16-residue helical peptide using molecular dynamics simulation with Tsallis effective potential*, J. Chem. Phys. **111**, 4359 (1999).
- [9048] G. Gielis and C. Maes, *A simple approach to time-inhomogeneous dynamics and applications to (fast) simulated annealing*, J. Phys. A **32**, 5389 (1999).
- [9049] M. Iwamatsu and Y. Okabe, *Reducing quasi-ergodicity in a double well potential by Tsallis Monte Carlo simulation*, Physica A **278**, 414 (2000).
- [9050] M. Iwamatsu, *Generalized evolutionary programming with Levy-type mutation*, Comp. Phys. Comm. **147**, 729 (2002).
- [9051] Y. Xiang, D.Y. Sun and X.G. Gong, *Generalized simulated annealing studies on structures and properties of Ni_n ($n = 2 - 55$) clusters*, J. Phys. Chem. A **104**, 2746 (2000).
- [9052] Y. Xiang and X.G. Gong, *Efficiency of generalized simulated annealing*, Phys. Rev. E **62**, 4473 (2000).
- [9053] Y.Q. Gao and L. Yang, *On the enhanced sampling over energy barriers in molecular dynamics simulation*, J. Chem. Phys. **125**, 114103 (2006).
- [9054] D. Fuks, K.C. Mundim, V. Liubich and S. Dorfman, *Non-empirical simulations of $\Sigma_3 < 111 >$ tungsten grain boundary with boron atoms*, preprint (1999).
- [9055] S. Dorfman, V. Liubich, D. Fuks and K.C. Mundim, *Simulations of decohesion and slip of the $\Sigma_3 < 111 >$ grain boundary in tungsten with non-empirically derived interatomic potentials: The influence of boron interstitials*, J. Phys.: Condens. Matter **13**, 6719 (2001).
- [9056] F. Calvo and F. Spiegelmann, *Mechanisms of phase transitions in sodium clusters: From molecular to bulk behavior*, J. Chem. Phys. **112**, 2888 (2000).
- [9057] U.H.E. Hansmann, *Protein energy landscapes as studied by a generalized-ensemble approach with Tsallis statistics*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13**, Number 3, 507 (Pergamon-Elsevier, Amsterdam, 2002).
- [9058] V.R. Ahon, F.W. Tavares and M. Castier, *A comparison of simulated annealing algorithms in the scheduling of multiproduct serial batch plants*, Brazilian Journal of Chemical Engineering, **17**, 199 (2000).
- [9059] A. Fachat, K.H. Hoffmann and A. Franz, *Simulated annealing with threshold accepting or Tsallis statistics*, Comput. Phys. Commun. **132**, 232 (2000).
- [9060] A. Franz and K.H. Hoffmann, *Best possible strategy for finding ground states*, Phys. Rev. Lett. **86**, 5219 (2001).

- [9061] A. Franz and K.H. Hoffmann, *Optimal annealing schedules for a modified Tsallis statistics*, J. Comput. Phys. **176**, 196 (2002).
- [9062] T. Takaishi, *Generalized ensemble algorithm for $U(1)$ gauge theory*, Nucl. Phys. B (Proc. Suppl.) **106**, 1091 (2002).
- [9063] T. Munakata and Y. Nakamura, *Temperature control for simulated annealing*, Phys. Rev. E **64**, 046127 (2001).
- [9064] D. Fuks, S. Dorfman, K.C. Mundim and D.E. Ellis, *Stochastic molecular dynamics in simulations of metalloid impurities in metals*, Int. J. Quant. Chem. **85**, 354 (2001).
- [9065] E.H. Shiguemori, H.F. de Campos Velho, J.D.S. da Silva and F.M. Ramos, *A parametric study of a new regularization operator: The non-extensive entropy*, communication at the 4th International Conference on Inverse Problems in Engineering, Rio de Janeiro, May 2002.
- [9066] E. Chicurel-Uziel, *Unit step and impulse function equations to simplify the solution of engineering problems*, Journal of Information Sciences and Computing Technologies **7** (1), 654-666 (2018).
- [9067] Y. Pak, S. Jang and S. Shin, *Prediction of helical peptide folding in an implicit water by a new molecular dynamics scheme with generalized effective potential*, J. Chem. Phys. **116**, 6831 (2002).
- [9068] S. Jang, S. Shin and Y. Pak, *Replica-exchange method using the generalized effective potential*, Phys. Rev. Lett. **91**, 058305 (2003).
- [9069] W.J. Son, S. Jang, Y. Pak and S. Shin, *Folding simulations with novel conformational search method*, J. Chem. Phys. **126**, 104906 (2007).
- [9070] W. J. Son, S. Jang and S. Shin, *Simulated Q -annealing: conformational search with an effective potential*, J. Molecular Modeling **18** (1), 213-220 (2012).
- [9071] A.F.A. Vilela, J.J. Soares Neto, K.C. Mundim, M.S.P. Mundim and R. Gargano, *Fitting potential energy surface for reactive scattering dynamics through generalized simulated annealing*, Chem. Phys. Lett. **359**, 420 (2002).
- [9072] M.A.M. Filho, J.D.L. Dutra, G.B. Rocha, A.M. Simas and R.O. Freire, *Semiempirical quantum chemistry model for the lanthanides: RM1 (Recife Model 1) parameters for Dysprosium, Holmium and Erbium*, Plos One **9** (1), e86376 (2014) (7 pages).
- [9073] T.W. Whitfield, L. Bu and J.E. Straub, *Generalized parallel sampling*, Physica A **305**, 157 (2002).
- [9074] L.E. Espinola Lopez, R. Gargano, K.C. Mundim and J.J. Soares Neto, *The Na + HF reactive probabilities calculations using two different potential energy surfaces*, Chem Phys. Lett. **361**, 271 (2002).
- [9075] A.F.A. Vilela, R. Gargano and P.R.P. Barreto, *Quasi-classical dynamical properties and reaction rate of the Na+HF system on two different potential energy surfaces*, Int. J. Quant. Chem. **103**, 695 (2005).
- [9076] Z.X. Yu and D. Mo, *Generalized simulated annealing algorithm applied in the ellipsometric inversion problem*, Thin Solid Films **425**, 108 (2003).
- [9077] I. Fukuda and H. Nakamura, *Deterministic generation of the Boltzmann-Gibbs distribution and the free energy calculation from the Tsallis distribution*, Chem. Phys. Lett. **382**, 367 (2003).
- [9078] I. Fukuda and H. Nakamura, *Efficiency in the generation of the Boltzmann-Gibbs distribution by the Tsallis dynamics reweighting method*, J. Phys. Chem. B **108**, 4162 (2004).
- [9079] I. Fukuda, M. Horie and H. Nakamura, *Deterministic design for Tsallis distribution sampling*, Chem. Phys. Lett. **405**, 364 (2005).
- [9080] F.J. Alonso, M.C. Bueso and J.M. Angulo, *Dependence assessment based on generalized relative complexity: Application to sampling network design*, Methodol. Comput. Appl. Probab. (2016) (13 pages), in press, doi: 10.1007/s11009-016-9495-6
- [9081] I. Fukuda and H. Nakamura, *Construction of an extended invariant for an arbitrary ordinary differential equation with its development in a numerical integration algorithm*, Phys. Rev. E **73**, 026703 (2006) (14 pages).
- [9082] I. Fukuda and K. Moritsugu, *Double density dynamics: realizing a joint distribution of a physical system and a parameter system*, J. Phys. A: Math. Theor. **48**, 455001 (2015) (28 pages), doi:10.1088/1751-8113/48/45/455001
- [9083] P.H. Nguyen, E. Mittag, A.E. Torda and G. Stock, *Improved Wang-Landau sampling through the use smoothed potential-energy surfaces*, J. Chem. Phys. **124**, 154107 (2006).
- [9084] Z.N. Ding, D.E. Ellis, E. Sigmund, W.P. Halperin and D.F. Shriver, *Alkali-ion kryptand interactions and their effects on electrolyte conductivity*, Phys. Chem. Chem. Phys. **5**, 2072 (2003).
- [9085] D. Yu, C. Rong, T. Lu, P. Geerlings, F. De Proft, M. Alonso and S. Liu, *Switching between Huckel and Mobius aromaticity: a density functional theory and information-theoretic approach study*, Phys. Chem. Chem. Phys. **22**, 4715-4730 (2020).

- [9086] M. Sekania, W.H. Appelt, D. Benea, H. Ebert, D. Vollhardt and L. Chioncel, *Scaling behavior of the Compton profile of alkali metals*, Physica A **489**, 18-27 (2018), doi: dx.doi.org/10.1016/j.physa.2017.07.018
- [9087] J.A.E. Bonart, W.H. Appelt, D. Vollhardt and L. Chioncel, *Scaling behavior of the momentum distribution of a quantum Coulomb system in a confining potential*, Phys. Rev. B **102**, 024306 (2020).
- [9088] A.D. Anastasiadis and G.D. Magoulas, *Nonextensive statistical mechanics for hybrid learning of neural networks*, Physica A **344**, 372 (2004).
- [9089] A.D. Anastasiadis and G.D. Magoulas, *Nonextensive entropy and regularization for adaptive learning*, in Proceedings of the IEEE International Joint Conference on Neural Networks (IJCNN-04) (Budapest, 2004), in press.
- [9090] A.D. Anastasiadis, *Cooling hybrid learning for neural networks*, Proceedings of the International Summer School on Complex Systems (June 2005, Santa Fe Institute, NM).
- [9091] A.D. Anastasiadis, L.D. Costa, C.P. Gonzales, C. Honey, M.I. Szeliga and T. Terhesiu, *Measures of structural complexity in networks*, Proceedings of the International Summer School on Complex Systems (June 2005, Santa Fe Institute, NM).
- [9092] A.D. Anastasiadis and G.D. Magoulas, *Evolving stochastic learning algorithm based on Tsallis entropic index*, Eur. Phys. J. B **50**, 277-283 (2006).
- [9093] M. Sacanamboy, F. Bolanos and A. Bernal, *A comparison among three entropy alternatives for the population-based incremental learning algorithm*, WMSCI 2018 - 22nd World Multi-Conference on Systemics, Cybernetics and Informatics, Proceedings **1**, Code 140272, 25-29 (2018).
- [9094] A.D. Anastasiadis, *Neural network training and applications using biological data*, Doctor Thesis (School of Computer Science and Information Systems, University of London, December 2005).
- [9095] G.D. Magoulas and A. Anastasiadis, *Approaches to adaptive stochastic search based on the nonextensive q-distribution*, Int. J. Bifurcation and Chaos **16**, 2081-2091 (2006).
- [9096] G.D. Magoulas and A. Anastasiadis, *A nonextensive probabilistic model for global exploration of the search space*, ICNAAM Extended Abstracts 1-4 (Wiley-VCH, Weinheim, 2005).
- [9097] A. Anastasiadis and D. Kalamatianos, *Coating weight estimation through nonextensive statistical analysis*, communicated at the 7th International Conference in Nonextensive Statistical Mechanics: Foundations and Applications (27-31 October 2008, Iguacu-Brazil).
- [9098] D. Kalamatianos, A.D. Anastasiadis and P. Liatsis *A nonextensive method for spectroscopic data analysis with artificial neural networks*, Braz. J. Phys. **39**, 488-494 (2009).
- [9099] Y. Koveos, A. Anastasiadis, G. Georgoulas, A. Tzes and D. Tsahalis, *An adaptive particle swarm optimization method for control of a high frequency active electro-hydraulic pump system*, preprint (2006).
- [9100] A.D. Anastasiadis, G.D. Magoulas, G. Georgoulas and A. Tzes, *Nonextensive particle swarm optimization methods*, communicated at the Conference on Numerical Analysis NumAn (Kalamata, September 3-7 2007).
- [9101] V.P. Kulikov, A.S. Kazanbayeva and K.E. Iklasseva, *The study of entropy approach the characteristics of the training and certification system*, The Bulletin of KazATC **110** (3), 215-223 (2019).
- [9102] P.S.S. Rodrigues and G.A. Giraldi, *Fourier analysis and q-Gaussian functions: analytical and numerical Results*, Theoretical and Applied Informatics **27** (2), 16-44 (2016); 1605.00452 [cs.CV].
- [9103] J.J. Deng, H.S. Chen, C.L. Chang and Z.X. Yang, *A superior random number generator for visiting distributions in GSA*, Int. J. Computer Mathematics **81**, 103-120 (2004).
- [9104] J.J. Deng, C.L. Chang and Z.X. Yang, *An exact random number generator for visiting distribution in GSA*, I. J. Simulation **6**, 54-61 (2005).
- [9105] J.G. Kim, Y. Fukunishi, A. Kidera and H. Nakamura, *Stochastic formulation of sampling dynamics in generalized ensemble methods*, Phys. Rev. E **69**, 021101 (2004).
- [9106] J.G. Kim, Y. Fukunishi, A. Kidera and H. Nakamura, *Generalized simulated tempering realized on expanded ensembles of non-Boltzmann weights*, J. Chem. Phys. **121**, 5590 (2004).
- [9107] I. Fukuda and H. Nakamura, *Molecular dynamics sampling scheme realizing multiple distributions*, Phys. Rev. E **71**, 046708 (2005).
- [9108] R. Nakamura, R. Tadokoro, E. Yamagata, Y. Kondo, K. Hara, H. Kataoka and N. Inoue, *Pseudo-outlier synthesis using q-Gaussian distributions for out-of-distribution detection*, IEEE (2024).
- [9109] A. Dall' Igna Jr., R.S. Silva, K.C. Mundim and L.E. Dardenne, *Performance and parameterization of the algorithm Simplified Generalized Simulated Annealing*, Genetics and Molecular Biology **27**, 616 (2004).
- [9110] D.F.S. Machado, V.H.C. Silva, C.S. Esteves, R. Gargano, L.G.M. Macedo, K.C. Mundim and H.C.B. de Oliveira, *Fully relativistic rovibrational energies and spectroscopic constants of the lowest $X:(1)0_g^+$, $A':(1)2_u^-$, $A:(1)1_u^-$, $B':(1)0_u^+$ and $B':(1)0_u^-$ states of molecular chlorine*, J. Mol. Model. **18**, 4343-4348 (2012).

- [9111] D.F.S. Machado, R.A.L. Silva, A.P. de Oliveira, V.H. Carvalho-Silva, R. Gargano, L. Ribeiro and H.C.B. de Oliveira, *A novel analytical potential function for dicationic diatomic molecular systems based on deformed exponential function*, J. Mol. Model. **23**, 182 (2017), doi: 10.1007/s00894-017-3339-3
- [9112] Y.G. Spill, G. Bouvier and M. Nilges, *A convective replica-exchange method for sampling new energy basins*, J. Computational Chem., **34**, 132-140 (2013).
- [9113] E. Farkash, *Structural prediction of flexible molecular interactions*, Doctor Thesis (Tel Aviv University, 2012).
- [9114] E.R. Correia, V.B. Nascimento, C.M.C. Castilho, A.S.C. Esperidiao, E.A. Soares and V.E. Carvalho, *The generalized simulated annealing algorithm in the low energy diffraction search problem*, J. Phys.: Cond. Matt. **17**, 1-16 (2005).
- [9115] M. Habeck, W. Rieping and M. Nilges, *A replica-exchange Monte Carlo scheme for Bayesian data analysis*, Phys. Rev. Lett. **94**, 018105 (2005).
- [9116] M. A. Moret, P. M. Bisch, E. Nogueira Jr. and P. G. Pascutti, *Stochastic strategy to analyze protein folding*, Physica A **353**, 353 (2005).
- [9117] M.C.R. Melo, R.C. Bernardi, T.V.A. Fernandes and P.G. Pascutti, *GSAFold: A new application of GSA to protein structure prediction*, Proteins 2305-2310 (2012).
- [9118] R.C. Bernardi, M.C.R. Melo and K. Schulten, *Enhanced sampling techniques in molecular dynamics simulations of biological systems*, Biochimica et Biophysica Acta **1850**, 872-877 (2015).
- [9119] Y. Xiang, S. Gubian, B. Suomela and J. Hoeng, *Generalized simulated annealing function*, The R Journal (2012), in press.
- [9120] J.M. Munoz, R. Sawant, A. Maffei, X. Wang, and G. Barontini, *Realizing the Frenkel-Kontorova model with Rydberg-dressed atoms*, preprint (2020), 2006.16304 [cond-mat.quant-gas].
- [9121] R. Sawant, *A protocol to create a multi-particle entangled state for quantum-enhanced sensing*, preprint (2022), 2205.13591 [quant-ph].
- [9122] Y. Xiang, S. Gubian, B. Suomela and J. Hoeng, *GenSA: Generalized Simulated Annealing Function* (2019).
- [9123] V.A. Legkokonets, A.A. Vasilenko and M.M. Khasanov, *Selection of optimal developing strategy for a group of prospects in terms of geological uncertainties and infrastructure constraints*, OnePetro SPE-201985-MS (2020), doi: 10.2118/201985-MS
- [9124] Y. Dagasas, P. Renard, J. Straubhaar, O. Erten and E. Topal, *Pilot point optimization of mining boundaries for lateritic metal deposits: Finding the trade-off between dilution and ore loss*, Natural Resources Research (2018), doi: 10.1007/s11053-018-9380-9
- [9125] Y. Dagasas, *Development of a grade control technique optimizing dilution and ore loss trade-off in lateritic bauxite deposits*, Doctor Thesis (2018, Western Australian School of Mines).
- [9126] M.R. Guevara, D. Hartmann and M. Mendoza, *Diverse: an R package to analyze diversity in complex systems*, The R Journal **8** (2), 60-78 (2016).
- [9127] Y. Xiang, S. Gubian, B. Suomela and J. Hoeng, *Generalized simulated annealing for efficient global optimization: The GenSA Package for R*, The R Journal **5** (1), 13-29 (2013).
- [9128] Y. Xiang, S. Gubian, B. Suomela and J. Hoeng, *Generalized simulated annealing for global optimization: The GenSA package*, R Journal **5** (1) (2013).
- [9129] B. Mo, Z. Ma, H.N. Koutsopoulos and J. Zhao, *Calibrating path choices and train capacities for urban rail transit simulation models using smart card data*, Journal of Advanced Transportation, ID 5597130 (2021).
- [9130] C. Bergmeir, D. Molina and J.M. Benitez, *Memetic algorithms with local search chains in R: The Rmalschains package*, J. Statistical Software **75** (4) (2016), doi: 10.18637/jss.v075.i04
- [9131] L. Bagnato, L. De Capitani, A. Mazza and A. Punzo, *SDD: An R package for serial dependence diagrams*, J. Statistical Software **64**, Issue CODESNIPPET 1, 1-19 (2015).
- [9132] A. Gupta, B. Suri, V. Kumar, S. Misra, T. Blazauskas and R. Damasevicius, *Software code smell prediction model using Shannon, Renyi and Tsallis entropies*, Entropy **20**, 372 (2018), doi: 10.3390/e20050372
- [9133] A. Redmund, *La surmortalite des jeunes adultes: realite individuelle ou artefact des inegalites sociales?*, Rapport, Universite de Geneve, I-DEMO et NCCR LIVES (Avril 2014).
- [9134] Y. Inagaki, *Generalized simulated annealing algorithms using Tsallis statistics: Application to the discrete-time optimal growth problem*, **37** (2), 305-315 (2007).
- [9135] Z. Huang and R. Xiao, *An emergent computation approach to the polygon layout problem with performance constraints*, Physica A **392**, 5074-5088 (2013).
- [9136] A. Moreira de Cerqueira Sobrinho, M.D. de Andrade, M.A. Chaer Nascimento and L.A.C. Malbouisson, *Multi-reference Hartree-Fock configuration interaction calculations of LiH and Be using a new double-zeta atomic base*, J. Mol. Model **20**, 2382 (2014) (10 pages), doi: 10.1007/s00894-014-2382-6

- [9137] C.M. Zohner, L. Mo, T.A.M. Pugh, J.F. Bastin and T.W. Crowther, *Interactive climate factors restrict future increases in spring productivity of temperate and boreal trees*, *Global Change Biology* (2020) (14 pages).
- [9138] M. Fleischer, *Scale invariance and symmetry relationships in non-extensive statistical mechanics*, preprint (2005) [cond-mat/0501293].
- [9139] R. Gangal and P. Sharma, *Human pol II promoter prediction: Time series descriptors and machine learning*, *Nucleic Acids Research* **33**, 1332 (2005).
- [9140] W.C. de Almeida Costa, S.L. do Nascimento Cunha Costa, F.M. de Assis and B.G. Aguiar Neto, *Clasificacion de sinais de vozes saudaveis e patologicas por meio da combinacao entre medidas da analise nao linear e codificacao preditiva linear*, *Brazilian Journal Biomedical Engineering* **29** (1), 3-14 (2013), <http://dx.doi.org/10.4322/rbeb.2013.010>
- [9141] H.B. Liu and K.D. Jordan, *On the convergence of parallel tempering Monte Carlo simulations of LJ(38)*, *J. Phys. Chem. A* **109**, 5203 (2005).
- [9142] H.B. Liu and K.D. Jordan, *On the convergence of a hybrid parallel tempering Tsallis statistics Monte Carlo algorithm*, Abstracts of papers of the American Chem. Soc. **229**, U788, 216-COMP Part 1 (2005).
- [9143] Q. Xu, S.Q. Bao, R. Zhang, R.J. Hu, M. Sbert, *Adaptive sampling for Monte Carlo global illumination using Tsallis entropy*, *Computational Intelligence and Security, Part 2, Proceedings Lecture Notes in Artificial Intelligence* **3802**, 989-994 (Springer-Verlag, Berlin, 2005).
- [9144] J. Zimmert and Y. Seldin, *An optimal algorithm for stochastic and adversarial bandits*, AISTATS 2019 - 22nd International Conference on Artificial Intelligence and Statistics, code 159692 (2019).
- [9145] E. Amid, M.K. Warmuth and S. Srinivasan, *Two-temperature logistic regression based on the Tsallis divergence*, AISTATS 2019 - 22nd International Conference on Artificial Intelligence and Statistics, code 159692 (2019), 1705.07210 [cs.LG].
- [9146] E. Amid, *Tempered Bregman divergence for continuous and discrete time mirror descent and robust classification*, Doctor Thesis (Computer Science, University of California, Santa Cruz, 2020).
- [9147] E. Amid, F. Nielsen, R. Nock and M.K. Warmuth, *The Tempered Hilbert simplex distance and Its application to non-linear embeddings of TEMs*, preprint (2023), 2311.13459 [cs.LG].
- [9148] J. Hannig, E.K.P. Chong and S.R. Kulkarni, *Relative frequencies of generalized simulated annealing*, *Mathematics of Operation Research* **31**, 199-216 (2006).
- [9149] W. Thistleton, J.A. Marsh, K. Nelson and C. Tsallis, *Generalized Box-Muller method for generating q-Gaussian random deviates*, *IEEE Transactions on Information Theory* **53**, 4805-4810 (2007).
- [9150] K.P. Nelson and W. Thistleton, *Comments on "Generalized Box-Muller method for generating q-Gaussian random deviates"*, *IEEE Transactions on Information Theory*, IT-20-0633 (2021), in press.
- [9151] M. Rezaeimozafar, E. Barrett, R.F.D. Monaghan and M. Duffy, *A stochastic method for behind-the-meter PV-battery energy storage systems sizing with degradation minimization by limiting battery cycling*, *Journal of Energy Storage* **86**, 111199 (2024).
- [9152] A. Cheng, Z. Wang, Y. Li and J. Cheng, *HPN: Personalized federated hyperparameter optimization*, preprint (2023), 2304.05195 [cs.LG].
- [9153] O. Parkash and P. Kakkar, *An Algorithm to Generate Probabilities with Specified Entropy*, *Applied Mathematics* **6**, 1968-1976 (2015).
- [9154] D. Ghoshdastidar, A. Dukkipati and S. Bhatnagar, *Smoothed functional algorithms for stochastic optimization using q-Gaussian distributions*, *ACM Transactions on Modeling and Computer Simulation* **24** (3), 17 (2014) (26 pages).
- [9155] E.L de Santa Helena, C.M. Nascimento and G.J.L. Gerhardt, *An alternative way to characterize a q-Gaussian distribution by a robust heavy tail measurement*, *Physica A* **435**, 44-50 (2015).
- [9156] W.S. de Lima and E.L de Santa Helena, *qGaussian: Tools to explore applications of Tsallis statistics*, preprint (2017), 1703.06172 [physics.data-an].
- [9157] S.A. Shaikh and H. Kitagawa, *Continuous outlier detection on uncertain data streams*, preprint (Tsukuba University, 2014).
- [9158] E. Hoffmann, *Verbesserung der Quellentrennung bei mehrkanaligen Audiosignalmischungen mittels neuartiger Ansätze zur Permutationskorrektur und zur Zeit-Frequenz-Maskierung*, Doctor Thesis (Fakultat IV - Elektrotechnik und Informatik der Technischen Universität Berlin, 2013) (173 pages).
- [9159] T. Schanze, *Exact Tsallis random number generator*, preprint (2006).
- [9160] T. Schanze, *An exact D-dimensional Tsallis random number generator for generalized simulated annealing*, *Comp. Phys. Comm.* **175**, 708-712 (2006).
- [9161] R.C. Venkatesan and A. Plastino, *Generalized statistics framework for rate distortion theory*, *Physica A* **388**, 2337-2353 (2009).

- [9162] A.S. Venkatesan and L. Parthiban, *A novel nature inspired fuzzy Tsallis entropy segmentation of magnetic resonance images*, NeuroQuantology **12** (2), 221-229 (2014).
- [9163] C. Tsallis, *Computational applications of nonextensive statistical mechanics*, J. Comput. Appl. Math. **227**, 51-58 (2009).
- [9164] J.S. Liu, A.J. Caley, A.J. Waddie and M.R. Taghizadeh, *Comparison of simulated quenching algorithms for design of diffractive optical elements*, Applied Optics **47**, 807-816 (2008).
- [9165] S. Sudo, T. Ohtomo, M. Iwamatsu, T. Osada and K. Otsuka, *Analysis of molecular dynamics of colloidal particles in transported dilute samples by self-mixing laser Doppler velocimetry*, Applied Optics **51** (3), 370-377 (2012).
- [9166] G. Guedes, A.C. Goncalves and D.A.P. Palma, *The Doppler broadening function using the Kaniadakis distribution*, Annals Nuclear Energy **110**, 453-458 (2017).
- [9167] G. Guedes, D.A.P. Palma and A.C. Goncalves, *A deformed Doppler Broadening Function considering the Tsallis speed distribution*, Annals of Nuclear Energy **128**, 414-421 (2019).
- [9168] J.A.R. Cunha, G. Guedes, D.A.P. Palma and A.J.M. Antunes, *Asymptotic expressions for the Tsallis Doppler broadening function*, Annals of Nuclear Energy **206**, 110613 (2024).
- [9169] J.A.R. Cunha, A.J.M. Antunes, G.G. de Almeida, M.V. da Silva, L.D. Moreira, A.P. Resende, D.A.P. Palma and G.L. de Stefani, *Calculo da funcao $J(\xi, \beta)$ considerando uma formulacao analitica Q-deformada para a funcao de alargamento Doppler*, Semana Nacional de Engenharia Nuclear e da Energia e Ciencias das Radiacoes (Belo Horizonte, 2024).
- [9170] G. Guedes and D.A.P. Palma, *Quasi-Maxwellian interference term functions*, Annals of Nuclear Energy **151**, 107914 (2021).
- [9171] W.V. de Abreu, A.C. Goncalves, A.S. Martinez, *Analytical solution for the Doppler broadening function using the Kaniadakis distribution*, Annals Nuclear Energy **126**, 262-268 (2019).
- [9172] W.V. de Abreu, A.C. Goncalves and A.S. Martinez, **New analytical formulations for the Doppler broadening function and interference term based on Kaniadakis distributions**, Annals of Nuclear Energy **135**, 106960 (2020).
- [9173] W.V. de Abreu, *Solucao analitica da funcao de alargamento Doppler usando a distribuicao de Kaniadakis*, Doctor Thesis (COPPE, Universidade Federal do Rio de Janeiro, Brazil, 2020).
- [9174] A.J.M. Antunes, A.C. Goncalves and A.S. Martinez, *Analytical solution for the Doppler Broadening Function using the Tsallis distribution*, Progress in Nuclear Energy **144**, 104071 (2022).
- [9175] M.V. Silva, G.L. de Stefani, G. Guedes and D.A.P. Palma, *Effective medium temperature for calculating the deformed Doppler broadening function considering the Tsallis distribution*, Annals of Nuclear Energy **194**, 110110 (2023).
- [9176] S. Sudo, T. Ohtomo and K. Otsuka, *Observation of motion of colloidal particles undergoing flowing Brownian motion using self-mixing laser velocimetry with a thin-slice solid-state laser*, Applied Optics **54** (22), 6832-6840 (2015).
- [9177] N. Breckwoldt, S.K. Son, T. Mazza, A. Rorig, R. Boll, M. Meyer, A.C. LaForge, D. Mishra, N. Berrah and R. Santra, *Machine-learning calibration of intense x-ray free-electron-laser pulses using Bayesian optimization*, Phys. Rev. Res. **5**, 023114 (2023).
- [9178] A. Luis, I. Gonzalo and M. Porras, *Majorization applied to diffraction*, Optics Letters **41** (7), 1624-1627 (2016).
- [9179] Y. Zhou and J.L. Du, *The anomalous distributions and Soret coefficient in a nonequilibrium colloidal system*, Fluct. Noise Lett. (2016), doi: 10.1142/S0219477516500012
- [9180] F. Martinez-Pedrero, J. Benet, J.E.F. Rubio, E. Sanz, R.G. Rubio and F. Ortega, *Field-induced sublimation in perfect two-dimensional colloidal crystals*, Phys. Rev. E **89**, 012306 (2014) (7 pages).
- [9181] S. Kiani and F. Taherkhani, *Free energy, configurational and nonextensivity of Tsallis entropy with the size and temperature in colloidal silver nanoparticles in [EMim][PF6] ionic liquid*, J. Molecular Liquids **249**, 1012-1019 (2018).
- [9182] W. Guo and S. Cui, *A q-parameterized deterministic annealing EM algorithm based on nonextensive statistical mechanics*, IEEE Transactions on Signal Processing **56**, 3069-3080 (2008).
- [9183] G.H. Jajamovich and X.D. Wang, *Maximum-parsimony haplotype inference based on sparse representations of genotypes*, IEEE Transactions on Signal Processing **60** (4), 2013-2023 (2012).
- [9184] Q. Lin and C. Ou, *Tsallis entropy and the long-range correlation in image thresholding*, Signal Processing **92**, 2931-2939 (2012).
- [9185] Y. Wang, G. Zhang and X. Zhang, *Multilevel image thresholding using Tsallis entropy and cooperative pigeon-inspired optimization bionic algorithm*, Journal of Bionic Engineering **16** (5), 954-964 (2019).

- [9186] A. Wunna, M.K. Naik, R. Panda, B. Jena and A. Abraham, *An adaptive Harris hawks optimization technique for two dimensional grey gradient based multilevel image thresholding*, Applied Soft Computing Journal **95**, 106526 (2020).
- [9187] I. Kulikovskikh and T. Legovic, *Step size self-adaptation for SGD*, preprint (2021).
- [9188] U. Mlakar, B. Potocnik and J. Brest, *A hybrid differential evolution for optimal multilevel image thresholding*, Expert Systems With Applications **65**, 221-232 (2016).
- [9189] S. Sarkar and S. Das, *Multi-level image thresholding based on 2D histogram and maximum Tsallis entropy - A differential evolution approach*, IEEE Transactions on Image Processing **22** (12), 4788-4797 (2013).
- [9190] S. Chakraborty, D. Paul and S. Das, *t-Entropy: A new measure of uncertainty with some applications*, preprint (2021), 2105.00316 [cs.IT].
- [9191] R.G. Mesquita, C.A.B. Mello and L.H.E.V. Almeida, *A new thresholding algorithm for document images based on the perception of objects by distance*, Integrated Computer-Aided Engineering **21** (2), 133-146 (2014), doi: 10.3233/ICA-130453
- [9192] M.S. Mani, S. Manisha, K.P. Thanaraj and V. Rajinikanth, *Automated segmentation of giemsa stained microscopic images based on entropy value*, IEEE International Conference on Intelligent Computing, Instrumentation and Control Technologies (ICICT) 2017).
- [9193] J. Yu, J. Zhou and X.F. Yin, *Two-dimensional Tsallis symmetric cross entropy image threshold segmentation*, eds. J. Chen, F. Yu, W. Chen, Y. Lu and H. Long, 2012 International Symposium on Information Science and Engineering (ISISE), 362-366; 10.1109/ISISE.2012.88 2012, Book Series *International Conference on Information Science and Engineering* (2012).
- [9194] O.A. Kittaneh, M.A.U. Khan, M. Akbar and H.A. Bayoud, *Average entropy: A new uncertainty measure with application to image segmentation*, The American Statistician **70**, 18-24 (2017).
- [9195] H.A. Bayoud and M.Z. Raqab, *Sup-entropy: A measure of uncertainty*, Communications in Statistics - Theory and Methods (2024).
- [9196] G. Vig, S. Varshney, S. Kumar and M.D. Shahbaz, *Entropy-based multilevel 2D histogram image segmentation using DEWO optimization*, 2019 International Conference on Automation, Computational and Technology Management (ICACTM), Amity University (2019).
- [9197] Z. Ye, J. Yang, M. Wang, X. Zong, L. Yan and W. Liu, *2D Tsallis entropy for image segmentation based on modified chaotic bat algorithm*, Entropy **20**, 239 (2018) (28 pages), doi: 10.3390/e20040239
- [9198] D. Stosic, D. Stosic, T.B. Ludermir and T.I. Ren, *Natural image segmentation with non-extensive mixture models*, J. Vis. Commun. Image R. **63**, 102598 (2019), doi: doi.org/10.1016/j.jvcir.2019.102598
- [9199] E. Turajlic, *Application of firefly and bat algorithms to multilevel thresholding of x-ray images*, IEEE, MIPRO (Opatija, Croatia, 2018).
- [9200] S. Borjigin and P.K. Sahoo, *Color image segmentation based on multi-level Tsallis-Havrda-Charvat entropy and 2D histogram using PSO algorithms*, Pattern Recognition **92**, 107-118 (2019).
- [9201] S. Sahoo, S.S. Sahoo, S. Kumar, T. Mishra and K.K. Singh, *Optimized entropy based image segmentation*, IEEE (2020).
- [9202] K. Chowdhury, D. Chaudhuri and A.K. Pal, *A new image segmentation technique using bi-entropy function minimization*, Multimed. Tools Appl. (Springer, 2017) (27 pages), doi: 10.1007/s11042-017-5429-8
- [9203] O.A. Kittaneh, *Response to "Average entropy does not measure uncertainty" (Letter)*, American Statistician **71** (1), 91 (2017).
- [9204] J.T. Rickard and J. Aisbett, *New classes of threshold aggregation functions based upon the Tsallis q-exponential with applications to perceptual computing*, IEEE Transactions on Fuzzy Systems **22** (3), 672-684 (2014), doi: 10.1109/TFUZZ.2013.2258026
- [9205] J. Aisbett and J.T. Rickard, *Centroids of type-1 and type-2 fuzzy sets when membership functions have spikes*, IEEE Transactions on Fuzzy Systems **22** (3), 685-692 (2014), doi: 10.1109/TFUZZ.2014.2306973
- [9206] H.C. Yanik and B. Yazici, *Mono-static synthetic aperture radar interferometry with arbitrary flight trajectories*, Proceedings of SPIE, Algorithms for Synthetic Aperture Radar Imagery XIX, 8394 (2012).
- [9207] Ping Li, *A very efficient scheme for estimating entropy of data streams using compressed counting*, preprint (2008), 0808.1771 [cs.DS].
- [9208] I. Fukuda and H. Nakamura, *Efficiency in the generation of the Boltzmann-Gibbs distribution by the Tsallis dynamics reweighting method*, J. Phys. Chem. B **108**, 4162-4170 (2004).
- [9209] D. Strzalka and F. Grabowski, *Towards possible non-extensive thermodynamics of algorithmic processing - Statistical mechanics of insertion sort algorithm*, Int. J. Mod. Phys. C **19**, 1443-1458 (2008).
- [9210] D. Strzalka, *Connections between von Foerster coalition growth model and Tsallis q-exponential*, Acta Physica Polonica B **40**, 41-47 (2009).

- [9211] F.L. Ribeiro, *A non-phenomenological model of competition and cooperation to explain population growth behaviors*, Bull. Math. Biol. **77**, 409-433 (2015), doi: 10.1007/s11538-014-0059-z
- [9212] A. Deppman, R.L. Fagundes, E. Megias, R. Pasechnik, F.L. Ribeiro and C. Tsallis, *Nonlinear dynamics approach to urban scaling*, Chaos, Solitons and Fractals **191**, 115877 (2025).
- [9213] A. Deppman, *Urban Scaling is hardwired in the human brain*, preprint (2024), 2412.14134 [physics.soc-ph].
- [9214] M.G. Campo, G.L. Ferri and G.B. Roston, *q-exponential distribution in time correlation function of water hydrogen bonds*, Braz. J. Phys. **39**, 439-443 (2009).
- [9215] J. Lassig and K.H. Hoffmann, *Threshold-selecting strategy for best possible ground state detection with genetic algorithms*, Phys. Rev. E **79**, 046702 (2009) (8 pages).
- [9216] J. Yu, P. Cheng and X. Yin, *Two-dimensional Tsallis entropy threshold segmentation based on decomposition*, J. Computational Information Systems (2013).
- [9217] H. Shimodaira, *Automatic color image segmentation using a square elemental region-based seeded region growing and merging method*, preprint (2017), arxiv 1711.09352
- [9218] I. Rutkowska-Wlodarczyk, B. Kierdaszuk, J. Wlodarczyk *Analysis of proton exchange kinetics with time-dependent exchange rate*, Biochimica et Biophysica Acta **1804**, 891-898 (2010).
- [9219] P. Li, *Compressed Counting*, Proc. Twentieth Annual ACM-SIAM Symposium on Discrete Algorithms, 412-421 (2009).
- [9220] A. Boule and A. Debelle, *Strain-profile determination in ion-implanted single crystals using generalized simulated annealing*, J. Appl. Cryst. **43**, 1046-1052 (2010).
- [9221] L.A.C. Malbouisson, A.M. de C. Sobrinho, M.A.C. Nascimento and M.D. de Andrade, *Optimization of geometry at Hartree-Fock level using the Generalized Simulated Annealing*, Appl. Math. **3**, 1526-1531 (2012).
- [9222] G.Q. Zeng, Y.Z. Lu and W.J. Mao, *Multistage extremal optimization for hard travelling salesman problem*, Physica A **389**, 5037-5044 (2010).
- [9223] J. Chen, H. Li, Y. Wang, R. Xie and X. Liu, *A novel approach to extracting casing status features using data mining*, Entropy **16**, 389-404 (2014), doi: 10.3390/e16010389
- [9224] S. Cai, K. Zheng, G. Chen, H.V. Jagadish, B.C. Ooi and M. Zhang, *ARM-Net: Adaptive relation modeling network for structured data*, Research Data Management Track Paper SIGMOD '21 (June 20-25, 2021, China).
- [9225] K. Hua and D.A. Simovici, *Dual criteria determination of the number of clusters in data*, IEEE SYNASC (2018).
- [9226] M. Jamaati and A. Mehri, *Text mining by Tsallis entropy*, Physica A **490**, 1368-1376 (2018).
- [9227] G. Tian, Z. Wang, X. Yin, Z. Li, X. Shi, Z. Lu, C. Zhou, Y. Yu and D. Wu, *TADOOP: Mining network traffic anomalies with Hadoop*, in *Security and Privacy in Communication Networks*, Series Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering **164**, 175-192 (2016).
- [9228] B.S. Rocha, F.A. Mendonca and R.V. Ramos, *An algorithm to decrease the key distribution error rate using pulsars*, communicated at the 7th Workshop on Communication Networks and Power Systems (WCNPS 2022).
- [9229] P. Berezinski, B. Jasiul and M. Szpyrka, *An entropy-based network anomaly detection method*, Entropy **17**, 2367-2408 (2015), doi:10.3390/e17042367
- [9230] P. Berezinski, *Entropy-based network anomaly detection*, Doctor Thesis (Faculty of Electrical Engineering, Automatics, Computer Science and Biomedical Engineering, Krakow, 2015).
- [9231] T. Lojka and I. Zolotova, *Distributed sensor network - data stream mining and architecture*, Advances in Information Science and Applications - Volume I (2014).
- [9232] I. Zolotova and T. Lojka, *Online Data Stream Mining in Distributed Sensor Network*, WSEAS Transactions Circuits and Systems **13**, 412-421 (2014).
- [9233] Z. Wu and Y. Li, *Optimal design and comparative analysis of a novel microgripper based on matrix method*, IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM) (Besancon, France, July 8-11, 2014).
- [9234] F. Ahmed, M. Fuge, S.K. Ramachandran, S. Hunter and S. Miller, *Design variety measurement using Sharma-Mittal entropy*, ASME (2020).
- [9235] A.M. Awad, *On optimal designs of some censoring schemes*, Pakistan J. Statistics and Operation Research, **12** (1), 1-23 (2016).
- [9236] M. Shrahili, A.R. El-Saeed, A.S. Hassan, I. Elbatal and M. Elgarhy, *Estimation of entropy for log-logistic distribution under progressive type II censoring*, J. Nanomaterials, ID 2739606 (2022).

- [9237] F.M.A. Alam and M. Nassar, *On entropy estimation of inverse Weibull distribution under improved adaptive progressively type-II censoring with applications*, *Axioms* **12**, 751 (2023).
- [9238] N. Alotaibi, A.F. Hashem, I. Elbatal, S.A. Alyami, A.S. Al-Moisheer and M. Elgarhy, *Inference for a Kavya-Manoharan inverse length biased exponential distribution under progressive-stress model based on progressive type-II censoring*, *Entropy* **24**, 1033 (2022).
- [9239] S.A. Alyami, A.S. Hassan, I. Elbatal, M. Elgarhy and A.R. El-Saeed, *Bayesian and non-Bayesian estimation of dynamic cumulative residual Tsallis entropy for moment exponential distribution under progressive censored type II*, *Open Physics* **21**, 20220264 (2023).
- [9240] C. Shang and D.J. Wales, *Communication: Optimal parameters for basin-hopping global optimization based on Tsallis statistics*, *J. Chem. Phys.* **141**, 071101 (2014) (4 pages).
- [9241] D.J. Wales, *Perspective: Insight into reaction coordinates and dynamics from the potential energy landscape*, *J. Chem. Phys.* **142**, 130901 (2015) (12 pages).
- [9242] J. Novotny, M. Bergamelli and G. Urga, *Maximum Non-extensive Entropy Block Bootstrap*, preprint (2014, CEA, Cass Business School and CERGE-EI).
- [9243] A.J. Ballard, S. Martiniani, J.D. Stevenson, S. Somani and D.J. Wales, *Exploiting the potential energy landscape to sample free energy*, *Wiley Interdisciplinary Reviews: Computational Molecular Science* **5** (3), 273-289 (2015).
- [9244] L.G. Bernal, *Metodo da Tempera Simulada (Simulated-Annealing)*, preprint (2015).
- [9245] S.N. Carmo and J.M. Araujo, *A Feedforward anti-windup scheme for integral controllers inspired on a deformed integral operator*, *Proc. ASME International Mechanical Engineering Congress and Exposition* **15**, UNSP V015T16A010 (2013).
- [9246] J. Miskiewicz, *Improving quality of sample entropy estimation for continuous distribution probability functions.*, *Physica A* **450**, 473-485 (2016), doi: <http://dx.doi.org/10.1016/j.physa.2015.12.106>
- [9247] N. Kalogeropoulos, *Non-additive entropies in gravity?*, preprint (2016), 1601.04701 [gr-qc].
- [9248] S. Bergamaschi, D. Ferrari, F. Guerra, G. Simonini and Y. Velegrakis, *Providing insight into data source topics*, *J. Data Semant.* **5**, 211-228 (2016), doi: 10.1007/s13740-016-0063-6
- [9249] Y. Neuman, Y. Cohen, N. Israeli and B. Tamir, *A proposed methodology for studying the historical trajectory of words' meaning through Tsallis entropy*, *Physica A* **492**, 804-813 (2018), doi: 10.1016/j.physa.2017.11.011
- [9250] P. Figuera and P. Garcia Bringas, *Revisiting robabilistic latent semantic analysis: Extensions, challenges and insights*, *Technologies* **12**, 5 (2024).
- [9251] P. Figuera Vinue and P. Garcia Bringas, *Revisiting the probabilistic latent semantic analysis: The method, its extensions and its algorithms*, preprint (2023).
- [9252] R.R. Braga, K.C. Mundim and D. Fuks, *Modeling of boron adsorption on the (110) tungsten surface*, *Surf. Rev. and Lett.* **10**, 213 (2003).
- [9253] S.F.D.A. Morais, K.C. Mundim and D.A.C. Ferreira, *An alternative interpretation of the ultracold methylhydroxycarbene rearrangement mechanism: Cooperative effects*, *Physical Chemistry Chemical Physics* **17** (11), 7443-7448 (2015).
- [9254] S.F.A. Morais, *Efeitos sinergicos da cooperatividade molecular na descricao da reatividade quimica*, Doctor Thesis (Instituto de Quimica, Universidade de Brasilia, 2017).
- [9255] K.C. Mundim, S. Dorfman and D. Fuks, *Decohesion of Sigma(3)(111) grain boundary tungsten with boron interstitial*, *Surf. Rev. and Lett.* **10**, 227 (2003).
- [9256] S. Dorfman, D.E. Ellis, K.C. Mundim, V. Liubich, D. Fuks *Many-body ab initio potentials in simulations of grain boundary sliding and decohesion in metals*, *Adv. Eng. Mater.* **4** (8), 580-584 (2002).
- [9257] K.C. Mundim, *An analytical procedure to evaluate electronic integrals for molecular quantum mechanical calculations*, *Physica A* **350**, 338-348 (2005).
- [9258] M.D. de Andrade, K.C. Mundim and L.A.C. Malbouisson, *GSA algorithm applied to electronic structure: Hartree-Fock-GSA method*, *Int. J. Quantum Chem.* **103**, 493-499 (2005).
- [9259] G.S.T. de Morais and R. Custodio, *Metodo de grade-fixa variacional para a resolucao da estrutura eletrônica de atomos confinados*, preprint (2018).
- [9260] R. Custodio, G.S.T. de Morais and M.G. Rodrigues, *A grid-based variational method to the solution of the Schrodinger equation: the q-exponential and the near Hartree-Fock results for the ground state atomic energies*, *J. Molecular Modeling* **24**, 188 (2018), doi: 10.1007/s00894-018-3715-7
- [9261] M.D. de Andrade, L.A.C. Malbouisson and K.C. Mundim, *Generalized simulated annealing algorithm applied to electronic structure II. The unrestricted Hartree-Fock-GSA method*, *Int. J. Quantum Chem.* **106**, 2700-2705 (2006).

- [9262] L.A.C. Malbouisson, K.C. Mundim, M.A. Chaer Nascimento and M.D. de Andrade, *GSA algorithm applied to electronic structure III. The HF-GSA geometry optimization method*, preprint (2007).
- [9263] H.C.B. de Oliveira, C.S. Esteves, R. Gargano, M.A. Chaer Nascimento, L.A.C. Malbouisson and K.C. Mundim, *Molecular properties calculations using q -integral method in the Hartree-Fock approach*, preprint (2007).
- [9264] H.C.B. de Oliveira, F.C. Rangel, C.S. Esteves, L.A.C. Malbouisson and K.C. Mundim, *MP2 and coupled-cluster molecular properties calculation applying the q -integral method*, preprint (2007).
- [9265] M. Ishihara, *Chiral phase transition in the linear sigma model within Hartree factorization under $(1 - q)$ expansion and free particle approximation in the Tsallis nonextensive statistics*, Eur. Phys. J. A **56**, 145 (2020).
- [9266] H.C.B. de Oliveira, F.C. Rangel, C.S. Esteves, F.M.C. Vieira and K. C. Mundim, *Calculation of MP2 and Coupled-Cluster Molecular Properties Using the q -Integral Method*, J. Phys. Chem. A **113**, 14691-14698 (2009).
- [9267] C.S. Esteves, H.C.B. de Oliveira, L. Ribeiro, R. Gargano and K.C. Mundim, *Modeling diatomic potential energy curves through the generalized exponential function*, Chem. Phys. Lett. **427**, 10-13 (2006).
- [9268] M. Roshanzamir, *The information-theoretic treatment of spinless particles with the assorted diatomic molecular potential*, Advances High Energy Physics, ID 6621156 (2022) (12 pages), doi: 10.1155/2022/6621156
- [9269] D.H.T. Amador, H.C.B. de Oliveira, J.R. Sambrano, R. Gargano, L.G.M. de Macedo, *4-Component correlated all-electron study on Eka-actinium Fluoride (E121F) including Gaunt interaction: Accurate analytical form, bonding and influence on rovibrational spectra*, Chem. Phys. Lett. (2016), in press, doi: <http://dx.doi.org/10.1016/j.cplett.2016.09.025>
- [9270] M.D. de Andrade, K.C. Mundim and L.A.C. Malbouisson, *Convergence of the Generalized Simulated Annealing method with independent parameters for the acceptance probability, visitation distribution, and temperature functions*, Int. J. Quantum Chem. **108**, 2392-2397 (2008).
- [9271] M.D. de Andrade, *Otimizacao de bases atomicas utilizando o metodo Generalized Simulated Annealing: Aplicacoes em calculos Hartree-Fock e interacao de configuracao multi-referencia para moleculas.*, Doctor Thesis (Universidade Federal da Bahia, 2010).
- [9272] M. Sanchez, M. Oldenhof, J.A. Freitez, K.C. Mundim and F. Ruetze, *An improvement of quantum parametric methods by using SGSA parameterization technique and new elementary parametric functionals*, Internat. J. Quantum Chem. **110** (3), 755-764 (2010).
- [9273] S.S.D. Pita, T.V.A. Fernandes, E.R. Caffarena et al., *Studies of molecular docking between fibroblast growth factor and heparin using generalized simulated annealing*, Int. J. Quantum Chem. **108**, 2608-2614 (2008).
- [9274] H.C.B. de Oliveira, C.S. Esteves, R. Gargano, M.A.C. do Nascimento, L.A.C. Malbouisson and K.C. Mundim, *Molecular properties calculations using the q -Integral method*, Int. J. Quantum Chem. **108**, 2540-2549 (2008).
- [9275] F.C. Rangel, H.C.B. de Oliveira, A.L.B. Montel and K.C. Mundim, *Calculation of DFT molecular properties using the q -integral method*, Physica A **389**, 5208-5215 (2010).
- [9276] F.C. Rangel, A.A. Mamiya, H.C.B. de Oliveira, F.M.C. Vieira and K.C. Mundim, *An alternative approach to calculate two-center overlap matrix through deformed exponential function*, J. Phys. Chem. A (2013), in press, DOI: 10.1021/jp401631a
- [9277] L.R. Salviano, C.S. Esteves, H.C.B. de Oliveira, K.C. Mundim, L. Ribeiro and R. Gargano, *Use of generalized exponential function to build three-dimensional reactive surfaces*, Physica A **389**, 3604-3612 (2010).
- [9278] J.E. da Fonseca, H.C.B. de Oliveira, W.F. da Cunha and R. Gargano, *Alternative analytical forms to model diatomic systems based on the deformed exponential function*, J. Mol. Model **20**, 2297 (2014) (10 pages), doi: 10.1007/s00894-014-2297-2
- [9279] A.B.M. Aquino, L.A. Leal, V.H. Carvalho-Silva, R. Gargano, L.A. Ribeiro Junior and W.F. da Cunha, *Krypton-methanol spectroscopic study: Assessment of the complexation dynamics and the role of the van der Waals interaction*, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (2018), in press, doi: doi:10.1016/j.saa.2018.06.110
- [9280] F.A. Escobedo and F.J. Martinez-Veracoechea, *Optimized expanded ensembles for simulations involving molecular insertions and deletions. I. Closed systems*, J. Chem. Phys. **127**, 174103 (2007) (10 pages).
- [9281] H. Kamberaj and A. van der Vaart, *Multiple scaling replica exchange for the conformational sampling of biomolecules in explicit water*, J. Chem. Phys. **127**, 234102 (2007) (7 pages).
- [9282] J. Spiriti, H. Kamberaj and A. van der Vaart, *Development and application of enhanced sampling techniques to simulate the long-time scale dynamics of biomolecular systems*, Int. J. Quant. Chem. **112**, 33-43 (2012).
- [9283] H. Kamberaj, *Q -Gaussian swarm quantum particle intelligence on predicting global minimum of potential energy function*, Applied Math. Comput. **229**, 94-106 (2014).

- [9284] F. Hedin, N. Plattner, J.D. Doll and M. Meuwly, *Spatial averaging: Sampling enhancement for exploring configurational space of atomic clusters and biomolecules*, J. Chem. Theory Comput. **10**, 4284-4296 (2014), doi: 10.1021/ct500529w
- [9285] Y. Zhou and C. Yin, *Transit probability of biomolecule in nonlinear membranal channel*, Physica A (2015), in press, <http://dx.doi.org/10.1016/j.physa.2015.05.078>
- [9286] M.D. De Andrade, M. Nascimento, K. Mundim and L. Malbouisson, *GSA algorithm applied to electronic structure II: UHF-GSA method*, Int. J. Quantum Chem. **106**, 2700-2705 (2006).
- [9287] J.S. Shiner and M. Davison, *Quantifying the connectivity of scale-free and biological networks*, Chaos, Solitons and Fractals **21**, 1 (2004).
- [9288] M. Davison and J.S. Shiner, *Extended entropies and disorder*, Advances in complex systems **8**, 125 (2005).
- [9289] T. Van Calster, B. Baesens and W. Lemahieu, *ProfARIMA: a profit-driven order identification algorithm for ARIMA models in sales forecasting*, Applied Soft Computing (2017), in press, doi: <http://dx.doi.org/doi:10.1016/j.asoc.2017.02.011>
- [9290] D. Villuendas, A. Hernando, M. Sulc, R. Hernando, R. Seoane and A. Plastino, *Maximum Entropy Principle underlying the dynamics of automobile sales*, preprint (2017), 1705.03458 [physics.soc-ph].
- [9291] O.N. Vassiliev, *An exact Monte Carlo algorithm for quantum spin systems*, preprint (2017).
- [9292] M. Kaminski, *Tsallis entropy in dual homogenization of random composites using the Stochastic Finite Element Method*, Internat. J. for Numerical Methods in Engineering **113** (5), 834-857 (2018), doi: 10.1002/nme.5638
- [9293] X. Chen, Y.M. Kang and Y.X. Fu, *Switches in a genetic regulatory system under multiplicative non-Gaussian noise*, J. Theor. Biology **435**, 134-144 (2017), doi: 10.1016/j.jtbi.2017.09.010
- [9294] Z. Ma, *Measuring microbiome diversity and similarity with Hill numbers*, Metagenomics, 157-178 (2017), doi: [linkinghub.elsevier.com/retrieve/pii/B978008102268900_0082](https://doi.org/10.1016/j.mbs.2017.09.010)
- [9295] L.P. Karakatsanis, E.G. Pavlos, G. Tsoulouhas, G.L. Stamokostas, T.L. Mosbrugger, J.L. Duke, G.P. Pavlos and D.S. Monos, *Information and order of genomic sequences within chromosomes as identified by complexity theory. An integrated methodology*, preprint (2020), arxiv 2004.11287
- [9296] L.P. Karakatsanis, E.G. Pavlos, G. Tsoulouhas, G.L. Stamokostas, T. Mosbrugger, J.L. Duke, G.P. Pavlos and D.S. Monos, *Spatial constraints and information content of sub-genomic regions of the human genome*, iScience **24**, 102048 (2021).
- [9297] E.H. Vasconcelos Segundo, V.C. Mariani and L.S. Coelho, *Design of spiral heat exchanger from economic and thermal point of view using a tuned wind-driven optimizer*, J. Brazilian Society of Mechanical Sciences and Engineering (2018) **40** (4), 212 (2018).
- [9298] K.T. Arasu and M.T. Mohan, *Optimization problems with orthogonal matrix constraints*, Numerical Algebra, Control and Optimization **8** (4), 413-440 (2018), doi: doi:10.3934/naco.2018026
- [9299] M. Lalaoui and A. El Afia, *A Fuzzy generalized simulated annealing for a simple assembly line balancing problem*, IFAC PapersOnLine **51-32**, 600-605 (2018).
- [9300] M. Feng, Y. Yuanxi, Z. Anmin and Z. Bin, *Decomposition of geodetic time series: A combined simulated annealing algorithm and Kalman filter approach*, Advances in Space Research (2019), in press.
- [9301] R.W.S. Pessoa, F. Mendes, T.R. Oliveira, K. Oliveira-Esquerre and M. Krstic, *Numerical optimization based on generalized extremum seeking for fast methane production by a modified ADM1*, J. Process Control **84**, 56-69 (2019).
- [9302] J.E. Ramirez, C. Pajares, M.I. Martinez, R. Rodriguez Fernandez, E. Molina-Gayosso, J. Lozada-Lechuga, and A. Fernandez Tellez, *Site-bond percolation solution to preventing the propagation of Phytophthora zoospores on plantations*, Phys. Rev. E **101**, 032301 (2020).
- [9303] M.N. Xenakis, D. Kapetis, Y. Yang, J. Heijman, S.G. Waxman, G. Lauria, C.G. Faber, H.J. Smeets, P.J. Lindsey and R.L. Westra, *Non-extensivity and criticality of atomic hydrophobicity around a voltage-gated sodium channel's pore: a modeling study*, J. Biological Physics **47**, 61-77 (2021), doi: 10.1007/s10867-021-09565-w
- [9304] P.O. Dral, A. Owens, A. Dral and G. Csanyi, *Hierarchical machine learning of potential energy surfaces*, J. Chem. Phys. **152**, 204110 (2020), doi: 10.1063/5.0006498
- [9305] A. Heliou, M. Martin, P. Mertikopoulos and T. Rahier, *Online non-convex optimization with imperfect feedback*, preprint (2020), 2010.08496 [cs.LG].
- [9306] R. Brekelmans, V. Masrani, T. Bui, F. Wood, A. Galstyan, G.V. Steeg and F. Nielsen, *Annealed importance sampling with q-paths*, preprint (2020), 2012.07823 [cs.LG].
- [9307] V. Masrani, R. Brekelmans, T. Bui, F. Nielsen, A. Galstyan, G.V. Steeg and F. Wood, *q-Paths: Generalizing the geometric annealing path using power means*, preprint (2021), 2107.00745 [cs.LG].

- [9308] Z. Fang, Y. Zhao and H. Wang, *Modeling and simulation of biomaterials*, Biomaterials and Materials for Medicine (2021, CRC Press).
- [9309] J. Li, *Innovations in research, devices, and applications*, Biomaterials and Materials for Medicine (2021, CRC Press).
- [9310] A. Gaudencio, *Study on the texture of biomedical data : contributions from multiscale and multidimensional features based on entropy measures*, preprint (2025), Thesis (Universite d'Angers, 2025).
- [9311] M.Z. Iqbal, M.Z. Arshad, G. Ozel and O.S. Balogun, *A better approach to discuss medical science and engineering data with a modified Lehmann type-II model*, preprint (2021).
- [9312] D.T. Robson, A. Annibale and A.C.W. Baas, *Reproducing size distributions of swarms of barchan dunes on Mars and Earth using a mean-field model*, *Physica A* **606**, 128042 (2022).
- [9313] H. Liu, K. Deng, H. Liu and Z. Wen, *An entropy-regularized ADMM for binary quadratic programming*, *Journal of Global Optimization* (2022), doi: 10.1007/s10898-022-01144-0
- [9314] L. Wei, Y. Chen, J. Liu, L. Rao, Y. Ren, X. Xu and J. Wan, *Cov-DOX: A method for structure prediction of covalent protein-ligand bindings*, *J. Medicinal Chemistry* (2022), in press, doi: 10.1021/acs.jmedchem.1c02007
- [9315] W. Shao, Y. Zuo and J. Luo, *Employing the MCMC technique to compute the projection depth in high dimensions*, *J. Computational and Applied Mathematics* (2022).
- [9316] M. Shrahili, A.S. Hassan, E.M. Almetwally, A.B. Ghorbal and I. Elbatal, *Alpha power moment exponential model with applications to biomedical science*, *Scientific Programming*, ID 6897405 (2022).
- [9317] O.V. Morzhin and A.N. Pechen, *On optimization of coherent and incoherent controls for two-level quantum systems*, *Izvestiya: Mathematics* **87** (5), 1024-1050 (2023).
- [9318] O. Veilleux, *Evaluation realiste de l'apprentissage Few-Shot transductif*, Master Thesis (Ecole de Technologie Supérieure, Université du Québec, 2022).
- [9319] J. Christ, F. Schmid, K. Stergiaropoulos and S. Bertsch, *Semi-empirical Scroll Compressor Model with Optional Vapor-injection* (2022). International Compressor Engineering Conference. Paper 2731 (2022), docs.lib.purdue.edu/icec/2731
- [9320] X. Zha, L. Xiong, C. Liu, P. Shu and B. Xiong, *Identification and evaluation of soil moisture flash drought by a nonstationary framework considering climate and land cover changes*, *Science of the Total Environment* **856**, 158953 (2023).
- [9321] Y. Shen and A.P. Willard, *Directed walk in probability space that locates mean field solutions to spin models*, *Phys. Rev. E* **106**, 044132 (2022).
- [9322] R. Goswami, S. Ruhila, A. Goswami, S. Goswami and D. Goswami, *Unified software design patterns for simulated annealing*, preprint (2023), 2302.02811 [cs.SE].
- [9323] C. Dann, C.Y. Wei and J. Zimmert, *Best of both worlds policy optimization*, preprint (2023), 2302.09408 [cs.LG].
- [9324] G.H. Yang, S.Q. Ma, X.D. Bian and J.C. Li, *The roles of liquidity and delay in financial markets based on an optimal forecasting model*, *PLoS ONE* **18** (9), e0290869 (2023).
- [9325] N. Jiang and Y. Xue, *Racing control variable genetic programming for symbolic regression*, preprint (2023), 2309.07934 [cs.NE].
- [9326] S. Kaidisch, T.U. Hilger, A. Krassnigg and W. Lucha, *Pole-fitting for complex functions: enhancing standard techniques by artificial-neural-network classifiers and regressors*, *Computer Physics Communications* **295**, 108998 (2024).
- [9327] G.R. Palma, R. Alaiz, A.S. Araujo, M. Savaris, R.A. Zucchi, C. Markham and R.A. Moral, *Towards species' classification of the *Anastrepha pseudoparallela* group*, preprint (2025), 2503.08598 [q-bio.QM].
- [9328] M.M.F. de Lima, M.O. Costa, R. Silva, U.L. Fulco, J.I.N. Oliveira, M.S. Vasconcelos and D.H.A.L. Anselmo, *Viral proteins length distributions: A comparative analysis*, *Physica A* **633**, 129367 (2024).
- [9329] B.M. Dolgonosov, *On the knowledge production function*, preprint (2023), arxiv 2312.01147
- [9330] M. Jelic, M. Batic, A. Krstic, M. Bottarelli and E. Mainardi, *Comparative analysis of metaheuristic optimization approaches for multisource heat pump operation*, *Renewable and Sustainable Energy Reviews* **188**, 113871 (2023).
- [9331] R. Wang, X. Liu, X. Zhao, X. Cheng and H. Qiu, *A novel entropy-based method for quantifying urban energy demand aggregation: Implications for urban planning and policy*, *Sustainable Cities and Society* **103**, 105284 (2024).
- [9332] J. Seok and C.S. Cho, *Numerical analysis of quantization-based optimization*, *ETRI Journal* (Wiley, 2023).
- [9333] O.V. Morzhin and A.N. Pechen, *Generation of C-NOT, SWAP, and C-Z gates for two qubits using coherent and incoherent controls and stochastic optimization*, preprint (2023), 2312.05625 [quant-ph].
- [9334] N. Jiang, M. Nasim, Y. Xue, *Vertical symbolic regression*, preprint (2023), 2312.11955 [cs.AI].

- [9335] S. Stastny, H.P. Buchler and N. Lang, *Functional completeness of planar Rydberg blockade structures*, Phys. Rev. B **108**, 085138 (2023).
- [9336] K. Zervas, P.E. Christopoulou and A. Papageorgiou, *Investigating period variability mechanisms in eclipsing binary stars through eclipsing time variation analysis: A case study of TZ Bootis*, Astrophysical Journal **961**, 97 (2024).
- [9337] D. Stanley, *A universal $1/E^2$ suppression law: Expanded integrative framework across domains*, preprint (2025),
- [9338] M.C. Hell and C. Horvat, *A method for constructing directional surface wave spectra from ICESat-2 altimetry*, The Cryosphere **18**, 341-361 (2024).
- [9339] G.L. Rabello, G.M.P. Andrade, D.Q.F. de Menezes, R.M. Soares, T.S.M. Lemos, L.D. Ribeiro, B.F. Vieira and J.C. Pinto, *Enhancing virtual flow metering on offshore oil platforms through parallel computing and data reconciliation*, Geoenergy Science and Engineering (2024), in press.
- [9340] N.G. Musakaev, S.P. Rodionov, V.I. Lebedev and E.N. Musakaev, *D-CRMP history matching considering predictive properties*, Oil and Gas Studies **2**, 62-82 (2023) (In Russian). doi: 10.31660/0445-0108-2023-2-62-82
- [9341] I. Cebaite, *Counterdiabatic, better, faster, stronger: Optimal control for approximate counterdiabatic driving*, Doctor Thesis (Department of Physics, University of Strathclyde, Glasgow, 2024).
- [9342] C. Zhu, T. Luo, B. Li, X. Shen and G. Zhu, *Machine learning aided understanding and manipulating thermal transport in amorphous networks*, J. Appl. Phys. **135**, 195103 (2024).
- [9343] T. Hoven, *Regularization parameter optimization in NIPA using simulated annealing*, preprint (2024).
- [9344] Nicy, J.W.R. Morgan and D.J. Wales, *Energy landscapes for clusters of hexapeptides*, J. Chem. Phys. **161**, 054112 (2024).
- [9345] P.D.S. de Lima, A. Lyons, A. Irannezhad, J.M. de Araujo, S. Hutzler and M.S. Ferreira, *Self-assembled clusters of magnetically tilted dipoles*, Phys. Rev. E **110**, 064134 (2024).
- [9346] D. Xie, *Self-Adaptive Differential Evolution for Multi-Objective Optimization with Local Search and Indicator-Based Selection*, preprint (2024).
- [9347] C.T. Lin, Y.C. Chen, T.C. Yeh and H.K.T. Ng, *Reliability estimation and statistical inference under joint progressively Type-II right-censored sampling for certain lifetime distributions*, Communications in Statistics - Simulation and Computation (2024).
- [9348] T. Hoven, A. Garcia-Robledo and M. Zangiabady, *Enhancing epidemic prediction using Simulated Annealing for parameter optimization in infection network inference*, preprint (2024).
- [9349] Z. Wang, L. Wang, G. Martinez-Arellano, J. Griffin, D. Sanderson and S. Ratchev, *Digital twin based photogrammetry field-of-view evaluation and 3D layout optimisation for reconfigurable manufacturing systems*, Journal of Manufacturing Systems **77**, 1045-1061 (2024).
- [9350] M. Leskovar, M. Heyland, A. Trepczynski and S. Zachow, *Comparison of global and local optimization methods for intensity-based 2D-3D registration*, Computers in Biology and Medicine **186**, 109574 (2025).
- [9351] E. Naka, *Optimization algorithms for data management*, Doctor Thesis (Bulgarian Academy of Sciences, Institute of Information and Communication Technologies, Bulgaria, 2024).
- [9352] L.A. Reeves, T. Belien, D. Senapathi, M.P.D. Garratt and M.T. Fountain, *Exploring climate-driven phenological mismatches in pears, pests and natural enemies: a multi-model approach*, Journal of Pest Science (2025).
- [9353] F. Fourati, S. Kharrat, V. Aggarwal and M.S. Alouini, *Every call is precious: Global optimization of Black-Box functions with unknown Lipschitz constants*, preprint (2025), 2502.04290 [cs.LG].
- [9354] T. Sujjaviriyasup, *Prediction of container throughput at Thailand's major ports with error correction and parameter selection techniques emphasizes optimal smoothing period*, Maritime Business Review (2025).
- [9355] X. Li, W. Guo, H. He, H. Wang, A. Classen, D. Wu, Y. Ma, Y. Wang, J.S. He and X. Xu, *Trade-off between spring phenological sensitivities to temperature and precipitation across species and space in alpine grasslands over the Qinghai-Tibetan Plateau*, New Phytologist (2025).
- [9356] S. Walser, *Time-aware container-based virtualization*, Thesis (TU Wien, 2024).
- [9357] K.S. Gomez-Haibach, *Toward discrete, incomplete market cost efficiency*, Project (Worcester Polytechnic Institute, 2025).
- [9358] S.A. Cannas, D. Stariolo and F.A. Tamarit, *Learning dynamics of simple perceptrons with non-extensive cost functions*, Network: Computation in neural sciences **7**, 141 (1996).
- [9359] T.D. Frank, A. Daffertshofer, P.J. Beek and H. Haken, *Impacts of noise on a field theoretical model of the human brain*, Physica D **127**, 233 (1999).
- [9360] T.D. Frank, *Strongly Nonlinear Stochastic Processes in Physics and the Life Sciences*, ISRN Mathematical Physics, 149169 (Hindawi Publishing Corporation, 2013) (28 pages).

- [9361] S. Martinez, C. Tessone and A. Plastino, *Training symmetrical neural networks with a q-generalized Boltzmann machine*, communication at the IUPAP International Conference on "New Trends in the Fractal Aspects of Complex Systems", Maceio-Brazil, 16-20 October 2000.
- [9362] P. Baudot, *The Poincare-Boltzmann machine: from statistical physics to machine learning and back*, preprint (2019), 1907.06486 [q-bio.NC].
- [9363] F. Montani, E. Phoka, M. Portesi and S.R. Schultz, *Statistical modelling of higher-order correlations in pools of neural activity*, *Physica A* **392**, 3066-3086 (2013).
- [9364] F. Montani, *Neural population activity: finding simplicity in complexity*, communicated at Medyfinol 2014 (Maceio, Brazil, 13 to 16 October 2004).
- [9365] N. Ding, *Statistical machine learning in the T-exponential family of distributions*, Doctor Thesis (Purdue University, 2013).
- [9366] Y. Pak, I.J. Enyedy, J. Varady, J.W. Kung, P.S. Lorenzo, P.M. Blumberg and S.M. Wang, *Structural basis of binding of high-affinity ligands to protein kinase C: Prediction of the binding modes through a new molecular dynamics method and evaluation by site-directed mutagenesis*, *J. Medicinal Chemistry* **44**, 1690 (2001).
- [9367] V. Latora and M. Marchiori, *The architecture of complex systems*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [9368] D.D. Han, J.G. Liu, Y.G. Ma, X.Z. Cai and W.Q. Shen, *Scale-free download networks for publications*, *Chinese Phys. Lett.* **21**, 1855 (2004).
- [9369] D.J.B. Soares, C. Tsallis, A.M. Mariz and L.R. da Silva, *Preferential attachment growth model and nonextensive statistical mechanics*, *Europhys. Lett.* **70**, 70 (2005).
- [9370] M.D.S. de Meneses, S.D. da Cunha, D.J.B. Soares and L.R. da Silva, *Preferential attachment scale-free growth model with random fitness and connection with Tsallis statistics*, in *Complexity and Nonextensivity: New Trends in Statistical Mechanics*, eds. M. Sakagami, N. Suzuki and S. Abe, *Prog. Theor. Phys. Suppl.* **162**, 131-137 (2006).
- [9371] A.S. Mata, *Complex networks: a mini-review*, *Brazilian J. Phys.* (2020), doi: 10.1007/s13538-020-00772-9
- [9372] T.C. Nunes, S. Brito, L.R. da Silva and C. Tsallis, *Role of dimensionality in preferential attachment growth in the Bianconi-Barabasi model*, *J. Stat. Mech.* 093402 (2017) (12 pages).
- [9373] S.G.A. Brito, T.C. Nunes, L.R. da Silva and C. Tsallis, *Scaling properties of d-dimensional complex networks*, communicated at II Encontro Nacional de Fisica Estatistica – ENFE (Ilheus, 2017).
- [9374] S. Brito, T.C. Nunes, L.R. da Silva and C. Tsallis, *Scaling properties of d-dimensional complex networks*, *Phys. Rev. E* **99**, 012305 (2019).
- [9375] G.A. Mendes, L.R. da Silva, S.D. Cunha and A.O. Sousa, *Redes complexas mais realistas e a estatistica de Tsallis*, communicated at the XXV EFNNE, Encontro de Fisicos do Norte e Nordeste (Natal, 15-20 October 2007).
- [9376] L.R. da Silva, *Redes independente de escala e mecanica estatistica nao extensiva*, communicated at the 2nd Workshop of the National Institute of Science and Technology for Complex Systems (Rio de Janeiro, 1-5 March 2010).
- [9377] S.G.A. Brito, L.R. da Silva and C. Tsallis, *Role of dimensionality of complex networks with metrics: Connection with nonextensive statistical mechanics*, communicated at the International School of Complexity (Erice, 2015).
- [9378] S.G.A. Brito, L.R. da Silva and C. Tsallis, *Role of dimensionality in complex networks*, *Scientific Reports* **6**, 27992 (2016), doi: 10.1038/srep27992.
- [9379] S.G.A. Brito, *Papel da dimensionalidade em redes complexas: conexoes com a mecanica estatistica nno-extensiva*, Doctoral Thesis (Universidade Federal do Rio Grande do Norte, Natal, 2016).
- [9380] N. Cinardi, C. Tsallis and A. Rapisarda, *Asymptotically-scale-free geographical networks: Role of dimensionality and of stochastic fitness*, communicated at CCS2019, 405 (2019, Singapore).
- [9381] L. Gang, T. Tian, H. Chengfu and M. Biao, *Complexity of networks: A structural heterogeneity approach*, *EPL* **143**, 31001 (2023).
- [9382] N. Cinardi, A. Rapisarda and C. Tsallis, *A generalised model for asymptotically-scale-free geographical networks*, *J. Stat. Mech.* 043404 (2020).
- [9383] S. Sidorov and S. Mironov, *Surprising behavior of the average degree for a node's neighbors in growth networks*, *International Conference on Complex Networks and Their Applications X*, 463-474 (2021).
- [9384] R.M. de Oliveira, S. Brito, L.R. da Silva and C. Tsallis, *Connecting complex networks to nonadditive entropies*, *Scientific Reports* **11**, 1130 (2021).
- [9385] R.M. de Oliveira, S. Brito, L.R. da Silva and C. Tsallis, *Statistical mechanical approach of complex networks with weighted links*, *JSTAT* 063402 (2022).

- [9386] C. Tsallis and R.M. de Oliveira, *Complex network growth model: Possible isomorphism between nonextensive statistical mechanics and random geometry*, *Chaos* **32**, 053126 (2022), doi: 10.1063/5.0090864
- [9387] C.I.N. Sampaio Filho, M.M. Bastos, H.J. Herrmann, A.A. Moreira and J.S. Andrade, Jr., *Random networks with q -exponential degree distribution*, *Phys. Rev. Research* **5**, 033088 (2023).
- [9388] A.M.R. Alencar Junior, *Análise dos efeitos da dimensionalidade em redes com estatística de Tsallis*, Master Thesis (Universidade Federal do Ceará, Departamento de Física, 2023).
- [9389] U. Tirnakli, *Characterization of degree and energy distributions in asymptotically scale-free d -dimensional random networks*, communicated at Sigma-Phi (Chania, 2023).
- [9390] R.M. de Oliveira, *Conexões entre Redes Complexas Geométricas e a q -Estatística*, Doctor Thesis (2022, Universidade Federal do Rio Grande do Norte).
- [9391] R.M. de Oliveira, L.R. da Silva and C. Tsallis, *Energy distribution in long-range-interacting weighted geographic networks*, *Eur. Phys. J. Plus* **139**, 975 (2024).
- [9392] G.G. Piva, F.L. Ribeiro and A.S. Mata, *Networks with growth and preferential attachment: Modeling and applications*, preprint (2020), 2007.01349 [physics.soc-ph].
- [9393] G.G. Piva, F.L. Ribeiro and A.S. Mata, *Voter model dynamics on networks with social features*, *Brazilian J. Phys.* **52**, 155 (2022).
- [9394] F.L. Ribeiro, Y. Li, S. Born and D. Rybski, *Analytical solution for the long- and short-range every-pair-interactions system*, *Chaos, Solitons and Fractals* **183**, 114771 (2024).
- [9395] O. El Deeb, *Entropic spatial auto-correlation of voter uncertainty and voter transitions in parliamentary elections*, *Physica A* **617**, 128675 (2023).
- [9396] T.S. Biro, G.G. Barnafoldi, G. Biro and K.M. Shen, *Near and far from equilibrium power-law statistics*, preprint (2016), 1608.03705 [hep-ph].
- [9397] Q. Zhang, M. Li and Y. Deng, *A new structure entropy of complex networks based on nonextensive statistical mechanics*, *Internat. J. Modern Phys. C* **27** (10), 1650118 (2016) (12 pages), doi: 10.1142/S0129183116501187
- [9398] S. Duan, T. Wen and W. Jiang, *A new information dimension of complex network based on Renyi entropy*, *Physica A* **516**, 529-542.(2019), doi: 10.1016/j.physa.2018.10.045
- [9399] P.C. da Silva, G. Corso and L.R. da Silva, *Lattices with variable and constant occupation density and q -exponential distribution*, *Rev. Mexicana Física* **54**, 459-463 (2008).
- [9400] H. Hasegawa, *Nonextensive aspects of small-world networks*, *Physica A* **365**, 383-401 (2006).
- [9401] H. Hasegawa, *Generalized rate-code model for neuron ensembles with finite populations*, *Phys. Rev. E* **75**, 051904 (2007).
- [9402] L. Wang, Y.B. Gong and X. Lin, *Enhancement of intrinsic spiking coherence by external non-Gaussian noise in a stochastic noise Hodgkin-Huxley neuron*, *Fluctuation and Noise Lett.* **10** (4), 359-369 (2011).
- [9403] Y.B. Gong, X. Lin and L. Wang, *External non-Gaussian noise-enhanced collective intrinsic spiking coherence in an array of stochastic Hodgkin-Huxley neurons*, *Fluctuation and Noise Lett.* **10** (4), 395-404 (2011).
- [9404] H. Hasegawa, *Non-extensive thermodynamics of transition-metal nanoclusters*, *Progr. Materials Science* **52**, 333-351 (2007).
- [9405] S. Thurner and C. Tsallis, *Nonextensive aspects of self-organized scale-free gas-like networks*, *Europhys. Lett.* **72**, 197-203 (2005).
- [9406] S. Thurner, *Nonextensive statistical mechanics and complex networks*, *Europhysics News* **36**, 218 (2005) [Europhysics News Special Issue *Nonextensive Statistical Mechanics: New Trends, New Perspectives*, eds. J.P. Boon and C. Tsallis (November/December 2005)].
- [9407] S. Abe and S. Thurner, *Hierarchical and mixing properties of static complex networks emerging from the fluctuating classical random graphs*, preprint (2006) [cond-mat/0601159].
- [9408] S. Thurner, F. Kyriakopoulos and C. Tsallis, *Unified model for network dynamics exhibiting nonextensive statistics*, *Phys. Rev. E* **76**, 036111 (2007) (8 pages).
- [9409] D.R. White, N. Kezcar, C. Tsallis, D. Farmer and S. White, *A generative model for feedback networks*, *Phys. Rev. E* **73**, 016119 (2006) (8 pages).
- [9410] T. Ochiai and J.C. Nacher, *On the construction of complex networks with optimal Tsallis entropy*, *Physica A* **388**, 4887-4892 (2009).
- [9411] Y. Li, J.-Q. Fang, Q. Bi and Q. Liu, *Entropy characteristic on harmonious unifying hybrid preferential networks*, *Entropy* **9**, 73-82 (2007).
- [9412] C. Tsallis, *Connection between scale-free networks and nonextensive statistical mechanics*, *Eur. Phys. J. Special Topics* **161**, 175-180 (2008).
- [9413] A. Deppman and E.O. Andrade-II, *Flux of information in scale-free networks*, preprint (2021), 2106.08959 [physics.gen-ph].

- [9414] L.R. da Silva, *The general preferential attachment growth model and nonextensive statistical mechanics*, communicated in the Workshop *Complex Systems: Foundations and Applications* (9-10 January 2014, ETH Zurich) [See also M.L. de Almeida, G.A. Mendes, G.M. Viswanathan and L.R. da Silva, *Scale-free homophilic network*, Eur. Phys. J. B **86**, 38 (2013) (6 pages), doi: 10.1140/epjb/e2012-30802-x].
- [9415] P. Tempesta, *Bipartite and directed scale-free complex networks arising from multiple zeta function I*, Comm. Nonlinear Science Numerical Simulation (2013), in press, doi: <http://dx.doi.org/10.1016/j.cnsns.2013.08.037>
- [9416] W. Li, Q.A. Wang, L. Nivanen and A. Le Mehaute, *How to fit the degree distribution of the air network?*, Physica A **368**, 262-272 (2006).
- [9417] K. Briggs and C. Beck, *Modelling train delays with q-exponential functions*, Physica A **378**, 498-504 (2007).
- [9418] E. Mitsokapas, B. Schafer, R.J. Harris and C. Beck, *Statistical characterization of airplane delays*, Scientific Reports **11**, 7855 (2021).
- [9419] G. Williams, B. Schafer and C. Beck, *Superstatistical approach to air pollution statistics*, Phys. Rev. Research **2**, 013019 (2020).
- [9420] H. He, B. Schafer and C. Beck, *Spatial heterogeneity of air pollution statistics*, preprint (2022), 2203.04296 [physics.ao-ph].
- [9421] H. He, B. Schafer and C. Beck, *Spatial heterogeneity of air pollution statistics in Europe*, Scientific Reports **12**, 12215 (2022).
- [9422] H. He, B. Schafer and C. Beck, *Spatial analysis of tails of air pollution PDFs in Europe*, Environmental Data Science **3**, e30, 1-11 (2024).
- [9423] H. He, *Superstatistical analysis of measured air Pollution and water quality time series*, Doctor thesis (Queen Mary College, 2024).
- [9424] H. He, T. Boehringer, B. Schafer, K. Heppell and C. Beck, *Analyzing spatio-temporal water quality dynamics for the river Thames using superstatistical methods and machine learning*, Scientific Reports **14**, 21288 (2024).
- [9425] V.P. Meshalkin, O.B. Butusov, R.R. Kantuyukov and A.Yu. Belozerskii, *Local-potential morphometric algorithm for information-entropy estimation of the impact of technogenic chemical pollution on forests*, Doklady Chemistry **495** (2), 199-204 (2020).
- [9426] W. Li and X. Cai, *Empirical analysis of a scale-free railway network in China*, Physica A **382**, 693-703 (2007).
- [9427] D. Valerio, A.M. Lopes and J.A. Tenreiro Machado, *Entropy analysis of a railway network's complexity*, Entropy **18**, 388 (2016) (12 pages), doi:10.3390/e18110388
- [9428] F. Tinessa, F. Simonelli, V. Marzano and C. Buonocore, *Evaluating the choice behaviour of high-speed rail passengers in Italy: a latent class structure with alternative kernel models to the multinomial logit*, IEEE (2020).
- [9429] T.B. Progulova and B.R. Gadjiev, *Modeling real spatial networks*, preprint (2008), 0805.3615 [physics.soc-ph].
- [9430] B.R. Gadjiev and T.B. Progulova, *Comparative analysis of transport communication networks and q-type statistics*, preprint (2008), 0805.3706 [physics.soc-ph].
- [9431] A.V. Kolesnichenko, *Construction of entropy transport model based on statistics of Tsallis*, preprint (2013) [in Russian].
- [9432] A.V. Kolesnichenko, *Modeling of linear response for quantum nonextensive system on dynamic external disturbance*, Mathematical Models and Computer Simulations **31** (12), 97-118 (2019).
- [9433] A.V. Kolesnichenko, *Modeling the linear response from a quantum nonextensive system to a dynamic external disturbance*, Mathematical Models and Computer Simulations **12** (5), 647-659 (2020).
- [9434] A.V. Kolesnichenko, *Criterion of thermal stability and the law of distribution of particles for self-gravitating astrophysical systems with the Tsallis statistics*, Mathematica Montisnigri, Mathematical Modeling **XXXVII**, 43-75 (2016) [in Russian].
- [9435] A.V. Kolesnichenko, *Power distributions for self-gravitating astrophysical systems based on nonextensive Tsallis kinetics*, Solar System Research **51** (2), 127-144 (2017) [Original Russian Text: *Astronomicheskii Vestnik* **51** (2), 142-160 (2017)].
- [9436] A.V. Kolesnichenko, *On construction of the entropy transport model based on the formalism of nonextensive statistics*, Mathematical Models and Computer Simulations **26** (5), 48-64 (2014).
- [9437] A.V. Kolesnichenko, *Modification in the framework of nonextensive Tsallis statistics of the gravitational instability criterions of astrophysical rotating disks with fractal structure* (2014) [in Russian]
- [9438] A.V. Kolesnichenko, *Jeans instability of a protoplanetary gas cloud with radiation in nonextensive Tsallis kinetics*, Solar System Research, **54** (2), 137-149 (2020) [In Russian *Astronomicheskii Vestnik* **54** (2), 151-164 (2020)].

- [9439] A.V. Kolesnichenko, *Jeans instability of the protoplanetary circumstellar disk taking into account the magnetic field and radiation in the nonextensive Tsallis kinetics*, (2021) [In Russian], doi: 10.20948/prepr-2021-4
- [9440] A.V. Kolesnichenko, *Jeans' instability of a protoplanetary disk with accounting for the magnetic field and radiation modified within the nonextensive Tsallis kinetics*, Solar System Research **59**, 17 (2025).
- [9441] A.V. Kolesnichenko, *Two-parameter Sharma-Mittal entropy functional as the foundation of the family of generalized thermodynamics of nonextensive systems*, Solar System Research, **59**, 15 (2025).
- [9442] A.V. Kolesnichenko, *Construction of the formalism of statistical thermodynamics of nonextensive systems based on the Kaniadakis kappa-entropy*, Solar System Research, **59**, 16 (2025).
- [9443] A.V. Kolesnichenko, *Renyi thermodynamics as a mandatory supporting basis for adequate modeling of the evolution of a protoplanetary gas-dust disk with a fractal structure*, Solar System Research **59**, 14 (2025).
- [9444] A.V. Kolesnichenko, *Elements of formalism of Curado-Tsallis nonadditive statistics. Rathie-Kannappan difference information*, Solar System Research **59**, 13 (2025).
- [9445] A.V. Kolesnichenko and M.Y. Marov, *The scenario of the accelerated expansion of the Universe under the influence of entropic forces associated with the entropies of Tsallis-Cirto and Barrow*, (2020, doi: 10.20948/prepr-2020-105 [In Russian]).
- [9446] A.V. Kolesnichenko and M.Y. Marov, *Modeling the dynamic evolution of the Universe under the influence of the entropic force associated with modified Sharma Mittal entropy*, **68**, 35 (2021), doi: 10.20948/prepr-2021-68
- [9447] W. Yang, H. Chen and S. Liu, *The effect of dark matter on the Jeans instability with the q-nonextensive velocity distribution*, AIP Advances **10**, 075003 (2020), doi: 10.1063/5.0011567
- [9448] A.V. Kolesnichenko, *To the construction of the thermodynamics of quantum nonextensive systems in the framework of the statistics of Tsallis*, (2019), doi: 10.20948/prepr-2019-16
- [9449] A.V. Kolesnichenko, *Jeans instability of a protoplanetary circular disk taking into account the magnetic field and radiation in nonextensive Tsallis kinetics*, Solar System Research **55** (2), 132-149 (2021).
- [9450] A.V. Kolesnichenko, *To the derivation of symmetry of matrix of kinetic coefficients Onsager in framework of the nonextensive statistical mechanics of Tsallis*, (2019), doi: 10.20948/prepr-2019-15
- [9451] D.R. White, N. Kejzar, C. Tsallis and C. Rozenblat, *Generative historical model of city size hierarchies: 430 BCE - 2005*, ISCOM Working Paper (Institute of Mathematical Behavioral Sciences, University of California, Irvine, CA, 2005) [http://eclectic.ss.uci.edu/~drwhite/pub/paper_7_6city.pdf].
- [9452] D.R. White and L. Tambayong, *Oscillatory dynamics of urban hierarchies 900-2000 - Vulnerability and Resilience*, Computational Models of Complex Systems, Intelligent Systems Reference Library **53**, 141-169 (Springer, 2014).
- [9453] T. Wen and Y. Deng, *The vulnerability of communities in complex networks: An entropy approach*, Reliability Engineering and System Safety **196**, 106782 (2020).
- [9454] J. Yang, L. Lu, W. Xie, G. Chen and D. Zhuang, *On competitive relationship networks: A new method for industrial competition analysis*, Physica A **382**, 704-714 (2007).
- [9455] A. Dukkipati, M.N. Murty and S. Bhatnagar, *Generalized evolutionary algorithm based on Tsallis statistics*, preprint (2004) [cs.AI/0407037].
- [9456] A. Dukkipati, M.N. Murty and S. Bhatnagar, *Nonextensive triangle equality and other properties of Tsallis relative-entropy minimization*, Physica A **361**, 124-138 (2005).
- [9457] A. Dukkipati, M.N. Murty and S. Bhatnagar, *On measure theoretic definitions of generalized information measures and maximum entropy prescriptions*, preprint (2006) [cs.IT/0601080].
- [9458] A. Dukkipati, S. Bhatnagar and M.N. Murty, *On measure-theoretic aspects of nonextensive entropy functionals and corresponding maximum entropy prescriptions*, Physica A **384**, 758-774 (2007).
- [9459] A. Dukkipati, S. Bhatnagar and M.N. Murty, *Gelfand-Yaglom-Perez theorem for generalized relative entropy functionals*, Information Sc. **177**, 5707-5714 (2007).
- [9460] A. Dukkipati, M.N. Murty and S. Bhatnagar, *Uniqueness of nonextensive entropy under Renyi's recipe*, preprint (2005) [cs.IT/0511078].
- [9461] J. Vachery and A. Dukkipati, *On Shore and Johnson properties for a special case of Csiszar f-divergences*, preprint (2012), 1201.4285 [cs.IT].
- [9462] D. Ghoshdastidar and A. Dukkipati, *On q-Gaussian kernel and its Reproducing Kernel Hilbert Space*, preprint (2012), 1204.1800 [cs.LG].
- [9463] D. Ghoshdastidar, A. Dukkipati and S. Bhatnagar, *Properties of multivariate q-Gaussian distribution and its application to smoothed functional algorithms for stochastic optimization*, preprint (2012), 1206.4832 [cs.IT].
- [9464] D. Ghoshdastidar, A. Dukkipati and S. Bhatnagar, *q-Gaussian based smoothed functional algorithms for stochastic optimization*, IEEE International Symposium on Information Theory Proceedings (ISIT) (2012).

- [9465] D. Ghoshdastidar, A. Dukkipati and S. Bhatnagar, *Newton based stochastic optimization using q-Gaussian smoothed functional algorithms*, preprint (2013), 1311.2296 [math.OC].
- [9466] N. Muangkote, K. Sunat and S. Chiewchanwattana, *Evolutionary training of a q-Gaussian radial basis functional-link nets for function approximation*, 2013 10th International Joint Conference on Computer Science and Software Engineering (JCSSE), IEEE 58-63 (2013).
- [9467] A. Ohara, *Affine differential geometric aspects of Tsallis statistics*, communicated at 2nd International Symposium on *Information Geometry and its Applications* (12-16 December 2005, Tokyo).
- [9468] T. Wada, A. Ohara and A.M. Scarfone, *Relationships between the Legendre structure in the S_{2-q} -formalism and the dually-flat structure in the space of escort distributions*, Reports Math. Phys. **70** (2) (2012).
- [9469] X. Zhang, T. Senyo, H. Sakai and A. Ohara, *Behaviors of solutions to network diffusion equation with power-nonlinearity – A role of the q-exponential function for sufficiently large power-exponent*, Eur. Phys. J. Special Topics **229**, 729-741 (2020).
- [9470] X. Geng and Q. Li, *Random models of scale-free networks*, Physica A **356**, 554-562 (2005).
- [9471] R. Guimera, A. -Guilera, F. Vega-Redondo, A. Cabrales and A. Arenas, *Optimal network topologies for local search with congestion*, Phys. Rev. Lett. **89**, 248701 (2002).
- [9472] T. Wilhelm and Hanggi, *Power-law distributions resulting from finite resources*, Physica A **329**, 499 (2003).
- [9473] B. Tadic and S. Thurner, *Information super-diffusion on structured networks*, preprint (2003) [cond-mat/0307670].
- [9474] B. Tadic and S. Thurner, *Search and topology aspects in transport in scale-free networks*, Physica A **346**, 183 (2005).
- [9475] M. Suvakov and B. Tadic, *Transport processes on homogeneous planar graphs with scale-free loops*, Physica A **372**, 354-361 (2006).
- [9476] M. Suvakov and B. Tadic, *Collective charge fluctuations in single-electron processes on nanonetworks*, J. Stat. Mech. P02015 (2009) (15 pages).
- [9477] B. Tadic, *Self-organised criticality and emergent hyperbolic networks – Blueprint for complexity in social dynamics*, preprint (2018), 1809.01554 [physics.soc-ph].
- [9478] M. Suvakov and B. Tadic, *Modeling collective charge transport in nanoparticle assemblies*, J. Phys. Condensed Matt. **22** (16), 163201 (2010) (23 pages).
- [9479] J. Zivkovic, B. Tadic, N. Wick and S. Thurner, *Statistical indicators of collective behavior and functional clusters in gene networks of yeast*, Eur. Phys. J. B **50**, 255-258 (2006).
- [9480] R. Rossi, M. Gelfusa, F. De Masi, M. Ossidi and A. Murari, *The reciprocal influence criterion: An upgrade of the information quality ratio*, Complexity, ID 9426547 (2021) (14 pages), doi: 10.1155/2021/9426547
- [9481] Z. Levnajic and B. Tadic, *Self-organization in trees and motifs of two-dimensional chaotic maps with time delay*, J. Stat. Mech. - Th. and Exp., P03003 (2008) (17 pages).
- [9482] B. Kujawski, B. Tadic and G.J. Rodgers, *Preferential behavior and scaling in diffusive dynamics on networks*, New J. Phys. **9**, 154 (2007) (16 pages).
- [9483] B. Tadic and G.J. Rodgers, *Modelling conflicts with cluster dynamics on networks*, Physica A **389**, 5495-5502 (2010).
- [9484] B. Tadic and M. Suvakov, *Can human-like Bots control collective mood: Agent-based simulations of online chats*, J. Stat. Mech. P10014 (2013) (23 pages).
- [9485] B. Tadic, M.M. Dankulov and R. Melnik, *Mechanisms of self-organized criticality in social processes of knowledge creation*, Phys. Rev. E **96**, 032307 (2017) (14 pages).
- [9486] B. Tadic, M.M. Dankulov and R. Melnik, *Evolving cycles and self-organised criticality in social dynamics*, Chaos, Solitons and Fractals **171**, 113459 (2023).
- [9487] B. Tadic, A. Shapoval and M. Shnirman, *Signatures of self-organized dynamics in rapidly driven critical sandpiles*, Phys. Rev. E **110**, 054203 (2024).
- [9488] A. Kononovicius and J. Ruseckas, *Continuous transition from the extensive to the non-extensive statistics in an agent-based herding model*, Eur. Phys. J. B **87**, 169 (2014), doi: 10.1140/epjb/e2014-50349-0
- [9489] S. Thurner and C. Biely, *Two statistical mechanics aspects of complex networks*, Physica A **372**, 346-353 (2006).
- [9490] G. Wilk and Z. Wlodarczyk, *Nonextensive information entropy for stochastic networks*, Acta Phys. Polonica B **35**, 871 (2004).
- [9491] G. Wilk and Z. Wlodarczyk, *Information theory point of view on stochastic networks*, Communication at the First Polish Symposium on Econo- and Sociophysics, Warsaw Poland (19-20 November 2004), Acta Phys. Polon. B **36**, 2513-2522 (2005).
- [9492] Z. Szabo, *Information theoretical estimators*, ITE Toolbox Release 0.51 (December 29, 2013).

- [9493] G. Wilk and Z. Wlodarczyk, *Information theory point of view on stochastic networks*, Acta Phys. Polonica B **36**, 2513 (2005).
- [9494] E.A.B. Cole, *Integral evaluation in semiconductor device modelling using simulated annealing with Bose-Einstein statistics*, Int. J. Numerical Modelling - Electronic networks devices and fields **20**, 197-215 (2007).
- [9495] W.S. Chung, E.J. Jang and J.Y. Kim, *On the q -deformed thermodynamics and q -deformed Fermi level in intrinsic semiconductor*, Advanced Studies Theoretical Physics **11** (5), 213-223 (2017), doi: 10.12988/astp.2017.61138
- [9496] S. Suzuki, J. Inoue and B.K. Chakrabarti, *Quantum annealing*, in *Quantum Ising Phases and Transitions in Transverse Ising Models*, Lecture Notes in Physics **862**, 225-289 (2013).
- [9497] M. Uchida and J. Kurose, *An information-theoretic characterization of weighted α -proportional fairness in network resource allocation*, Information Sciences **181**, 4009-4023 (2011).
- [9498] K. Goto and M. Uchida, *Tsallis entropy based labelling*, 19th ICMLA IEEE 9356272, 33-40 (2020).
- [9499] G.F. Su, X.B. Zhang and Yi. Zhang, *Tsallis mapping in growing complex networks with fitness*, Commun. Theor. Phys. **57** (3), 493-498 (2012).
- [9500] Q. Zhang, C. Luo, M. Li, Y. Deng and S. Mahadevan, *Tsallis information dimension of complex networks*, Physica A **419**, 707-717 (2015).
- [9501] Q. Zhang, X. Lu, M. Li, Y. Deng and S. Mahadevan, *A new structure entropy of complex networks based on Tsallis nonextensive statistical mechanics*, preprint (2014), 1411.6082 [cs.SI].
- [9502] A. Ramirez-Arellano, J.S. De-la-Cruz-Garcia and J. Bory-Reyes, *A fractional (q, q') non-extensive information dimension of complex networks*, Fractal Fract. **7**, 702 (2023).
- [9503] Q. Zhang, M. Li, Y. Du, Y. Deng and S. Mahadevan, *Local structure entropy of complex networks based on nonextensive statistical mechanics*, <http://www.researchgate.net/publication/271771746> (2015).
- [9504] M. Lei, L. Liu and D. Wei, *An improved method for measuring the complexity in complex networks based on structure entropy*, IEEE **7**, 8888200, 159190-159198 (2019).
- [9505] B. Wang, F. Tan, J. Zhu and D. Wei, *A new structure entropy of complex networks based on nonextensive statistical mechanics and similarity of nodes*, Mathematical Biosciences and Engineering **18** (4), 3718-3732 (2021), doi: 10.3934/mbe.2021187
- [9506] Y. He and Y. Deng *Ordinal relative belief entropy*, preprint (2021), 2102.12575 [cs.AI].
- [9507] A.A. Amaral, B.B. Zarpelao, L.S. Mendes, J.J.P.C. Rodrigues and M.L. Proenca Jr., *Inference of network anomaly propagation using spatio-temporal correlation*, J. Network Computer Applic. **35**, 1781-1792 (2012).
- [9508] A.A. Amaral, L.S. Mendes, B.B. Zarpelao and M.L. Proenca Jr., *Deep IP flow inspection to detect beyond network anomalies*, Computer Communications **98**, 80-96 (2017), doi: 10.1016/j.comcom.2016.12.007
- [9509] Y.B. Gong, L. Wang and X. Lin, *Effect of non-Gaussian channel noise on coherence resonance in coupled stochastic Hodgkin-Huxley neurons*, Fluctuation and Noise Letters **11** (2), 1250013 (2012) (12 pages).
- [9510] A.J. da Silva, M.A.S. Trindade, D.O.C. Santos and R.F. Lima, *Maximum likelihood q -estimator reveals nonextensivity regulated by extracellular potassium in the mammalian neuromuscular junction*, Biol. Cybern. **110**, 31-40 (2016), doi: 10.1007/s00422-015-0673-3
- [9511] A.J. da Silva, M.A.S. Trindade, D.O.C. Santos and R.F. Lima, *Maximum-likelihood q -estimator uncovers the role of potassium at neuromuscular junctions*, Biol. Cybern. (2016), in press, doi: 10.1007/s00422-015-0673-3
- [9512] Y. Holler, A. Thomschewski, J. Bergmann, M. Kronbichler, J.S. Crone, E.V. Schmid, K. Butz, P. Holler, R. Nardone and E. Trinka, *Connectivity biomarkers can differentiate patients with different levels of consciousness*, Clinical Neurophysiology **125** (8), 1545-1555 (2014), doi: 10.1016/j.clinph.2013.12.095
- [9513] P. Patel, S. Balasubramanian and R.N. Annavarapu, *Tsallis entropy as biomarker to assess and identify human emotion via EEG rhythm analysis*, NeuroQuantology - Bornova Izmir **21** (1), 135-149 (2023).
- [9514] S.G. Benli, *Classification of first-episode psychosis with EEG signals: ciSSA and machine learning approach*, Biomedicines **11**, 322 (2023).
- [9515] I. Gialampoukidis and I. Antoniou, *Age, innovations and time operator of networks*, Physica A **432**, 140-155 (2015).
- [9516] S. Thakor, T. Chan and A. Grant, *Capacity bounds for networks with correlated sources and characterisation of distributions by entropies*, IEEE Transactions on Information Theory **63** (6), 3540-3553 (2017).
- [9517] A. Camacho Guardian, C.J. Tessone and R. Algesheimer, *Idiosyncratic correlations and non-Gaussian distributions in network data*, preprint (2017).
- [9518] A. Camacho Guardian, C.J. Tessone and R. Algesheimer, *Modelling the interdependencies between social mechanisms underlying the formation of networks*, preprint (2017).
- [9519] T. Wu and Q. Ling, *Fusing hybrid attentive network with self-supervised dual-channel heterogeneous graph for knowledge tracing*, Expert Systems With Applications **225**, 120212 (2023).

- [9520] C. Han, *Agent-based studies of collective phenomena in supply network operation*, Doctor Thesis (Mathematisch-Naturwissenschaftlichen Fakultät der Universität zu Köln, 2024).
- [9521] Y. Sun, K.L. Chan, S.M. Krishnan and D.N. Dutt, *Tsallis' multiscale entropy for the analysis of nonlinear dynamical behavior of ECG signals*, in *Medical Diagnostic Techniques and Procedures*, eds. Megha Singh et al (Narosa Publishing House, London, 1999), p. 49.
- [9522] P. Casari, J. Neasham, G. Gubnitsky, D. Eccher and R. Diamant, *Acoustic projectors make covert bioacoustic chirplet signals discoverable*, *Scientific Reports* **13**, 2591 (2023).
- [9523] D. Soh, *An intelligence diagnostic tool for the diagnostic of hypertension*, Master Thesis in Engineering (Nanyang Technological University, 2020).
- [9524] T. Li and M. Zhou, *ECG classification using wavelet packet entropy and random forests*, *Entropy* **18**, 285 (2016) (16 pages), doi:10.3390/e18080285(2016).
- [9525] M. Amrani, M. Hammad, F. Jiang, K. Wang and A. Amrani, *Very deep feature extraction and fusion for arrhythmias detection*, *Neural Computing and Applications* doi: 10.1007/s00521-018-3616-9
- [9526] Y. Zheng, G. Li, W. Zhang, Y. Li and B. Wei, *Feature selection with ensemble learning based on improved Dempster-Shafer evidence fusion*, *IEEE Access* **7**, art. 8598753, 9032-9045 (2019).
- [9527] Y. Gao and W. Liu, *Be trust: A dynamic trust model based on Bayesian inference and Tsallis entropy for medical sensor networks*, *Journal of Sensors* **2014**, 649392 (2014).
- [9528] Y. Gao and W. Liu, *A security routing model based on trust for medical sensor networks*, *Proceedings of 2015 IEEE International Conference on Communication Software and Networks, ICCSN 2015*, Article 7296192, 405-408 (Chengdu, China, 2015).
- [9529] N. Zhao, S. Seitingner, R. Richer and J.A. Paradiso, *Real-time work environment optimization using multimodal media and body sensor network*, *Smart Health* **19**, 100164, (2021), doi: 10.1016/ j.smhl.2020.100164.
- [9530] G. Pastor Figueroa, *Probabilistic models and algorithms for energy-efficient large and dense wireless sensor networks*, Doctor Thesis (Programa de Doctorado Interuniversitario en Multimedia y Comunicaciones, Escuela Internacional de Doctorado, Universidad Rey Juan Carlos, 2016).
- [9531] S. Sun, L. Zhang and C. Guo, *Medical image registration by minimizing divergence measure based on Tsallis entropy*, *Int. J. Biological and Life Sciences* **2**, 2 (2006).
- [9532] S. Sun, L. Zhang and C. Guo, *Medical image registration by minimizing divergence measure based on Tsallis entropy*, *Int. J. Biomedical Sciences* **2**, 75-80 (2007).
- [9533] V.P. Vianna and L.O. Murta Jr., *Long-range medical image registration through generalized mutual information (GMI): toward a fully automatic volumetric alignment*, *Phys. Med. Biol.* 67 055006 (2022).
- [9534] H.Y. Kose and S. Ikizoglu, *Nonadditive entropy application on detrended force sensor data to indicate balance disorder of patients with vestibular system dysfunction*, *Entropy* **25**, 1385 (2023).
- [9535] W.L. Shi, Y. Miao, Z.F. Chen and H.B. Zhang, *Research of automatic medical image segmentation algorithm based on Tsallis entropy and improved PCNN*, *IEEE International Conference on Mechatronics and Automation*, *Proceedings* **1-7**, 1004-1008 (2009).
- [9536] S. Wang, J. Fan and H. Liu, *Linearized circular energy curve color image segmentation based on Tsallis entropy*, *Expert Systems with Applications* 126746 (2025).
- [9537] C. Wu, B. Yao, X. Zhang, T. Li, J. Wang and J. Pu, *The application of entropy in motor imagery paradigms of brain-computer interfaces*, *Brain Sci.* **15**, 168 (2025).
- [9538] D. Oliva and E. Cuevas, *Digital image segmentation as an optimization problem*, in *Advances and Applications of Optimised Algorithms in Image Processing*, *Intelligent Systems Reference Library* **117**, 43-91 (2016).
- [9539] E. Cuevas, V. Osuna and D. Oliva, *Multilevel segmentation in digital images*, *Series Studies in Computational Techniques: A Comparative Perspective* **686**, 9-33 (2016).
- [9540] T. Kaur, B.S. Saini and S. Gupta, *Optimization techniques for the multilevel thresholding of the medical images*, *Medical Data Security for Bioengineers* (2019) (19 pages), doi: 10.4018/978-1-5225-7952-6.ch009
- [9541] G.M. Mansour, H.M. Barakat, I.A. Hussein, M. Nagy, A.H. Mansi and M.A. Alawady, *Measures of cumulative residual Tsallis entropy for concomitants of generalized order statistics based on the Morgenstern family with application to medical data*, *Mathematical Biosciences and Engineering* **22** (6), 1572-1597 (2025).
- [9542] M.N. Alshahrani, *Modeling the medical data using a new three-parameter distribution with statistical properties*, *JP Journal of Biostatistics* **23** (2), 125-147 (2023).
- [9543] M.A. Khan, M. Sharif, T. Akram, M. Yasmin and R.S. Nayak, *Stomach deformities recognition using rank-based deep features selection*, *Journal of Medical Systems* **43**, 329 (2019).
- [9544] S. Abdel-Khalek, A.B. Ishak, O.A. Omer and A.S.F. Obada, *A two-dimensional image segmentation method based on genetic algorithm and entropy*, *Optik* **131**, 414-422 (2017).

- [9545] D. Oliva, V. Osuna-Enciso, E. Cuevas, G. Pajares, M. Perez-Cisneros and D. Zaldivar, *Improving segmentation velocity using an evolutionary method*, Expert Systems with Applications **42**, 5874-5886 (2015).
- [9546] W. Mohamed and A. Ben Hamza, *Medical image registration using stochastic optimization*, Optics and Lasers in Engineering **48**, 1213-1223 (2010).
- [9547] H. Mezaoui, A.M. Hamza and P.T. Jayachandran, *Dynamic analysis of the polar ionosphere using the GPS signal: Toward an optimization of the cutoff scale*, Radio Science **52** (2), 271-281 (2017), doi: 10.1002/2016RS006184
- [9548] Swarm - ESA, *Results of the first part of INTENS project*, ESA/Contract No.4000125663/18/I-NB (2021)
- [9549] N. Arunkumar, R. Kumar and V. Venkataraman, *Automatic detection of epileptic seizures using permutation entropy, Tsallis entropy and Kolmogorov complexity*, J. Medical Imaging and Health Informatics **6** (2), 526-531 (2016).
- [9550] N. Arunkumar, K.R. Kumar and V. Venkataraman, *Automatic detection of epileptic seizures using new entropy measures*, J. Medical Imaging and Health Informatics **6** (3), 724-730 (2016).
- [9551] Cha-sang-bin, Y. Se-Won, S. Hwang and S.H. Park, *Analysis of phase adjustment techniques for ISAR imaging targets in formation flight*, Journal of Korean Institute of Information Technology **16** (5), 67-74 (2018), doi: 10.14801/jkiit.2018.16.5.67
- [9552] S. Raghu, N. Sriraam, Y. Temel, S.V. Rao, A.S. Hegde and P.L. Kubben, *Performance evaluation of DWT based sigmoid entropy in time and frequency domains for automated detection of epileptic seizures using SVM classifier*, Computers in Biology and Medicine **110**, 127-1432 (2019).
- [9553] S. Raghu, N. Sriraam, Y. Temel, S.V. Rao, A.S. Hegde and P.L. Kubben, *Complexity analysis and dynamic characteristics of EEG using MODWT based entropies for identification of seizure onset*, J. Biomedical Research **34** (3), 213-227 (2020), doi: 10.7555/JBR.33.20190021
- [9554] N.K. Al-Qazzaz, M. Alrahhah, S.H. Jaafer, S.H.B.M. Ali and S.A. Ahmad, *Automatic diagnosis of epileptic seizures using entropy-based features and multimodel deep learning approaches*, Medical Engineering and Physics **130**, 104206 (2024).
- [9555] D.R. Nayak, R. Dash, B. Majhi and U.R. Acharya, *Application of fast curvelet Tsallis entropy and kernel random vector functional link network for automated detection of multiclass brain abnormalities*, Computerized Medical Imaging and Graphics **77**, 101656 (2019).
- [9556] A.P. Chumakova, M. Hitomi, E.P. Sulman and J.D. Lathia, *High-throughput automated single-cell imaging analysis reveals dynamics of glioblastoma stem cell population during state transition*, Cytometry Part A - Journal Quantitative Cell Science (2019) (12 pages), doi: 10.1002/cyto.a.23728
- [9557] A. Ben Hamza, *Registration of digital terrain images using nondegenerate singular points*, in *Image Feature Detectors and Descriptors*, Springer Series Studies in Computational Intelligence **630**, 345-366 (2016).
- [9558] Y. Huang, C. Rong, R. Zhang and S. Liu, *Evaluating frontier orbital energy and HOMO/LUMO gap with descriptors from density functional reactivity theory*, J. Mol. Model **23**, 3 (2017), doi: 10.1007/s00894-016-3175-x
- [9559] H.A. Jalab, R.W. Ibrahim and A. Ahmed, *Image denoising algorithm based on the convolution of fractional Tsallis entropy with the Riesz fractional derivative*, Neural Comput. Applic. (2016) (7 pages), in press, doi: 10.1007/s00521-016-2331-7
- [9560] T.K. Das, L. Mandi and P. Chatterjee, *Propagation of dust ion acoustic waves with Riesz fractional derivative*, Indian J. Phys. (2024).
- [9561] O. Sotolongo-Grau, D. Rodriguez-Perez, J.C. Antoranz and O. Sotolongo-Costa, *Non-extensive radiobiology*, in *Bayesian inference and maximum entropy methods in science and engineering*, Proceedings of the 30th International Workshop on Bayesian Inference and Maximum Entropy Methods in Science and Engineering (4-9 July 2010, Chamonix, France), Eds. by A. Mohammad-Djafari, J.-F. Bercher and P. Bessiere, AIP Conference Proceedings **1305**, 219-226 (2010), 1006.3410 [q-bio.QM].
- [9562] J.P. Correia, R. Silva, D.H.A.L. Anselmo and J.R.P. da Silva, *Bayesian inference of length distributions of human DNA*, Chaos, Solitons and Fractals **160**, 112244 (2022).
- [9563] O. Sotolongo-Costa and O. Sotolongo-Grau, *Tsallis formalism in radiobiology - El formalismo de Tsallis en la radiobiologia*, Rev. Cub. Fis. **29**, 1E48 (2012) (3 pages).
- [9564] D. Rodriguez-Perez, O. Sotolongo-Grau, M.M. Desco and J.C. Antoranz, *Stochastic effects in a discrete RT model with critical behaviour*, J. Phys.: Conference Series **633**, 012089 (2015) (4 pages), doi:10.1088/1742-6596/633/1/012089
- [9565] D.B. Pougaza and A. Mohammad-Djafari, *Maximum entropies copulas*, in *Bayesian inference and maximum entropy methods in science and engineering*, Proceedings of the 30th International Workshop on Bayesian Inference and Maximum Entropy Methods in Science and Engineering (4-9 July 2010, Chamonix, France),

- Eds. by A. Mohammad-Djafari, J.-F. Bercher and P. Bessiere, AIP Conference Proceedings **1305**, 329-336 (2010).
- [9566] I. Panait, *A Weighted entropic copula from preliminary knowledge of dependence*, Versita **26** (1), 223-240 (2018), doi: 10.2478/auom-2018-0014
- [9567] J.E. Garcia, V.A. Gonzalez-Lopez, and R.B. Nelsen, *The structure of the class of maximum Tsallis-Havrda-Chavat entropy copulas*, Entropy **18**, 264 (2016) (6 pages), doi:10.3390/e18070264
- [9568] F. Zhang, Y. Shi and R. Wang, *Geometry of the q-exponential distribution with dependent competing risks and accelerated life testing*, Physica A **468**, 552-565 (2017).
- [9569] F. Zhang, H.K.T. Ng, Y. Shi and R. Wang, *Amari-Chentsov structure on the statistical manifold of models for accelerated life tests*, Test (2018), doi: 10.1007/s11749-018-0587-1
- [9570] T. Progulova and B. Gadjiev, *Comparative analysis of collaboration networks*, in *Bayesian inference and maximum entropy methods in science and engineering*, Proceedings of the 30th International Workshop on Bayesian Inference and Maximum Entropy Methods in Science and Engineering (4-9 July 2010, Chamonix, France), Eds. by A. Mohammad-Djafari, J.-F. Bercher and P. Bessiere, AIP Conference Proceedings **1305**, 415-422 (2010).
- [9571] O. Sotolongo-Grau, D. Rodriguez-Perez, J.C. Antoranz and O. Sotolongo-Costa, *Tissue radiation response with maximum Tsallis entropy*, Phys. Rev. Lett. **105**, 158105 (2010) (4 pages).
- [9572] O. Sotolongo-Grau, D. Rodriguez-Perez, O. Sotolongo-Costa and J. C. Antoranz, *Does tissue annihilation dose change along radiotherapy protocols?*, preprint (2011), 1104.5088 [q-bio.TO].
- [9573] D. Saldana Ulloa, *Modelo de tratamiento para tumores en presencia de radiacion*, Master Thesis (Benemerita Universidad Autonoma de Puebla, Instituto de Fisica, 2017).
- [9574] G. Kayser, J. Gortler, C.A. Weis, S. Borckenfeld and K. Kayser, *The application of structural entropy in tissue based diagnosis*, Diagnostic Pathology **3**, 251 (2017) (23 pages).
- [9575] X. Li, X. Ren and R. Venugopal, *Entropy measures for quantifying complexity in digital pathology and spatial omics*, IScience (2025), in press.
- [9576] O. Sotolongo-Grau, D. Rodriguez-Perez, O. Sotolongo-Costa and J.C. Antoranz, *Tsallis entropy approach to radiotherapy treatments*, Physica A **392**, 20070-2015 (2013).
- [9577] D. Rodriguez-Perez, O. Sotolongo-Grau, O. Sotolongo-Costa and J.C. Antoranz, *Radiotherapy treatments using Tsallis entropy statistical approach*, J. Phys.: Conference Series **490**, 012132 (2014) (7 pages), doi:10.1088/1742-6596/490/1/012132
- [9578] J. Weberszpil and O. Sotolongo-Costa, *Structural derivative model for tissue radiation response*, preprint (2017), 1703.07205 [physics.med-ph].
- [9579] M.M. Santos and U.P.C. Neves, *Estudo da fracao de sobrevivencia de celulas tumorais irradiadas em diferentes tecidos: ajuste de dados da literatura utilizando o modelo Linear-Quadratico e a estatistica de Tsallis*, XIX Congresso Brasileiro de Fisica Medica (17 a 20 de Agosto de 2014, Goiania-GO).
- [9580] Q. Guo, Z. Sun and W. Xu, *The properties of the anti-tumor model with coupling non-Gaussian noise and Gaussian colored noise*, Physica A (2016), in press.
- [9581] M. Tanaka, T. Watanabe and T. Mishima, *Tsallis entropy in scalespaces*, in *SPIE Conference on Vision Geometry VIII*, Eds. L.J. Latecki, R.A. Melter, D.M. Mount and A.Y. Wu, Vol. **3811** (Proceedings of SPIE, October 1999).
- [9582] O. Sotolongo-Costa and A. Posadas, *Energy distribution in earthquakes: a non-extensive approach*, preprint (2001) [physics/0104023].
- [9583] P. Wang, Z. Chang, H. Wang and H. Lu, *Scale-invariant structure of energy fluctuations in real earthquakes*, Eur. Phys. J. B **90**, 214 (2017), doi: 10.1140/epjb/e2017-70702-y
- [9584] C.E. Sanchez and P. Vega-Jorquera, *New Bayesian frequency-magnitude distribution model for earthquakes applied in Chile*, Physica A (2018), in press, doi: 10.1016/j.physa.2018.05.119
- [9585] A.I. Olemskoi, *Statistical theory of self-similar time series as a nonextensive thermodynamic system*, preprint (2001) [cond-mat/0105221].
- [9586] Z. Chen, C. Wu, J. Wang and H. Qiu, *Tsallis entropy-based complexity-IPE casualty plane: A novel method for complex time series analysis*, Entropy **26**, 521 (2024).
- [9587] F. Michael and M.D. Johnson, *Financial market dynamics*, Physica A **320**, 525 (2003).
- [9588] O.A. Rosso, M.T. Martin and A. Plastino, *Brain electrical activity analysis using wavelet based informational tools*, Physica A **313**, 587 (2002).
- [9589] H. Rabal, L. Zunino, O. Rosso and N. Cap, *Q-statistics and disequilibrium in dynamic speckle measures*, communicated at Medyfinol 2014 (Maceio, Brazil, 13 to 16 October 2004).

- [9590] H.V. Ribeiro, M. Jauregui, L. Zunino and E.K. Lenzi, *Characterizing time series via complexity-entropy curves*, Phys. Rev. E **95**, 062106 (2017).
- [9591] J. Chen and G. Li, *Tsallis wavelet entropy and its application in power signal analysis*, Entropy **16**, 3009-3025 (2014), doi:10.3390/e16063009
- [9592] M. Beenamol, S. Prabavathy and J. Mohanalin, *Wavelet based seismic signal de-noising using Shannon and Tsallis entropy*, Computers and Mathematics with Applications **64** (11), 3580-3593 (2012).
- [9593] D.G. Perez, L. Zunino and O.A. Rosso, *Self-similar stochastic processes influence over nonextensive wavelet-based informational tools*, communication at XV Conference on Nonequilibrium Statistical Mechanics and Nonlinear Physics (4-8 December 2006, Mar del Plata, Argentina).
- [9594] L. Zunino, D.G. Perez, M.T. Martin, A. Plastino, M. Garavaglia and O.A. Rosso, *Characterization of Gaussian self-similar stochastic processes using wavelet-based informational tools*, Phys. Rev. E **75**, 021115 (2007).
- [9595] D.G. Perez, L. Zunino, M.T. Martin, M. Garavaglia, A. Plastino and O.A. Rosso, *Model-free stochastic processes studied with q -wavelet-based informational tools*, Phys. Lett. A **364**, 259-266 (2007).
- [9596] O. Nicolis, J. Mateu and J.E. Contreras-Reyes, *Wavelet-based entropy measures to characterize two-dimensional fractional Brownian fields*, Entropy **xx**, 5 (2020), doi: 10.3390/exx010005
- [9597] L. Zunino, B.M. Tabak, D.G. Perez, M. Garavaglia and O.A. Rosso, *Inefficiency in Latin-America market indices*, Eur. Phys. J. B **60**, 111-121 (2007).
- [9598] L. Zunino, D.G. Perez, A. Kowalski, M.T. Martin, M. Garavaglia, A. Plastino and O.A. Rosso, *Fractional Brownian motion, fractional Gaussian noise, and Tsallis permutation entropy*, Physica A **387**, 6057-6068 (2008).
- [9599] M. Xu and P. Shang, *Generalized permutation entropy analysis based on the two-index entropic form $S_{q,\delta}$* , Chaos **25**, 053114 (2015) (7 pages).
- [9600] A.M. Kowalski, M.T. Martin, A. Plastino and L. Zunino, *Tsallis' deformation parameter q quantifies the classical-quantum transition*, Physica A **388**, 1985-1994 (2009).
- [9601] A. Plastino, M.T. Martin and O.A. Rosso, *Generalized information measures and the analysis of brain electrical signals*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [9602] O.A. Rosso, M.T. Martin and A. Plastino, *Brain electrical activity analysis using wavelet-based informational tools (II): Tsallis non-extensivity and complexity measures*, Physica A **320**, 497 (2003).
- [9603] M. Azimbagirad and L.O. Murta Junior, *Tsallis generalized entropy for Gaussian mixture model parameter estimation on brain segmentation application*, Neuroscience Informatics (2021), in press, doi: 10.1016/j.neuri.2021.100002
- [9604] A. Tozzi, J.F. Peters, J. Korbelt, M. Zare and D. Papo, *An entropic link in brain between power laws and spike frequency*, preprint (2016).
- [9605] O. Veilleux, M. Boudiaf, P. Piantanida and I.B. Ayed, *Realistic evaluation of transductive few-shot learning*, communicated at 35th Conference on Neural Information Processing Systems (NeurIPS 2021), (Sydney, Australia, 2021).
- [9606] M. Boudiaf, *Transductive few-shot learning*, Doctor Thesis (Ecole de Technologie Superieure, Universite du Quebec, Canada, 2023).
- [9607] O.A. Rosso, M.T. Martin, A. Figliola, K. Keller and A. Plastino, *EEG analysis using wavelet-based information tools*, J. Neuroscience Methods **153**, 163-182 (2006).
- [9608] A. Plastino and O.A. Rosso, *Entropy and statistical complexity in brain activity*, Europhysics News **36**, 224 (2005) [Europhysics News Special Issue *Nonextensive Statistical Mechanics: New Trends, new perspectives*, eds. J.P. Boon and C. Tsallis (November/December 2005)].
- [9609] A.I. Olemskoi, *Statistical theory of self-similar time series*, preprint (2002) [cond-mat/0210667].
- [9610] A. Olemskoi and S. Kokhan, *Effective temperature of self-similar time series: Analytical and numerical developments*, Physica A **360**, 37-58 (2006).
- [9611] S.V. Aksenov, M.A. Savageau, U.D. Jentschura, J. Becher, G. Soff and P.J. Mohr, *Application of the combined nonlinear-condensation transformation to problems in statistical analysis and theoretical physics*, Comp. Phys. Comm. **150**, 1 (2002).
- [9612] M.M. Anino, M.E. Torres and G. Schlotthauer, *Slight parameter changes detection in biological models: A multiresolution approach*, Physica A **324**, 645 (2003).
- [9613] M.E. Torres, M.M. Anino and G. Schlotthauer, *Automatic detection of slight parameter changes associated to complex biomedical signals using multiresolution q -entropy*, Medical Eng. and Physics **25**, 859 (2003).

- [9614] S. Farashi, *A multiresolution time-dependent entropy method for QRS complex detection*, Biomedical Signal Processing and Control **24**, 63-71 (2016).
- [9615] S. Farashi, *Spike detection using a multiresolution entropy based method*, Biomed. Eng.-Biomed. Tech. **63** (4), 361-376 (2018).
- [9616] V.E. Papaioannou, I.G. Chouvarda, N.K. Maglaveras, G.I. Baltopoulos and I.A. Pneumatikos, *Temperature multiscale entropy analysis: a promising marker for early prediction of mortality in septic patients*, Physiol. Meas. **34**, 1449-1466 (2013), doi:10.1088/0967-3334/34/11/1449
- [9617] I.A. Esquef, *Técnicas de entropia em processamento de imagens*, Master Thesis (Centro Brasileiro de Pesquisas Fisicas, January 2003).
- [9618] I. Esquef, M. Albuquerque and M. Albuquerque, *Nonextensive entropic image thresholding*, Proc. XV Brazilian Symposium on Computer Graphics and Image Processing (7-10 Oct. 2002, Fortaleza), IEEE (2002), p. 402.
- [9619] M.P. de Albuquerque, I.A. Esquef, A.R.G. Mello and M.P. de Albuquerque, *Image thresholding using Tsallis entropy*, Pattern Recognition Letters **25**, 1059 (2004).
- [9620] S. Suresh and S. Lal, *An efficient cuckoo search algorithm based multilevel thresholding for segmentation of satellite images using different objective functions*, Expert Systems With Applications **58**, 184-209 (2016).
- [9621] L. Ye, Z. Wu and S.M. Fei, *Tsallis relative α entropy of coherence dynamics in Grover's search algorithm*, Commun. Theor. Phys. **75**, 085101 (2023).
- [9622] J. Rahaman and M. Sing, *An efficient multilevel thresholding based satellite image segmentation approach using a new adaptive cuckoo search algorithm*, Expert Systems With Applications **174**, 114633 (2021).
- [9623] S. Agrawal, R. Panda, S. Bhuyan and B.K. Panigrahi, *Tsallis entropy based optimal multilevel thresholding using cuckoo search algorithm*. Swarm Evol. Comput. **11**, 16-30 (2013).
- [9624] S. Varsha, V. Rajinikanth and G.A. Prabhu, *Gray scale image multi-thresholding with chaotic cuckoo search*, IEEE 8541262 (2019).
- [9625] M. Sun and H. Wei, *An improved cuckoo search algorithm for multi-level gray-scale image thresholding*, Multimedia Tools and Applications (2020) (24 pages), doi: doi.org/10.1007/s11042-020-08931-5
- [9626] J.R.G. Braga, G. Conte, P. Doherty, H.F.C. Velho and E.H. Shiguemori, *Use of artificial neural networks for automatic categorical change detection in satellite imagery*, preprint (2016).
- [9627] J.R.G. Braga, E.H. Shiguemori and H.F. Campos Velho, *Determining the trajectory of unmanned aerial vehicles by a novel approach for the particle filter*, Mecanica Computacional Vol. XXXVI, 683-692, Eds. J.G. Etse, B.M. Luccioni, M.A. Pucheta, M.A. Storti (6-9 Noviembre 2018, San Miguel de Tucuman, Argentina).
- [9628] J.R.G. Braga, H.F. Campos Velho, E.H. Shiguemori and P. Doherty, *Drone autonomous navigation by hardware image processing*, Mecanica Computacional Vol. XXXVII, 2033-2043, Eds. A. Cardona, L. Garelli, J.M. Gimenez, P.A. Kler, S. Marquez Damian and M.A. Storti (5-7 Noviembre 2019, Santa Fe, Argentina).
- [9629] H.E. Sevil, *Anomaly detection using parity space approach in team of UAVs with entropy based distributed behavior*, AIAA 2020-1625, Systems Health Management (2020), doi: 10.2514/6.2020-1625
- [9630] Y. Peng, *Anisotropic diffusion combined with selective fidelity term* [in Chinese], Computer Engineering Applications **52** (7), 206-209 (2016).
- [9631] K.S. Manic, R.K. Priya and V. Rajinikanth, *Image multithresholding based on Kapur/Tsallis entropy and firefly algorithm*, Indian J. Science and Technology **9** (12) (2016) (6 pages), doi: 10.17485/ijst/2016/v9i12/89949
- [9632] D. Suresh, N.S.M. Raja and A.K. Godweena, *Kapur/Tsallis entropy guided segmentation of plasmodium species from thin blood smear images*, J. Engineering Science and Technology 9th EURECA 2017 Special Issue September, 83-93 (2018).
- [9633] T. Kaur, B.S. Saini and S. Gupta, *A comparative study on Kapur's and Tsallis entropy for multilevel thresholding of MR images via particle swarm optimisation technique*, Internat. J. Computational Systems Engineering **4** (2-3) (2018).
- [9634] P.S. Rodrigues, G.A. Wachs-Lopes, H.R. Erdmann, M.P. Ribeiro and G.A. Giralardi, *Improving a firefly meta-heuristic for multilevel image segmentation using Tsallis entropy*, Pattern Anal. Applic. **20**, 1-20 (2017), doi: 10.1007/s10044-015-0450-x
- [9635] V.P.L. Varela, A. Oliveira, P.S. Rodrigues and M. Horvath, *q-FA: An optimized based-tracking approach using firefly algorithm*, IEEE 7th Brazilian Conference on Intelligent Systems 302 (2018).
- [9636] N. Dey, J. Chaki, L. Moraru, S. Fong and X.S. Yang, *Firefly algorithm and its variants in digital image processing: A comprehensive review*, Applications of Firefly Algorithm and its Variants 1-28 (2019, Springer).
- [9637] M. Horvath, G.A. Wachs-Lopes, G.A. Giralardi and P.S. Rodrigues, *Q-SIFT: Uso da estatística nao-extensiva de Tsallis como kernel do algoritmo SIFT*, VII Simposio de Iniciacao Cientifica, Didatica e de Acoes Sociais da FEI (Sao Bernardo do Campo, 2017) (2 pages).

- [9638] G.A. Wachs-Lopes, M. Horvath, G.A. Giraldo and P.S. Rodrigues, *A strategy based on non-extensive statistics to improve frame-matching algorithms under large viewpoint changes*, Signal Processing: Image Communication **75**, 44-54 (2019).
- [9639] R.M. Santos and P.S. Silva Rodrigues, *Estudo da ativacao de regioes encefalicas em imagens fMRI*, preprint (2019).
- [9640] A. Samaddar, B.S. Jackson, C.J. Helms, N.A. Lazar, J.E. McDowell and C. Park, *A group comparison in fMRI data using a semiparametric model under shape invariance*, Computational Statistics and Data Analysis **167**, 107361 (2022).
- [9641] A.C. Sparavigna, *Bi-level image thresholding obtained by means of Kaniadakis entropy*, preprint (2015), arXiv 1502.04500
- [9642] A.C. Sparavigna, *On the role of Tsallis entropy in image processing*, IRJ.Science **1** (6) 120150679 (2015) (9 pages), ISSN 2412-026X; <http://www.irj.science/pub/issue/2015-06/>
- [9643] A.C. Sparavigna, *Conditional Kaniadakis entropy: A preliminary discussion*, Philica.com, Article 524 (2015), ISSN 1751-3030.
- [9644] A.C. Sparavigna, *Calculating mutual information using Kaniadakis entropy*, Philica.com, Article 537 (2015).
- [9645] A.C. Sparavigna, *Some relations among entropy measures*, Philica.com, Article 536 (2015).
- [9646] A.C. Sparavigna, *Tsallis and Kaniadakis entropic measures in stellar polytropes*, Philica.com Article 541 (2015), ISSN 1751-3030.
- [9647] A.C. Sparavigna, *Tsallis and Kaniadakis entropic measures in polytropic, logarithmic and exponential functions*, Internat. J. Sciences **4** (11), 1-4 (2015), doi: 10.18483/ijSci.873
- [9648] A.C. Sparavigna and R. Marazzato, *Effects of GIMP Retinex filtering evaluated by the image entropy*, preprint (2015), 1512.05653
- [9649] A.C. Sparavigna and R. Marazzato, *Evaluation of GIMP retinex filtering of images by means of the Shen++ Max Shannon entropy finder*, hal-01308434 (2016), hal.archives-ouvertes.fr/hal-01308434
- [9650] A.C. Sparavigna, *Relations between Tsallis and Kaniadakis entropic measures and rigorous discussion of conditional Kaniadakis entropy*, Internat. J. Sciences **4** (10), 47-50 (2015).
- [9651] A.C. Sparavigna, *Mutual information and nonadditive entropies: The case of Tsallis entropy*, Internat. J. Sciences **4** (10), 1-4 (2015), ISSN 2305- 3925
- [9652] A.C. Sparavigna, *Mutual Information and nonadditive entropies: A method for Kaniadakis entropy*, Internat. J. Sciences **4** (10), 5-8 (2015).
- [9653] A.C. Sparavigna, *Entropies and fractal dimensions*, Philica.com, 559 (2016).
- [9654] A.C. Sparavigna, *Tsallis entropy In bi-level and multi-level image thresholding*, Internat. J. Sciences **4** (1), 40-49 (2015).
- [9655] A.C. Sparavigna, *Generalized sums based on transcendental functions*, preprint (2018).
- [9656] A.C. Sparavigna, *On the additive group of q-integers*, preprint (2018).
- [9657] A.C. Sparavigna, *The q-integers and the Mersenne numbers*, preprint (2018).
- [9658] A.C. Sparavigna, *The group of the Fermat numbers*, Zenodo.10.5281/zenodo.1252422 (2018).
- [9659] A.C. Sparavigna, *On the generalized sums of Mersenne, Fermat, Cullen and Woodall numbers*, Zenodo 10.5281/zenodo.2634312 (2019).
- [9660] A.C. Sparavigna, *The groupoids of Mersenne, Fermat, Cullen, Woodall and other numbers and their representations by means of integer sequences*, Zenodo (2019), doi: 10.5281/zenodo.3471358
- [9661] A.C. Sparavigna, *Some groupoids and their representations by means of integer sequences*, Int. J. Sciences. **8** (10), 1-5 (2019).
- [9662] A.C. Sparavigna, *Composition operations of generalized entropies applied to the study of numbers*, Internat. J. Sciences **8** (4), 87-92 (2019).
- [9663] A.C. Sparavigna, *A binary operator generated by homographic function*, preprint (2019).
- [9664] A.C. Sparavigna, *Binary operations inspired by generalized entropies applied to figurate numbers*, Zenodo, (2021), doi: 10.5281/zenodo.4662489
- [9665] A.C. Sparavigna, *Entropies and logarithms*, Zenodo (2022).
- [9666] A.C. Sparavigna, *q-Gaussians and the shapes of Raman spectral lines*, preprint (2023), ChemRxiv (7 March 2023).
- [9667] A.C. Sparavigna, *Asymmetric q-Gaussian functions to fit the Raman LO mode band in Silicon Carbide*, preprint (2024), ChemRxiv (24 September 2023).
- [9668] A.C. Sparavigna, *Generalizing asymmetric and pseudo-Voigt functions by means of q-Gaussian Tsallis functions to analyze the wings of Raman spectral bands*, preprint (2023).

- [9669] A.C. Sparavigna, *Convolution and Fourier transform: from Gaussian and Lorentzian functions to q-Gaussian Tsallis functions*, International Journal of Sciences **12** (11), (2023).
- [9670] A.C. Sparavigna, *The modified Bessel K functions and the Fourier Transform of q-Gaussians*, preprint (2023).
- [9671] A.C. Sparavigna, *Hypergeometric ${}_0F_3$ functions and the Fourier transform of κ -exponentials*, preprint (2023).
- [9672] A.C. Sparavigna, *Kubo lineshape and its fitted q-Gaussian Tsallis function*, International Journal of Sciences **13** (01) (2024).
- [9673] A.C. Sparavigna, *Raman spectroscopy of Siderite with q-Gaussian and split-q-Gaussian analyses*, International Journal of Sciences **13** (02) (2024).
- [9674] A.C. Sparavigna, *Pyrene and Biochar (Raman spectroscopy)*, preprint (2024).
- [9675] A.C. Sparavigna, *The case of the Q(5) Raman line of carbon monoxide and its fitted q-Gaussian function*, preprint (2024).
- [9676] A.C. Sparavigna, *The fitted q-Gaussian function, from Voigt profile to Kubo lineshape*, preprint (2024).
- [9677] A.C. Sparavigna, *Water and q-Gaussians (Raman spectroscopy)*, preprint (2024).
- [9678] A.C. Sparavigna, *Applying q-Gaussians to the OH-stretching Raman bands of water and ice*, International Journal of Sciences (2024).
- [9679] A.C. Sparavigna, *Graphene and Graphene Oxide (Raman Spectroscopy)*, preprint (2024).
- [9680] A.C. Sparavigna, *Molybdenum disulfide MoS₂ and the q-BWF line shapes (Raman Spectroscopy)*, preprint (2024).
- [9681] A.C. Sparavigna, *Graphene, graphene oxide and carbon nanotubes in Raman spectroscopy*, International Journal of Sciences **13** (2024).
- [9682] A.C. Sparavigna, *q-Gaussian and q-BWF functions applied to the decomposition of pulsar profiles: Preliminary results*, International Journal of Sciences **13** (6) (2024).
- [9683] A.C. Sparavigna, *Raman broad scans of glasses with rare earth element (REE) oxides and their decomposition with q-BWF line shapes*, preprint (2024).
- [9684] A.C. Sparavigna, *Barium Titanate BaTiO₃ Raman spectra and their deconvolution with q-BWF functions*, preprint (2024).
- [9685] A.C. Sparavigna, *Raman broad scans of Rare Earth Oxide (REO) glasses from RRUFF database, compared to the Raman spectra of RE Oxides from Raman open database*, International Journal of Sciences **13** (2024).
- [9686] A.C. Sparavigna, *Hydroxyl-stretching region in the Raman broad scans on minerals of the vivianite group*, preprint (2024).
- [9687] A.C. Sparavigna, *Water in zeolites of natrolite group and its OH-stretching region in Raman spectroscopy*, preprint (2024).
- [9688] A.C. Sparavigna, *q-Gaussian and q-BWF functions for the deconvolution of Raman and infrared spectra of Calcite*, preprint (2024).
- [9689] A.C. Sparavigna, *q-BWF functions to deconvolute the attenuated total reflectance infrared spectra of the barite-group minerals*, preprint (2024).
- [9690] A.C. Sparavigna, *Hydroxyl-stretching region in the Raman broad scans on minerals of the Vivianite group (Vivianite, Baricite, Bobierrite, Annabergite, Erythrite)*, International Journal of Sciences **13** (8) (2024).
- [9691] A.C. Sparavigna, *Attenuated total reflectance infrared spectra of carbonate minerals, deconvoluted by means of q-BWF functions*, International Journal of Sciences **13** (9) (2024).
- [9692] A.C. Sparavigna, *Gypsum crystallization water: Comparing a laser excited Raman spectrum with a mercury resonance radiation excited spectrum (Rasetti technique)*, International Journal of Sciences **13** (9) (2024).
- [9693] A.C. Sparavigna, *Gaussian and q-Gaussian functions for the decomposition of J1022+1001 pulsar profiles*, International Journal of Sciences **13** (6) (2024).
- [9694] A.C. Sparavigna, *Atlas of metabolite SERS fingerprints obtained by means of q-Gaussian deconvolutions and Fityk Software*, preprint (2024).
- [9695] A.C. Sparavigna, *Albite Feldspar Mineral Raman and ATR-IR Fingerprints obtained with q-Gaussian and q-BWF deconvolutions made by means of Fityk Software*, preprint (2025).
- [9696] A.C. Sparavigna, *Augelite Raman and ATR-IR fingerprints obtained with q-Gaussian and q-BWF deconvolutions made by means of Fityk software*, preprint (2025).
- [9697] A.C. Sparavigna, *Paraffin ATR-IR Fingerprints obtained with q-BWF deconvolutions*, preprint (2025).
- [9698] A.C. Sparavigna, *Pulsar profiles and the q-Gaussian and q-BWF line shapes*, Zenodo (2025).
- [9699] A.C. Sparavigna, *ATR-IR fingerprint of Carnauba wax, obtained by means of a deconvolution based on q-BWF functions and Fityk software*, preprint (2025).

- [9700] A. Murari, D. Mazon, A. Debrie and JET-EFDA Contributors, *On the use of non-additive entropy to determine the presence of vibrations in the videos of JET cameras*, IEEE Transactions on Plasma Science, **39** (12), 3364-3370 (2011).
- [9701] T. Craciunescu, A. Murari, M. Gelfusa, I. Tiseanu, V. Zoita and G. Arnoux, *Advanced methods for image registration applied to JET videos*, Fusion Engineering and Design **96-97**, 765-768 (2015).
- [9702] Y.D. Zhang and L.N. Wu, *Optimal multi-Level thresholding based on maximum Tsallis entropy via an artificial bee colony approach*, Entropy **13**, 841-859 (2011).
- [9703] J. Mohanalin, P.K. Kalra and N. Kumar, *Microcalcification segmentation using normalized Tsallis entropy: An automatic "q" calculation by exploiting type II fuzzy sets*, IETE J. Research **55**, 90-96 (2009).
- [9704] J. Mohanalin, P.K. Kalra and N. Kumar, *Tsallis entropy based microcalcification segmentation*, ICGST-GVIP Journal, ISSN 1687-398X **9**(I), 49-55 (2009).
- [9705] J. Mohanalin, P.K. Kalra and N. Kumar, *An automatic method to enhance microcalcifications using normalized Tsallis entropy*, Signal Processing **90**, 952-958 (2010).
- [9706] J. Mohanalin, P.K. Kalra and N. Kumar, *Extraction of micro calcification using non extensive property of mammograms*, 2009 IEEE International Advance Computing Conference **1-3**, 636-641 (2009).
- [9707] J. Mohanalin, P.K. Kalra and N. Kumar, *Enhancement of microcalcifications in mammograms using Gaussian membership function based on Tsallis entropy*, 2009 IEEE International Advance Computing Conference **1-3**, 687-690 (2009).
- [9708] R. Kochher, G. Marken and A. Bhasin, *Optimal mammogram edge detection using artificial neural network*, Internat. J. Innovations and Advancement in Computer Science **6** (8), 8616 (2017).
- [9709] S. Banik, R.M. Rangayyan and J.E. Leo Desautels, *Measures of angular spread and entropy for the detection of architectural distortion in prior mammograms*, Int. J. Computer Assisted Radiology and Surgery **8**, 121-134 (2013).
- [9710] R.M. Rangayyan, S. Banik, and J.E. Leo Desautels, *Detection of architectural distortion in prior mammograms using statistical measures of angular spread*. This chapter is a revised and expanded version of S. Banik, R. M. Rangayyan, and J. E. L. Desautels, *Measures of angular spread and entropy for the detection of architectural distortion in prior mammograms*, International Journal of Computer Assisted Radiology and Surgery **8** (1), 121-134 (2013).
- [9711] J. Mohanalin, Beenamol, P.K. Kalra and N. Kumar, *A novel automatic microcalcification detection technique using Tsallis entropy and a type II fuzzy index*, Computers and Mathematics with Applications **60** (8), 2426-2432 (2010).
- [9712] J. Mohanalin, Beenamol, P.K. Kalra and N. Kumar, *An automatic image registration scheme using Tsallis entropy*, Biomedical Signal Processing and Control **5**, 328-335 (2010).
- [9713] J. Mohanalin and M. Beenamol, *A new wavelet algorithm to enhance and detect microcalcifications*, Signal Processing **105**, 438-448 (2014).
- [9714] R. Roselin and K. Thangavel, *Mammogram image segmentation using granular computing based on rough entropy*, Proceedings of the International Conference on Pattern Recognition, Informatics and Medical Engineering 21-23 (2012).
- [9715] M. Tunnicliffe and G. Hunter, *Dimensionality, granularity, and differential residual weighted entropy*, Entropy **21**, 825 (2019), doi:10.3390/e21090825
- [9716] S. Sadek and S. Abdel-Khalek, *Generalized α -entropy based medical image segmentation*, J. Software Engineering and Applications **7**, 62-67 (2014).
- [9717] J.F. Ramirez-Villegas and D.F. Ramirez-Moreno, *Wavelet packet energy, Tsallis entropy and statistical parameterization for support vector-based and neural-based classification of mammographic regions*, Neurocomputing **77** (1), 82-100 (2012).
- [9718] Z. Liu, Q. Hu, Y. Cui and Q. Zhang, *A new detection approach of transient disturbances combining wavelet packet and Tsallis entropy*, Neurocomputing **142**, 393-407 (2104), doi: <http://dx.doi.org/10.1016/j.neucom.2014.04.020>
- [9719] X.G. Tian and X.R. Hou, *A Tsallis-entropy image thresholding method based on two-dimensional histogram oblique segmentation*, 2009 WASE International Conference on Information Engineering, ICIE **I**, 164-168 (2009).
- [9720] F. Nie, *Tsallis cross-entropy based framework for image segmentation with histogram thresholding*, J. Electronic Imaging **24** (1), 013002 (2015) (16 pages).
- [9721] F. Nie, X. Wang, S. Yu and Z. Liao, *Image thresholding by minimizing Tsallis divergence measure*, Internat. J. Signal Processing, Image Processing and Pattern Recognition **8** (8), 89-98 (2015), doi: <http://dx.doi.org/10.14257/ijisp.2015.8.8.10>

- [9722] H.Y. Li, T.T. Tang and Y.J. Wang, *Casing state detection methods based on the CCL signal of the tractor for horizontal wells*, Proceedings of the IEEE 11th International Conference on Electronic Measurement and Instruments (ICEMI), C. Jianping, Z. Ying and W. Juan, eds. (16-19 Aug 2013, Harbin, China).
- [9723] L. Assirati, A.S. Martinez and O.M. Bruno, *Satellite classification and segmentation using non-additive entropy*, J. Phys.: Conference Series **490**, 012086 (2014) (4 pages), doi:10.1088/1742-6596/490/1/012086
- [9724] S. Susan, M. Hanmandlu, V.K. Madasu, B.C. Lovell, *Detection of Skin Lesions by Fuzzy Entropy based Texel Identification*, Proceedings of 6th International Symposium on Image and Signal Processing and Analysis (ISPA 2009), 248-253 (2009).
- [9725] C.H. Ng, J. Dayou, C.M. Ho, S.V. Muniandy, A.H. Ahmadd and M.N. Dalimin, *Investigation on the possibility of using entropy approach for classification and identification of frog species*, Jurnal Teknologi **75** (1), 225-231 (2015).
- [9726] F.G. Medeiros Neto, A.F. de Lima, F.N.S. de Medeiros, M.M.S. de Souza and I.C. de Paula Junior, *Classificacao de especies vegetais por atributos de forma e textura das folhas*, preprint 153233 (2016).
- [9727] P. Zarjam, J. Epps, F. Chen and N.H. Lovell, *Estimating cognitive workload using wavelet entropy-based features during an arithmetic task*, Com. Biol. Med. **43** (12), 2186-2195 (2013), <http://dx.doi.org/10.1016/j.combiomed.2013.08.021i>
- [9728] M.P. de Albuquerque, *Aplicacoes tecnologicas da mecanica estatistica nao extensiva*, communicated at the 2nd Workshop of the National Institute of Science and Technology for Complex Systems (Rio de Janeiro, 1-5 March 2010).
- [9729] S.K. Ting, C.E. Tan and R. Sapawi, *Improved simulated annealing algorithm for PAPR reduction in OFDM systems*, 2006 International Conference on Computing and Informatics (ICOCI 2006), Proceedings 390-395 (2006).
- [9730] M.Z.M.B. Jilani, A. Tucker and S. Swift, *An application of generalised simulated annealing towards the simultaneous modelling and clustering of glaucoma*, Journal of Heuristics (2019) (25 pages), doi: doi.org/10.1007/s10732-019-09415-y
- [9731] S. Martin, G. Morison, W. Nailon and T. Durrani, *Fast and accurate image registration using Tsallis entropy and simultaneous perturbation stochastic approximation*, Electronics Lett. **40**, No. 10, 20040375 (13 May 2004) (2 pages).
- [9732] W. Mohamed and A.B. Hamza, *Nonextensive entropic image registration*, Image Analysis and Recognition, Proc. **5627**, 116-125 (2009).
- [9733] W. Mohamed, A. Ben Hamza and K. Gharaibeh, *Graph-theoretic image alignment using topological features*, Computational Modeling of Objects Represented in Images, Proc. **6026**, 199-209 (2010).
- [9734] P. Castello, C. Gonzalez, M. Chover, M. Sbert and M. Feixas, *Tsallis entropy for geometry simplification*, in *Tsallis Entropy*, Special Issue of *Entropy*, ed. A. Anastasiadis, Entropy **13**, 1805-1828 (2011).
- [9735] M. Vila, A. Bardera, M. Feixas and M. Sbert, *Tsallis mutual information for document classification*, in *Tsallis Entropy*, Special Issue of *Entropy*, ed. A. Anastasiadis, Entropy **13** (9), 1694-1707 (2011).
- [9736] J.M. Angulo and F.J. Esquivel, *Multifractal dimensional dependence assessment based on Tsallis mutual information*, Entropy **17**, 5382-5401 (2015), doi:10.3390/e17085382
- [9737] M. Vila, A. Bardera, Q. Xu, M. Feixas and M. Sbert, *Jensen-Tsallis divergence for video processing*, in press, in *Tsallis Entropy*, Special Issue of *Entropy*, edited by A. Anastasiadis (2011).
- [9738] Q. Xu, Y. Liu, X. Li, Z. Yang, J. Wang, M. Sbert and R. Scopigno, *Browsing and exploration of video sequences: A new scheme for key frame extraction and 3D visualization using entropy based Jensen divergence*, Information Sciences **278**, 736-756 (2014).
- [9739] V.B. Surya Prasath and R. Delhibabu, *Automatic mucosa detection in video capsule endoscopy with adaptive thresholding*, Computational Intelligence in Data Mining-Volume 1, Series Advances in Intelligent Systems and Computing **410**, 95-102 (2015).
- [9740] M. Vila, A. Bardera, Q. Xu, M. Feixas and M. Sbert, *Tsallis entropy-based information measures for shot boundary detection and keyframe selection*, Signal Image and Video Processing **7** (3), 507-520 (2013), DOI 10.1007/s11760-013-0452-3
- [9741] C. Gonzalez, P. Castello, M. Chover, M. Sbert, M. Feixas and J. Gumbau, *Simplification method for textured polygonal meshes based on structural appearance*, Signal Image and Video Processing **7** (7), 479-492-520 (2013), doi: 10.1007/s11760-013-0450-5
- [9742] J. Florindo and K. Metze, *Using non-additive entropy to enhance convolutional neural features for texture recognition*, Entropy **23**, 1259 (2021), doi: 10.3390/e23101259
- [9743] S. Susan and M. Hanmandlu, *Color texture recognition by color information fusion using the non-extensive entropy*, Multidim. Syst. Sign Process. (2017) (16 pages), doi: 10.1007/s11045-017-0502-z

- [9744] M.B. Valentin, C.R. de Bom, M.P. de Albuquerque, M.P. de Albuquerque, E.L. Faria, M.D. Correia and R. Surmas, *On a method for rock classification using textural features and genetic optimization*, Notas Tecnicas CBPF **7** (1), 18-30 (2017), doi: [dx.doi.org/10.7437/NT2236-7640/2017.01.003](https://doi.org/10.7437/NT2236-7640/2017.01.003)
- [9745] M. Sbert and J. Poch, *A necessary and sufficient condition for the inequality of generalized weighted means*, J. Inequalities Applications 2016:292 (2016), doi: [10.1186/s13660-016-1233-7](https://doi.org/10.1186/s13660-016-1233-7)
- [9746] M. Sbert, J. Poch, S. Chen and V. Elvira, *Stochastic order and generalized weighted mean invariance*, Entropy **23**, 662 (2021).
- [9747] M. Habermann, F.B. Campos and E.H. Shiguemori, *Rotation invariant texture analysis based on co-occurrence matrix and Tsallis distribution*, in *Advances in Swarm and Computational Intelligence*, Lecture Notes in Computer Science **9142**, 213-221 (2015).
- [9748] X. Bonaventura, M. Feixas and M. Sbert, *Information measures for object understanding*, Signal Image and Video Processing **7**, 467-478 (2013), DOI [10.1007/s11760-013-0449-y](https://doi.org/10.1007/s11760-013-0449-y)
- [9749] J.B. Florindo, L. Assirati and O.M. Bruno, *Enhancing texture descriptors by a neighborhood approach to the non-additive entropy*, Digital Signal Processing: A Review Journal **44** (1), 14-25 (2015), doi: <http://dx.doi.org/10.1016/j.dsp.2015.05.004>
- [9750] J.B. Florindo and O.M. Bruno, *Texture analysis by fractal descriptors over the wavelet domain using a best basis decomposition*, Physica A **444**, 415-427 (2016), doi: <http://dx.doi.org/10.1016/j.physa.2015.10.031>
- [9751] J.B. Florindo, L. Assirati, O.M. Bruno, *Locally enhancing fractal descriptors by using the non-additive entropy*, Pattern Recognition Lett. **70**, 32-37 (2016), doi: [10.1016/j.patrec.2015.11.002](https://doi.org/10.1016/j.patrec.2015.11.002)
- [9752] N. Inoue and K. Shinoda, *q-Gaussian mixture models for image and video semantic indexing*, J. Visual Comm. Image Representation (2013), in press (17 pages).
- [9753] M. Khader, A. Ben Hamza and P. Bhattacharya, *Multimodality image alignment using information-theoretic approach*, Image Analysis and Recognition, Part II, Proceedings **6112**, 30-39 (2010).
- [9754] M. Khader and A. Ben Hamza, *Nonrigid image registration using an entropic similarity*, IEEE Transactions on Information Technology in Biomedicine **15** (5), 681-690 (2011).
- [9755] M. Khader and A. Ben Hamza, *An information-theoretic method for multimodality medical image registration*, Expert Systems with Applications **39**, 5548-5556 (2012).
- [9756] M. Khader, E. Schiavi and A. Ben Hamza, *A multicomponent approach to nonrigid registration of diffusion tensor images*, Appl. Intell. **46**, 241-253 (2017), doi: [10.1007/s10489-016-0833-8](https://doi.org/10.1007/s10489-016-0833-8)
- [9757] A.K. Bhandari, A. Kumar and G.K. Singh, *Modified artificial bee colony based computationally efficient multilevel thresholding for satellite image segmentation using Kapur's, Otsu and Tsallis functions*, Expert Systems with Applications **42**, 1573-1601 (2015).
- [9758] A.A. Babu and V.M.A. Rajam, *Water-body segmentation from satellite images using Kapur's entropy-based thresholding method*, Computational Intelligence 1-19 (2020), doi: [10.1111/coin.12339](https://doi.org/10.1111/coin.12339)
- [9759] F. Nie, *A three-level thresholding technique based on nonextensive entropy and fuzzy partition with artificial bee colony algorithm*, Internat. J. Hybrid Information Technology **8** (7), 1-10 (2015), doi: <http://dx.doi.org/10.14257/ijhit.2015.8.7.01>
- [9760] M. Xu, E. Lopez Droguett, I.D. Lins and M. Chagas Moura, *On the q-Weibull distribution for reliability applications: An adaptive hybrid artificial bee colony algorithm for parameter estimation*, Reliability Engineering and System Safety **158**, 93-105 (2017).
- [9761] M. Yasuda, *Quantitative analyses and development of a q-incrementation algorithm for FCM with Tsallis entropy maximization*, Advances in Fuzzy Systems ID 404510, 148-154 (2015), doi: <http://dx.doi.org/10.1155/2015/404510>
- [9762] M. Yasuda, *Analysis of temperature and q-parameter dependencies of FCM with Tsallis entropy maximization*, 12th International Conference on Natural Computation, Fuzzy Systems and Knowledge Discovery (ICNC-FSKD), IEEE, 884-888 (2016).
- [9763] M. Yasuda, *Approximate determination of q-parameter for FCM with Tsallis entropy maximization*, 2016 Joint 8th International Conference on Soft Computing and Intelligent Systems and 2016 17th International Symposium on Advanced Intelligent Systems IEEE 700-705 (2016); J. Advanced Computational Intelligence and Intelligent Informatics **21** (7), 1152-1160 (2017).
- [9764] M. Yasuda, *On utilization of K-means for determination of q-parameter for Tsallis-Entropy-Maximized-FCM*, J. Software Engineering and Applications **10**, 605-624 (2017).
- [9765] M. Yasuda, *Analysis of temperature and q-parameter dependency of FCM with Tsallis entropy maximization*, J. Advanced Computational Intelligence and Intelligent Informatics **22** (5), 666-673 (2018).
- [9766] D.N. Guo, *Relative entropy and score function: New information-estimation relationships through arbitrary additive perturbation*, 2009 IEEE International Symposium on Information Theory **1-4**, 814-818 (2009).

- [9767] A. Teixeira, A. Souto, A. Matos and L. Antunes, *Entropy measures vs. algorithmic information*, 2010 IEEE International Symposium on Information Theory, 1413-1417 (2010).
- [9768] A. Teixeira, A. Matos, A. Souto and L. Antunes, *Entropy measures vs. Kolmogorov complexity*, Entropy **13**, 595-611 (2011).
- [9769] A. Teixeira, A. Souto and L. Antunes, *On conditional Tsallis entropy*, Entropy **23**, 1427 (2021).
- [9770] S. Liao, W. Fan, A.C.S. Chung and DY Yeung, *Facial expression recognition using advanced local binary patterns, Tsallis entropies and global appearance features*, 2006 IEEE International Conference on Image Processing (8-11 October 2006), pages 665 - 668 [Digital Object Identifier 10.1109/ICIP.2006.312418].
- [9771] L.B. Hinkle, K.K. Roudposhti and V. Metsis, *Physiological Measurement for Emotion Recognition in Virtual Reality*, preprint (2019).
- [9772] S. Wang, F.L. Chung and F. Xiong, *A novel image thresholding method based on Parzen window estimate*, Pattern Recognition **41**, 117-129 (2008).
- [9773] S. Ouadfel and S. Meshoul, *Bio-inspired algorithms for multilevel image thresholding*, International Journal of Computer Applications in Technology **49** (3/4), 207-226 (2014).
- [9774] S. Dey, I. Saha, S. Bhattacharyya and U. Maulik, *Multi-level thresholding using quantum inspired meta-heuristics*, Knowledge-Based Systems **67**, 373-400 (2014).
- [9775] Y.G. Tang, Q.Y. Di, X.P. Guan and F.C. Liu, *Threshold selection based on fuzzy Tsallis entropy and particle swarm optimization*, Neuroquantology **6**, 412-419 (2008).
- [9776] F. Nie and P. Zhang, *Fuzzy Tsallis entropy for infrared human image segmentation with simulated annealing algorithm*, ICIC Express Letters **9** (8), 2081-2088 (2015).
- [9777] Y. Xu, R. Chen, Y. Li , P. Zhang, J. Yang, X. Zhao, M. Liu and D. Wu, *Multispectral image segmentation based on a fuzzy clustering algorithm combined with Tsallis entropy and a Gaussian mixture model*, Remote Sensing **11**, 2772 (2019), doi: 10.3390/rs11232772
- [9778] Y.L. Li, Y.C. Zhang and H.Q. Tang, *Tsallis model-based separation of overlapped peak signals*, Science China - Information Sciences **53** (4), 823-832 (2010).
- [9779] L. Rong and F. Jiu-lun, *Fuzzy divergences based on Tsallis relative entropy*, Quantitative Logic and Soft Computing **2**, **82**, 359-368 (2010).
- [9780] F.M. Lopes, D.C. Martins and R.M. Cesar Jr., *Feature selection environment for genomic applications*, BMC Bioinformatics **9**, 451 (2008) (8 pages).
- [9781] T. Jiang, W. Xiang, P.C. Richardson, J. Guo and G. Zhu, *PAPR reduction of OFDM signals using partial transmit sequences with low computational complexity*, IEEE Transactions on Broadcasting **53**, 719-724 (2007).
- [9782] J. Hu, W.W. Tung and J. Gao, *A new way to model nonstationary sea clutter*, IEEE Signal Processing Lett. **16**, 129-132 (2009).
- [9783] S. Chen, F. Luo, C. Hu and X. Nie, *Small target detection in sea clutter background based on Tsallis entropy of Doppler spectrum*, Journal of Radars **8** (3), 344-354 (2019).
- [9784] Y. Zhang, Z. Deng, J. Shi, Y. Zhang and H. Liu, *Sea clutter modelling using an autoregressive generalized nonlinear-asymmetric GARCH model*, Digital Signal Processing **62**, 52-64 (2017), doi: 10.1016/j.dsp.2016.11.003
- [9785] A. Ziviani, A.T.A. Gomes, M.L. Monsoro and P.S.S. Rodrigues, *Network anomaly detection using nonextensive entropy*, IEEE Communications Letters **11**, 1034-1036 (2007).
- [9786] P. Zhao, P. Van Eetvelt, C. Goh, N. Hudson, S. Wimalaratna and E.C. Ifeakor, *EEG markers of Alzheimer's disease using Tsallis entropy*, communicated at the 3rd International Conference on Computational Intelligence in Medicine and Healthcare (CIMED2007) (July 25-27, 2007, Plymouth, U.K.).
- [9787] W. Fruhwirt, M. Mairhofer, A. Hahn, H. Garn, M. Waser, R. Schmidt, T. Benke, P. Dal-Bianco, G. Ransmayr, D. Grossegger, S. Roberts and G. Dorffner, *Standardized low-resolution brain Electromagnetic Tomography does not improve EEG Alzheimer' s disease assessment*, NeuroImage **310**, 121144 (2025).
- [9788] T.N. Sindhu, A. Shafiq, M.B. Riaz, T.A. Abushal, H. Ahmad, E.M. Almetwally and S. Askar, *Introducing the new arcsine-generator distribution family: An in-depth exploration with an illustrative example of the inverse weibull distribution for analyzing healthcare industry data*, Journal of Radiation Research and Applied Sciences **17**, 100879 (2024).
- [9789] A.H. Al-Nuaimi, E. Jammeh, L. Sun and E. Ifeakor, *Tsallis entropy as a biomarker for detection of Alzheimer's disease*, IEEE 4166-4169 (2015).
- [9790] Y. Hou, B. Wang, D. Song, X. Cao and W. Li, *Quadratic Tsallis entropy bias and generalized maximum entropy models*, Computational Intelligence **30** (2), 233-262 (2014).

- [9791] T. De Bock, S. Das, M. Mohsin, N.B. Munro, L.M. Hively, Y. Jiang, C.D. Smith, D.R. Wekstein, G.A. Jicha, A. Lawson, J. Lianekhammy, E. Walsh, S. Kiser and C. Black, *Early detection of Alzheimer's disease using nonlinear analysis of EEG via Tsallis entropy*, Oak Ridge National Laboratory preprint (2010).
- [9792] H. Garn, M. Waser, M. Deistler, T. Benke, P. Dal-Bianco, G. Ransmayr, H. Schmidt, G. Sanin, P. Santer, G. Caravias, S. Seiler, D. Grosseegger, W. Fruehwirt and R. Schmidt, *Quantitative EEG markers relate to Alzheimer's disease severity in the prospective dementia registry Austria (PRODEM)*, *Clinical Neurophysiology* **126**, 505-513 (2015).
- [9793] N. Sharma, M.H. Kolekar, and K. Jha, *Iterative filtering decomposition based early dementia diagnosis using EEG with cognitive tests*, *Generic Colorized Journal, IEEE Transactions on Neural Systems and Rehabilitation Engineering* (2020), in press, doi: 10.1109/TNSRE.2020.3007860
- [9794] A.H.H. Al-Nuaimi, E. Jammeh, L. Sun and E. Ifeakor, *Complexity measures for quantifying changes in electroencephalogram in Alzheimer's disease*, preprint (2017).
- [9795] K.D. Tzimourta, T. Afrantou, P. Ioannidis, M. Karatzikou, A.T. Tzallas, N. Giannakeas, L.G. Astrakas, P. Angelidis, E. Glavas, N. Grigoriadis, D.G. Tsalikakis and M.G. Tsipouras, *Analysis of electroencephalographic signals complexity regarding Alzheimer's disease*, *Computers and Electrical Engineering* **76**, 198-212 (2019).
- [9796] M. Azimbagirad, F.H. Simozo, A.C.S. Senra Filho and L.O. Murta Junior, *Tsallis-entropy segmentation through MRF and Alzheimer anatomic reference for brain magnetic resonance parcellation*, *Magnetic Resonance Imaging* **65**, 136-145 (2020).
- [9797] J. Sun, B. Wang, Y. Niu, Y. Tan, C. Fan, N. Zhang, J. Xue, J. Wei and J. Xiang, *Complexity analysis of EEG, MEG, and fMRI in mild cognitive impairment and Alzheimer's disease: A review*, *Entropy* **22**, 239 (2020), doi: 10.3390/e22020239
- [9798] P.N. Martinez Arias, *Study of artificial intelligence models applied to the analysis of electroencephalograms in Alzheimer's disease*, Thesis (Escuela de Ciencias Matematicas y Computacionales, Universidad de Investigacion de Tecnologia Experimental Yachay, Ecuador, 2020).
- [9799] A.C. Tsolakis, C. Timplalexis, M. Tsolaki, E.C. Aifantis, *Electroencephalography classification of healthy, mild cognitive impairment and probable Alzheimer's disease through linear and non-linear biomarkers*, *Medical Research Archives* (2022), doi: 10.18103/mra.v10i9.3064
- [9800] I.F. Tsigelny, V.L. Kouznetsova, D.E. Sweeney, W. Wu, K.T. Bush and S.K. Nigam, *Analysis of metagene portraits reveal distinct transitions during kidney organogenesis*, *Science Signaling* **1**, issue 49 (Dec. 9, 2008) [Cover in issue 50, Dec. 16, 2008].
- [9801] I.F. Tsigelny, V.L. Kouznetsova, M. Baitaluk and Jean-Pierre Changeux, *A hierarchical coherent-gene-group model for brain development*, in *Genes, Brain and Behavior* (Blackwell, 2012) (19 pages), doi: 10.1111/gbb.12005 .
- [9802] J. Pan, Z. Ma, Y. Pang and Y. Yuan, *Robust probabilistic tensor analysis for time-variant collaborative filtering*, *Neurocomputing* **119**, 139-143 (2013), <http://dx.doi.org/10.1016/j.neucom.2012.03.035>
- [9803] L. Peng, X. Li, D. Bi and Y. Xie, *Robust adaptive filtering with q-Gaussian kernel mean p-power error*, *IEEE Signal Processing Letters* **25** (9), 1335 (2018).
- [9804] X. Li, L. Peng, D. Bi and Y. Xie, *Robust adaptive filtering under least q-Gaussian kernel mean p-power error criterion*, *Proceedings IEEE International Conference on Information Communication and Signal Processing* (2018) (5 pages).
- [9805] J.D. Victor and S. Nirenberg, *Indices for Testing Neural Codes*, *Neural Computation* **20**, 2895-2936 (2008).
- [9806] P. Li, *Estimating entropy of data streams using compressed counting*, preprint (2009), 0910.1495 [cs.DS].
- [9807] D. Kouvatso and S.A. Assi, *On the analysis of queues with long range dependent traffic: An extended maximum entropy approach*, *IEEE CNF, 3rd EuroNGI Conference on Next Generation Internet Networks* (21-23 May 2007), pages 226-233 [Digital Object Identifier 10.1109/NGI.2007.371220].
- [9808] M. Shen, Q. Zhang and P.J. Beadle, *Nonextensive entropy analysis of non-stationary ERP signals*, *IEEE International Conference on Neural Networks and Signal Processing* (Nanjing, China, 14-17 December 2003), pages 806-809.
- [9809] S.J.J. Jui, R.C. Deo, P.D. Barua, A. Devi, J. Soar and U.R. Acharya, *Application of entropy for automated detection of neurological disorders with electroencephalogram signals: A review of the last decade (2012?2022)*, *IEEE Access* (2023).
- [9810] Y. Wang, J. Ge, H. Zhang and B. Zhou, *Intelligent injection liquid particle inspection machine based on two-dimensional Tsallis Entropy with modified pulse-coupled neural networks*, *Engineering Applications Artificial Intelligence* **24**, 625-637 (2011).
- [9811] Y.B. Gong, X. Lin, Y.H. Hao and X.G. Ma, *Non-Gaussian noise and coupling-induced firing transitions of Newman-Watts neuronal networks*, *Fluctuation and Noise Letters* **10** (1), 1-11 (2011).

- [9812] L. Montangie and F. Montani, *Quantifying higher-order correlations in a neuronal pool*, Physica A **421**, 388-400 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2014.11.046>
- [9813] L. Montangie and F. Montani, *Higher-order correlations in common input shapes the output spiking activity of a neural population*, Physica A **471**, 845-861 (2017).
- [9814] L. Montangie, *Modelos minimales y teoria de la informacion de poblaciones neuronales*, Doctor Thesis (Universidad de La Plata, Argentina, 2017).
- [9815] L. Montangie and F. Montani, *Common inputs in subthreshold membrane potential: The role of quiescent states in neuronal activity*, Phys. Rev. E **97**, 060302(R) (2018).
- [9816] N. Guisande, M.P. di Nunzio, N. Martinez, O.A. Rosso and F. Montani, *Chaotic dynamics of the Henon map and neuronal input-output: A comparison with neurophysiological data*, Chaos **33**, 043111 (2023).
- [9817] A. Ben Hamza, *Nonextensive information-theoretic measure for image edge detection*, J. Electronic Imaging **15**, 013011 (2006).
- [9818] A. Ben Hamza, *Spectral graph theoretic analysis of Tsallis entropy-based dissimilarity measure*, preprint (2015), 1504.01799 [cs.IT].
- [9819] H. Singh, G. Kaur and N. Gupta, *Robust edge detector using back propagation neural network with multi-thresholding*, IEEE International Conference on Computational Intelligence and Computing Research (2014) (6 pages).
- [9820] H. Singh, A. Pedraza, O. Deniz and G. Bueno, *Detection of adversarial examples through chaos quantification in time series analysis*, International Journal of Machine Learning and Cybernetics (2025).
- [9821] T. Jing and L. Wang, *Range alignment method for ISAR using Tsallis entropy*, J. Data Acquisition and Processing **29** (4), 609-614 (2014).
- [9822] B. Kowalik and M. Szpyrka, *Architecture of on-line data acquisition system for car on-board diagnostics*, MATEC Web of Conferences **252**, 02003 (2019), doi: 10.1051/mateconf/201925202003
- [9823] B. Kowalik and M. Szpyrka, *An entropy-based car failure detection method based on data acquisition pipeline*, Entropy **21**, 426 (2019), doi: 10.3390/e21040426
- [9824] M.F. Hu, L. Gao and Z.Y. Zhang, *A new ISAR range alignment method via minimum Tsallis entropy*, 2013 IEEE International Conference on Microwave Technology and Computational Electromagnetics (ICMTCE), 391-394 (2013).
- [9825] M.A. El-Sayed, S.F. Bahgat and S. Abdel-Khalek, *Novel approach of edges detection for digital images based on hybrid types of entropy*, Appl. Math. Inf. Sci. **7** (5), 1809-1817 (2013).
- [9826] M.A. El-Sayed, S. Abdel-Khalek and E. Abdel-Aziz, *Study of efficient technique based on 2D Tsallis entropy for image thresholding*, Internat. J. Computer Science and Engineering **3** (9), 3125-3138 (2011).
- [9827] M.A. El-Sayed, *Proposed system of biometric authentication using palm print/veins with Tsallis entropy*, Internat. J. Computer Science and Technology **6** (2), 9-14 (2015).
- [9828] W. Mohamed, Y. Zhang, A. Ben Hamza and N. Bouguila, *Stochastic optimization approach for entropic image alignment*, IEEE Internat. Symp. on Information Theory Proceed. **1-6**, 2126-2130 (2008).
- [9829] K. Tarmissi and A. Ben Hamza, *Information-theoretic hashing of 3D objects using spectral graph theory*, Expert Systems with Applications **36**, 9409-9414 (2009).
- [9830] M. Ghaderpanah, A. Abbas and A. Ben Hamza, *Entropic hashing of 3D objects using Laplace-Beltrami operator*, 15th IEEE Int. Conf. on Image Processing **1-5**, 3104-3107 (2008).
- [9831] C.Y. Li, A. Ben Hamza, N. Bouguila, X.H. Wang, F.H. Ming and G.H. Xiao, *Online redundant image elimination and its application to wireless capsule endoscopy*, SIViP [DOI 10.1007/s11760-012-0384-3]
- [9832] S. Liao, J. Sun, Y. Chen, Y. Wang and P. Zhang, *Distributed power control for wireless networks via the alternating direction method of multipliers*, J. Network and Computer Applications **55**, 81-88 (2015), doi: <http://dx.doi.org/10.1016/j.jnca.2015.05.005>
- [9833] M. Sacanamboy, *Heuristic algorithm for task mapping problem in a hierarchical wireless network-on-chip architecture*, Cluster Computing (2022), doi: 10.1007/s10586-022-03919-2
- [9834] N. Cvejic, C.N. Canagarajah and D.R. Bull, *Image fusion metric based on mutual information and Tsallis entropy*, Electronics Lett. **42**, No. 11 (25th May 2006).
- [9835] Y. Yang, M. Wang, S. Huang and W. Wan, *MIN-MEF: Multi-scale Interaction network for multi-exposure image fusion*, IEEE (2024).
- [9836] M. Hossny, S. Nahavandi, D. Creighton and A. Bhatti, *Image fusion performance metric based on mutual information and entropy driven quadtree decomposition*, Electronics Lett. **46** (18), 1266-1268 (2010).
- [9837] A. Sholehkerdar, J. Tavakoli and Z. Liu, *Theoretical analysis of Tsallis entropy-based quality measure for weighted averaging image fusion*, Information Fusion **58**, 69-81 (2020), doi: 10.1016/j.inffus.2019.12.010

- [9838] D.J. Hemanth, V. Rajinikanth, V.S. Rao, S. Mishra, N.M.S. Hannon, R. Vijayarajan and S. Arunmozhi, *Image fusion practice to improve the ischemic-stroke-lesion detection for efficient clinical decision making*, Evolutionary Intelligence (2021), doi: 10.1007/s12065-020-00551-0
- [9839] K.P. Nelson, B.J. Scannell and H. Landau, *A risk profile for information fusion algorithms*, Entropy **13**, 1518-1532 (2011), doi:10.3390/e13081518
- [9840] H. Joo, J. Park, Y. Choi, C.H. Lim and H.J. Yang, *Connecting quality metrics to deep learning accuracy for image fusion methods*, IEEE, 142-147 (2022).
- [9841] G. Popescu, *Quantitative phase imaging of nanoscale cell structure and dynamics*, Methods in Nano Cell Biology **90**, 87+ (2008).
- [9842] Y.L. Li, S.L. Yu and G. Zheng, *Separation method for overlapping voltammetric peaks based on the fractional-order differential*, Chinese J. Analytical Chemistry **35**, 747-750 (2007).
- [9843] I. Fukuda and H. Nakamura, FUJITSU LTD (FUIT); DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO (DOKU-Non-standard), *Sampling simulation device e.g. for medicine, integrates deterministic differential equations numerically for reproducing distribution obtained by combining Tsallis distributions*, Patent US2006184340-A1; Patent JP2006221578-A (2006-633933).
- [9844] I. Fukuda and H. Nakamura, *Sampling simulation device by deterministic system capable of generating multiple distributions simultaneously*, Patent record available from the Japanese Patent Office (2006).
- [9845] I. Fukuda and H. Nakamura, *Deterministic sampling simulation device for generating a plurality of distribution simultaneously*, Patent record available from the US Patent Office (2006)
- [9846] I. Fukuda and H. Nakamura, *Simulation apparatus*, Patent record available from the Japanese Patent Office (2003).
- [9847] R.S. Sneddon, SNEDDON AND ASSOC INC (SNED-Non-standard), *Data value measuring method for electroencephalography data, involves computing attribute for each data subset so that attribute is dependent on data in each subset and attribute is equal to variability of data in each data subset*, Patent US2005159919-A1 (2005-540950).
- [9848] R.S. Sneddon, *Method for measuring information in natural data*, Patent record available from the US Patent Office (2005).
- [9849] FUJITSU LTD (FUIT), *Simulation program for computing thermo-dynamic quantities in medical applications, includes calculator to calculate average thermo-dynamic quantity along acquired track based on sampling*, Patent JP2003044524-A (2003-424391).
- [9850] C. Tsallis and R. Pasechnik, *Medical applications of nonadditive entropies*, Entropy **25**, 578 (2023).
- [9851] E. Alshawarbeh, M.Z. Arshad, M.Z. Iqbal, M. Ghamkhar, A. Al Mutairi, M.A. Meraou, E. Hussam and A. Alrashidi, *Modeling medical and engineering data using a new power function distribution: Theory and inference*, Journal of Radiation Research and Applied Sciences **17**, 100787 (2024).
- [9852] M. Weiger, M. Fey and T. Speck, *Method for automatic shimming for nuclear magnetic resonance spectroscopy*, Patent record available from the European Patent Office (2006).
- [9853] J.T. Flick and J. Joseph, *Method for diagnosing heart disease, predicting sudden death, and analyzing treatment response using multifractal analysis*, Patent record available from the US Patent Office (2003).
- [9854] J.T. Flick and J. Joseph, *Method for diagnosing heart disease, predicting sudden death, and analyzing treatment response using multifractal analysis*, Patent record available from the US Patent Office (2006).
- [9855] H. Fujita, U.R. Acharya, V.K. Sudarshan, D.N. Ghista, S.V. Sree, L.W.J. Eugene, J.E.W. Koh, *Sudden cardiac death (SCD) prediction based on nonlinear heart rate variability features and SCD index*, Applied Soft Computing **43**, 510-519 (2016).
- [9856] F. Nasirzadeh, M. Mir, S. Hussain, M.T. Darbandy, A. Khosravi, S. Nahavandi and B. Aisbett, *Physical fatigue detection using entropy analysis of heart rate signals*, Sustainability **12**, 2714 (2020), doi: 10.3390/su12072714
- [9857] B. Deka and D. Deka, *Nonlinear analysis of heart rate variability signals in meditative state: a review and perspective*, BioMedical Engineering **22**, 35 (2023), doi: 10.1186/s12938-023-01100-3
- [9858] U.R. Acharya, Y. Hagiwara, J.E.W. Koh, S.L. Oh, J.H. Tan, M. Adam and R.S. Tan, *Entropies for automated detection of coronary artery disease using ECG signals: A review*, Biocybern. Biomed. Eng. **38** (2), 373-384 (2018), doi: 10.1016/j.bbe.2018.03.001
- [9859] Y. Wang, M. Falcioni, S.J. Turner and E.C. Ramberg, *Methods and apparatus for designing high-dimensional combinatorial experiments*, Patent record available from the US Patent Office (2002)
- [9860] Y. Wang, M. Falcioni, S.J. Turner and E.C. Ramberg, *Methods and apparatus for preparing high-dimensional combinatorial experiments*, Patent record available from the US Patent Office (2006)
- [9861] M.W. Deem and M. Falcioni, *Library design in combinatorial chemistry by Monte Carlo methods*, Patent record available from the US Patent Office (2006)

- [9862] E.C. Ramberg, *Methods and apparatus for designing high-dimensional combinatorial experiments*, Patent record available from the World Intellectual Property Organization (WIPO, 2002).
- [9863] S.V. Ulyanov, S. Panfilov, T. Hagiwara, K. Takahashi, L. Litvintseva and V.S. Ulyanov, *Intelligent mechatronic control suspension system based on quantum soft computing*, Patent record available from the World Intellectual Property Organization (WIPO, 2004).
- [9864] R. Ugajin, *Information processing method and information processing apparatus*, Patent record available from the US Patent Office (2003).
- [9865] M.M. DiStasio and C.T. Bock, *Data packet collection and monitoring computer system for e.g. security system functions, has wireless access point and data collection platform provided to calculate entropy of determined estimate of received signal strength*, Assignee: Syracuse Res. Corp., US2010226255-A1 (2010).
- [9866] I. Lazov, *A methodology for information and capacity analysis of broadband wireless access systems*, *Telecommunications Systems* **63** (2),127-139 (2016), doi: 10.1007/s11235-015-0104-8
- [9867] I. Lazov, *Entropy analysis of broadband wireless access systems*, *IEEE Systems Journal* **11** (4), 2366-2372 (2017).
- [9868] X. Bai, J. Chen and H. Li, *Local corrosion detecting method for horizontal well sleeve in oil field, involves outputting sleeve local corrosion information in neuron network according to calculating result of input Tsallis wavelet energy entropy*, Assignee: Harbin Inst Technology, CN101650327-A (2010).
- [9869] A.C.P. Rosa Jr, P. Vaveliuk and M.A. Moret, *Non-Markovian model for the study of pitting corrosion in a water pipe system*, *Internat. J. Mod. Phys. C* **26** (10), 1550119 (2015) (10 pages), doi: 10.1142/S0129183115501193
- [9870] Y. Jiang, B. Li and J. Chen, *Analysis of the velocity distribution in partially-filled circular pipe employing the principle of maximum entropy*, *PLOS ONE* — doi:10.1371/journal.pone.0151578 (2016) (17 pages).
- [9871] A.C.P. Rosa Jr., P. Vaveliuk, K.C. Mundim and M.A. Moret, *A model for diffusive systems: Beyond the Arrhenius mechanism*, *Physica A* **450**, 317-322 (2016), doi: <http://dx.doi.org/10.1016/j.physa.2015.12.122>
- [9872] A.C.P. Rosa Jr., C. Cruz, W.S. Santana and M.A. Moret, *Characterization of the non-Arrhenius behavior of supercooled liquids by modeling nonadditive stochastic systems*, *Phys. Rev. E* **100**, 022139 (2019).
- [9873] A.C.P. Rosa Jr., C. Cruz, W.S. Santana, E. Brito and M.A. Moret, *Non-Arrhenius behavior and fragile-to-strong transition of glass-forming liquids*, *Phys. Rev. E* **101**, 042131 (2020).
- [9874] M.S. de Lima, J.V.C. Santos, J.H.S. Prates, C.B. Silva, D. Moreira and M.A. Moret, *Applying the Adomian method to solve the Fokker-Planck equation: A case study in astrophysics*, *AppliedMath* **4**, 1306-1327 (2024).
- [9875] X. Li and Q. Xu, *Monte Carlo illumination self-adaptive method for image processing field, involves sampling voltage of pixel when value is larger than threshold value, and utilizing sampling points to increase another threshold value according to rule*, Patent Number(s): CN102289842-A, Patent Assignee Name(s) and Code(s): UNIV TIANJIN(UTIJ-C)
- [9876] K.P. Nelson, B.J. Scannell and H. Landau, *Risk management for object identification*, Patent Number: US 8,595,177 B1 (2013).
- [9877] R. Bai, F. Ji, X. Li et al. *Industrial production line grey scale-gradient 2D symmetrical Tsallis cross entropy gradient rapid threshold value dividing method, involves verifying clear texture details by utilizing scale-gradient two-dimensional histogram*, CN103390280-A, Univ. Jiangnan, Wuxi Xinjie Electric Co. Ltd., Derwent: 2014-B08872
- [9878] Y. Liu, C. Xiao, M. Liu, P. Yi, D. Huang, M. Gong, L. Wang, H. Li, D. Liu, H. Xu, G. Qi, D. Zhang, C. Shan et al, *Method for evaluating railway system contact based on Tsallis entropy by using electronic device, involves calculating corresponding Tsallis entropy value as state characteristic of contact, and evaluating state of contact system according to change of Tsallis entropy value*, China Railway Fourth Survey and Design Ins (CRCC-C), Derwent: 2022-D10561
- [9879] X. Li, H. Geng and X. Bai, *Method for aligning inverse synthetic aperture radar global envelope based on Tsallis entropy minimization useful in radar signal processing comprises calculating average distance image of current distance to be aligned to pulse pressure echo, calculating average distance image of Tsallis entropy*, CN114488149-A, Univ Xidian, Derwent: 2022-70890C
- [9880] Y. Li, L. Yao, X. Mu, C. Li, X. Luo and M. Zhu, *Secondary image segmentation method based on Otsu and Tsallis entropy, involves obtaining two-dimensional histogram of divided image, and calculating entropy of divided image, and obtaining the final re-divided image*, Univ. Xian Polytechnic (UYXP-C), Derwent: 2020-C91801
- [9881] L. Li, *Two-dimensional Tsallis gray entropy fast iteration based threshold value dividing method, involves dividing target and background in gray image by using optimal threshold value vector as dividing threshold of gray image*, CN111553926-ACN111553926-B, China Aviation Radios Electronics Res, Derwent: 2020-825675

- [9882] M.D. Correia, I.S. Oliveira, A.M. Souza, J.P. Sinnecker and R.S. Sarthour, *q-Estatística em rochas reservatório de petróleo: Modelagem direta de dados de RMN*, preprint (2013).
- [9883] J. Birjukov, T. Jahnke and G. Mahler, *Quantum thermodynamic processes: a control theory for machine cycles*, Eur. Phys. J. B **64**, 105-118 (2008).
- [9884] R. Sneddon, *The Tsallis entropy of natural information*, Physica A **386**, 101-118 (2007).
- [9885] H. Shioya and K. Gohara, *Generalized phase retrieval algorithm based on information measures*, Optics Comm. **266**, 88-93 (2006).
- [9886] L. Rokach, *Decomposition methodology for classification tasks: A meta decomposer framework*, Pattern Anal. Applic. **9**, 257-271 (2006).
- [9887] P.S. Rodrigues, G.A. Giraldo and A. de A. Araujo, *Using Tsallis entropy into a Bayesian network for CBIR*, IEEE International Conference on Image Processing **3**, 1028-1031 (2005).
- [9888] P.S. Rodrigues, G.A. Giraldo, M. Provenzano, M.D. Faria, R.F. Chang and J.S. Suri, *A new methodology based on q-entropy for breast lesion classification in 3 – D ultrasound images*, Proceedings of the 28th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 1048-1051 (2006).
- [9889] P.E. Ferreira Junior, V.M. Mello and G.A. Giraldo, *Image thresholding through nonextensive entropies and long-range correlation*, Multimedia Tools and Applications (2023), doi: 10.1007/s11042-023-14978-x
- [9890] W.L. Moreira Junior, M.Z. Nascimento and L.A. Neves, *A new approach to Ripplet transform-based texture descriptor for breast lesions classification*, Anais do XIII Workshop de Visao Computacional, 100-105 (Natal, Brazil, 2018).
- [9891] Y. Hagiwara, V.K. Sudarshan, S.S. Leong, A. Vijayanthan and K.H. Ng, *Application of entropies for automated diagnosis of abnormalities in ultrasound images: A review*, J. Mechanics in Medicine and Biology **17** (7), 1740012 (2017) (21 pages), doi: 10.1142/S0219519417400127
- [9892] G.A. Giraldo, P.S. Rodrigues, M. Faria, M. Provenzano, E. Antunes and R. Canellas, *Image segmentation approach for diagnosis based on Hounsfield Unit and Tsallis Non-extensive entropy*, Proceedings of the 10th European Congress of Dentomaxillofacial Radiology (Leuven, 31 May to 3 June 2006).
- [9893] Karmeshu and S. Sharma, *q-exponential product-form solution of packet distribution in queueing networks: Maximization of Tsallis entropy*, IEEE Comm. Lett. **10**, 585-587 (2006).
- [9894] S. Sharma and Karmeshu, *Bimodal packet distributions in loss systems using maximum Tsallis entropy principle*, IEEE Transactions on Comm. **56**, 1530-1535 (2008).
- [9895] S. Sharma and Karmeshu, *Power law characteristics and loss probability: Finite buffer queueing systems*, IEEE Comm. Lett. **13**, 971-973 (2009).
- [9896] A.K. Singh, H.P. Singh and Karmeshu, *Analysis of finite buffer queue: Maximum entropy probability distribution with shifted fractional geometric and arithmetic means*, IEEE Communications Letters (2015), in press, doi: 10.1109/LCOMM.2014.2377236
- [9897] Karmeshu and S. Sharma, *Power law and Tsallis entropy: Network traffic and applications*, Studies in Fuzziness and Soft Computing, Chaos, Nonlinearity, Complexity [DOI: 10.1007/3-540-31757-0-5].
- [9898] J. Santiago-Paz, D. Torres-Roman, A. Figueroa-Ypina and J. Argaez-Xool, *Using generalized entropies and OC-SVM with Mahalanobis kernel for detection and classification of anomalies in network traffic*, Entropy **17**, 6239-6257 (2015), doi:10.3390/e17096239
- [9899] A.K. Marnerides, A. Schaeffer-Filho and A. Mauthe, *Traffic anomaly diagnosis in internet backbone networks: A survey*, Computer Networks **73**, 224-243 (2014).
- [9900] Karmeshu and S. Sharma, *Long tail behavior of queue lengths in broadband networks: Tsallis entropy framework*, preprint (2010), 1012.2464 [cs.NI].
- [9901] Karmeshu, S. Sharma and S. Kumar, *Generation of power-law: Maximum entropy framework and super-statistics*, Man-Machine Interactions 4, Advances in Intelligent Systems and Computing **391**, 45-59 (2015, Berlin, Springer).
- [9902] P.K. Sahoo and G. Arora, *Image thresholding using two-dimensional Tsallis-Havrda-Charvat entropy*, Pattern Recognition Letters **27**, 520-528 (2006).
- [9903] H. Sahoo, S. Chandra and B. Ghosh, *Dust acoustic solitary waves in magnetized dusty plasma with trapped ions and q-non-extensive electrons*, African Review of Physics **10**, 235-241 (2015).
- [9904] F. Wieben, *Struktur und dynamik binarer komplexer plasmen*, Doctor Thesis (Mathematisch-Naturwissenschaftlichen Fakultät der Christian-Albrechts-Universität zu Kiel, 2021).
- [9905] I. Driouch and H. Chatei, *Effect of q-nonextensive distribution of electrons on the sheath in dusty plasma*, Eur. Phys. J. D **71**, 9 (2017) (7 pages), doi: 10.1140/epjd/e2016-70111-0
- [9906] O. El Ghani, I. Driouch and H. Chatei, *Numerical investigation of secondary electron emission effect on the dusty plasma sheath with superextensive electrons*, Phys. Plasmas **27**, 083701 (2020), doi: 10.1063/5.0010080

- [9907] P.K. Bhatia, S. Singh and V. Kumar, *On applications of a generalized hyperbolic measure of entropy*, I. J. Intelligent Systems and Applications **7**, 36-43 (2015), doi: 10.5815/ijisa.2015.07.05
- [9908] V. Kumar, L. Gleyzer, A. Kahana, K. Shukla and G.E. Karniadakis, *MYCRUNCHGPT: A LLM Assisted framework for scientific machine learning*, Journal of Machine Learning for Modeling and Computing **4** (4), 41-72 (2023).
- [9909] Y. Chen, G. Zhao, S. Yoon, P. Habibi, C.S. Hong, S. Li, O.A. Moulτος, P. Dey, T.J.H. Vlught and Y.G. Chung, *Computational exploration of adsorption-based hydrogen storage in Mg-Alkoxide functionalized covalent-organic frameworks (COFs): Force-field and machine learning models*, preprint (2024).
- [9910] M. Zelazarczyk, *Deep representation learning in varied settings*, Thesis (Warsaw University of Technology, 2024).
- [9911] V. Kumar, *Some results on Tsallis entropy measure and k-record values*, Physica A **462**, 667-673 (2016).
- [9912] J. Paul and P.Y. Thomas, *Sharma-Mittal entropy properties on record values*, Statistica, anno LXXVI (3), 273-287 (2016).
- [9913] J. Paul and P. Yageen Thomas, *Sharma-Mittal entropy properties on generalized (k) record values*, RTA **17** (2022).
- [9914] P.K. Bhatia, S. Singh and V. Kumar, *On some properties of Tsallis entropy on majorization lattice*, Acta Mathematica Academiae Paedagogicae Nyiregyhaziensis **31**, 331-340 (2015), doi: www.emis.de/journals ISSN 1786-0091
- [9915] S. Singh, *A review of some applications of classical probabilistic information measures*, Internat. J. of Mathematical Archive **6** (6), 202-208 (2015), www.ijma.info ISSN 2229 - 5046
- [9916] W. Shitong and F.L. Chung, *Note on the equivalence relationship between Renyi-entropy based and Tsallis-entropy based image thresholding*, Pattern Recognition Letters **26**, 2309-2312 (2005).
- [9917] M.P. Wachowiak, R. Smolikova, G.D. Tourassi and A.S. Elmaghraby, *Estimation of generalized entropies with sample spacing*, Pattern. Anal. Applic. **8**, 95-101 (2005).
- [9918] R. Smolikova, M.P. Wachowiak, G.D. Tourassi, A. Elmaghraby and J.M. Zurada, *Characterization of ultrasonic backscatter based on generalized entropy*, IEEE CNF, 24th Annual Conference and the Annual Fall Meeting of the Biomedical Engineering Society, Proceedings of the Second Joint Conference **2** (23-26 October 2002), pages 953-954 [Digital Object Identifier 10.1109/IEMBS.2002.1106222].
- [9919] M.P. Wachowiak, R. Smolikova, G.D. Tourassi and A.S. Elmaghraby, *Similarity metrics based on nonadditive entropies for 2D-3D multimodal biomedical image registration*, Proceedings of SPIE **5032**, 1090-1100 (2003).
- [9920] W. Guo and S. Cui, *Fast convergence with q-expectation in EM-based blind iterative detection*, IEEE CNF, Fortieth Asilomar Conference on Signals, Systems and Computers - ACSSC '06 (October-November 2006), pages 458-462 [Digital Object Identifier 10.1109/ACSSC.2006.354789].
- [9921] I.A. Esquef, Ma.P. de Albuquerque and M.P. de Albuquerque, *A new method for automatic gray level thresholding using nonextensive entropy*, preprint (2002) [In Portuguese].
- [9922] Y. Li, X. Fan and G. Li, *Image segmentation based on Tsallis-entropy and Renyi-entropy and their comparison*, 2006 IEEE International Conference on Industrial Informatics, INDIN'06 Article 4053516, 943-948 (2007).
- [9923] Y.G. Tang, Q.Y. Di, L.X. Zhao and F.C. Liu, *Image thresholding segmentation based on two-dimensional minimum Tsallis-cross entropy*, Acta Physica Sinica **58**, 9-15 (2009).
- [9924] F.A.A. Laleye, E.C. Ezin and C. Motamed, *Automatic boundary detection based on entropy measures for text-independent syllable segmentation*, Multimed. Tools Appl. **76** (15), 16347-16368 (2017), doi: 10.1007/s11042-016-3911-3
- [9925] M.V. Jankovic, T. Gajic and B.D. Reljin, *Applications of probabilistic model based on main quantum mechanics concepts*, IEEE Neurel 2014, 12th Symposium on Neural Network Applications in Electrical Engineering (NEUREL, 25 to 27 November 2014, Serbia) (4 pages).
- [9926] P.S. Rodrigues and G.A. Giraldi, *Computing the q-index for Tsallis nonextensive image segmentation*, XXII Brazilian Symposium on Computer Graphics and Image Processing (SIBGRAPI), 232-237 (2009).
- [9927] P.S. Rodrigues and G.A. Giraldi, *Improving the non-extensive medical image segmentation based on Tsallis entropy*, Pattern Anal. Applic. **14**, 369-379 (2011).
- [9928] G.A. Wachs-Lopes, R.M. Santos, N.T. Saito and P.S. Rodrigues, *Recent nature-inspired algorithms for medical image segmentation based on Tsallis statistics*, Communications in Nonlinear Science and Numerical Simulation (2020), in press, doi: doi.org/10.1016/j.cnsns.2020.105256
- [9929] X. Li, C. Wang, M. Tan and X. Fu, *Smeared spectrum jamming suppression based on generalized S transform and threshold segmentation*, Advances in Materials, Machinery, Electronics II, AIP Conf. Proc. **1955**, 040147 (2018) (12 pages), doi: 10.1063/1.5033811

- [9930] M. Chouksey and R.K. Jha, *Variational mode decomposition based image segmentation using sine cosine algorithm*, Proceedings, APSIPA Annual Summit and Conference (7-10 December 2020, Auckland, New Zealand).
- [9931] O. Bingol, S. Pacaci and U. Guvenc, *Image segmentation with SFS algorithm and entropy methods* [In Turkish], International Conferences on Science and Technology - Engineering Science and Technology - ICONST EST (2019).
- [9932] A.B. Ishak, *Choosing parameters for Renyi and Tsallis entropies within a two-dimensional multilevel image segmentation framework*, Physica A **466**, 521-536 (2017), doi: <http://dx.doi.org/10.1016/j.physa.2016.09.053>
- [9933] A.B. Ishak, *A two-dimensional multilevel thresholding method for image segmentation*, Applied Soft Computing **52**, 306-322 (2017), doi: <http://dx.doi.org/doi:10.1016/j.asoc.2016.10.034>
- [9934] G.A. Wachs-Lopes, W. Fukuma and P.S. Rodrigues, *Deteccao de tipos de tomadas em videos de futebol utilizando a divergencia de Kullback-Leibler*, in *Avancos em Visao Computacional*, eds. Neves et al, 201-218 (2012) [DOI: 10.7436/2012.avc.11].
- [9935] S. Susan and M. Hanmandlu, *Unsupervised detection of nonlinearity in motion using weighted average of non-extensive entropies*, (Springer, 2013), DOI 10.1007/s11760-013-0464-z
- [9936] S. Susan and M. Dwivedi, *Dynamic growth of hidden-layer neurons using the non-extensive entropy*, IEEE Fourth International Conference on Communication Systems and Network Technologies, 491-495 (2014), doi: 10.1109/CSNT.2014.104
- [9937] S. Susan, M. Dwivedi and Mayank, *Dynamic growth of hidden-layer neurons using the non-extensive entropy*, 2014 Fourth International Conference on Communications Systems and Network Technologies (CSNT), Ed. G. Tomar and S. Singh, Book Series International Conference on Communication Systems and Network Technologies 491-495 (2014), doi: 10.1109/CSNT.2014.104
- [9938] S. Singh and S. Sharma, *On a generalized entropy and dissimilarity measure in intuitionistic fuzzy environment with applications*, Soft Computing (2021), doi: 10.1007/s00500-021-05709-1
- [9939] M. Kedlaya, H. Bhatia, K. Manikantan and S. Ramachandran, *Novel KNN-motivation-PSO and its application to image segmentation*, CUBE 252-258 (India, September 3 to 5, 2012).
- [9940] I. Kilic and O. Kayacan, *Generalized ICM for image segmentation based on Tsallis statistics*, Physica A **391**, 4899-4908 (2012).
- [9941] A. Chaudhari and J. Kulkarni, *Cerebral edema segmentation using textural feature*, Biocybern. Biomed. Eng. (2019), in press, doi: 10.1016/j.bbe.2019.06.002
- [9942] A. Nakib, H. Oulhadj and P. Siarry, *Image histogram thresholding based on multiobjective optimization*, Signal Processing **87**, 2516-2534 (2007).
- [9943] A. Nakib, H. Oulhadj and P. Siarry, *Fractional differentiation and non-Pareto multiobjective optimization for image thresholding*, Engineering Appl. Artificial Intelligence **22**, 236-249 (2009).
- [9944] G. Livadiotis, *Approach to the block entropy modeling and optimization*, Physica A **387**, 2471-2494 (2008).
- [9945] G. Livadiotis, *Expectation values and variance based on L^p -norms*, Entropy **14**, 2375-2396 (2012).
- [9946] G.A.G. Cidade, C. Anteneodo, N.C. Roberty and A.J. Silva Neto, *A generalized approach for atomic force microscopy image restoration with Bregman distances as Tikhonov regularization terms*, Inverse Problems in Engineering **8**, 457 (2000).
- [9947] M. Al-Hasan and R.R. Nigmatullin, *Identification of the generalized Weibull distribution in wind speed data by the Eigen-coordinates method*, Renewable Energy **28**, 93 (2002).
- [9948] M. Anvari, G. Lohmann, M. Wachter, P. Milan, E. Lorenz, D. Heinemann, M.R.R. Tabar and J. Peinke, *Short term fluctuations of wind and solar power systems*, New J. Phys. **18**, 063027 (2016) (14 pages), doi:10.1088/1367-2630/18/6/063027
- [9949] P. Drobinski, C. Coulais and B. Jourdir, *Surface Wind-Speed Statistics Modelling: Alternatives to the Weibull Distribution and Performance Evaluation*, Boundary-Layer Meteorology, International Journal of Physical, Chemical and Biological Processes in the Atmospheric Boundary Layer **35** (2015), doi: 10.1007/s10546-015-0035-7
- [9950] K.K. Jose, S.R. Naik and M.M. Ristic, *Marshall-Olkin q -Weibull distribution and max-min processes*, Stat. Papers **51**, 837-851 (2010).
- [9951] C. Vignat and J.-F. Bercher, *Analysis of signals in the Fisher-Shannon information plane*, Phys. Lett. **312**, 27 (2003).
- [9952] J.-F. Bercher, *An amended MaxEnt formulation for deriving Tsallis factors, and associated issues*, communicated at MaxEnt2006 (July 10-13, 2006, Paris)[math-ph/0609077].
- [9953] J.-F. Bercher and C. Vignat, *An entropic view of Pickands' theorem*, IEEE Internat. Symp. on Information Theory Proceed. **1-6**, 2625-2628 (2008), 0802.3110 [cs.IT].

- [9954] J.-F. Bercher and C. Vignat, *A new look at q -exponential distributions via excess statistics*, Physica A **387**, 5422-5432 (2008).
- [9955] J.-F. Bercher, *Tsallis distribution as a standard maximum entropy solution with 'tail' constraint*, Phys. Lett. A **372**, 5657-5659 (2008).
- [9956] J.-F. Bercher, *Escort entropies and divergences and related canonical distribution*, Phys. Lett. A **375**, 2969-2973 (2011).
- [9957] J.-F. Bercher, *Escort entropies and divergences and related canonical distribution*, preprint (2011), 1109.3311 [math-ph].
- [9958] J.-F. Bercher, *Source coding with escort distributions and Rényi entropy bounds*, preprint (2011), 1109.3385 [math-ph].
- [9959] J.-J. Bercher, *On a (β, q) -generalized Fisher information and inequalities involving q -Gaussian distributions*, J. Math. Phys. **53**, 063303 (2012) (12 pages).
- [9960] J.-F. Bercher, *A simple probabilistic construction yielding generalized entropies and divergences, escort distributions and q -Gaussians*, Physica **391** (19), 4460-4469 (2012).
- [9961] J.-F. Bercher, *On generalized Cramer-Rao inequalities, generalized Fisher information and characterizations of generalized q -Gaussian distributions*, J. Phys. A: Math. Theor. **45**, 255303 (2012) (15 pages).
- [9962] J.-F. Bercher, *On generalized Cramer-Rao inequalities and characterizations of generalized q -Gaussian distributions: the multidimensional case*, preprint (2012), 1211.2008 [math-ph].
- [9963] J.-F. Bercher, *On multidimensional generalized Cramer-Rao inequalities, uncertainty relations and characterizations of generalized q -Gaussian distributions*, J. Phys. A: Math. Theor. **46**, 095303 (2013) (18 pages).
- [9964] J.-F. Bercher, *Some properties of generalized Fisher information in the context of nonextensive thermostatics*, Physica A **392**, 3140-3154 (2013).
- [9965] J.-F. Bercher, *On some interrelations of generalized q -entropies and a generalized Fisher information, including a Cramer-Rao inequality*, preprint (2013), 1305.6215 [cs.IT].
- [9966] J.-F. Bercher, *Some results on a χ -divergence, an extended Fisher information and generalized Cramer-Rao inequalities*, preprint (2013), 1305.6213 [cs.IT].
- [9967] J.-F. Bercher, *A propos d' extensions de l' information de Fisher et de l' inegalite de Cramer-Rao*, preprint(2014), 24e colloque Gretsi, Sep 2013, Brest, France. 4, Doi: hal-upec-upem.archives-ouvertes.fr/hal-01087428
- [9968] H.G. Miller, A. Plastino and A.R. Plastino, *Some remarks on Fisher information, the Cramer-Rao inequality, and their applications to physics*, Handbook of Statistics **45**, Chapter 11, 217-228 (2021)
- [9969] M.A. Kumar and K.V. Mishra, *Cramer-Rao lower bounds arising from generalized Csiszar divergences*, preprint (2020), 2001.04769 [cs.IT].
- [9970] K.V. Mishra and M.A. Kumar, *Hybrid and generalized Bayesian Cramer-Rao inequalities via information geometry*, preprint (2021), 2104.01061 [cs.IT].
- [9971] J.-F. Bercher, *Entropies et criteres entropiques*, preprint (2014), hal.archives-ouvertes.fr/hal-01087503
- [9972] J.-F. Bercher, *Entropies and entropic criteria*, preprint (2014), J.-F. Giovanelli and J. Idier, *Inversion methods applied to signal and image processing*, Wiley, pp.26, 2015. jhal- 01087579_i, HAL, hal.archives-ouvertes.fr/hal-01087579
- [9973] A.L. Tukmakov, *Application of the function of the number of states of a dynamic system to investigation of electroencephalographic reaction to photostimulation*, Zhurnal Vysshei Nervnoi Deyatelnosti imeni i P Pavlova **53**, 523 (2003).
- [9974] H.L. Rufiner, M.E. Torres, L. Gamero and D.H. Milone, *Introducing complexity measures in nonlinear physiological signals: Application to robust speech recognition*, Physica A **332**, 496 (2004).
- [9975] X. Bonaventura-Brugues, *?Perceptual information-theoretic measures for viewpoint selection and object recognition*, Doctor Thesis (Universitat de Girona, 2015).
- [9976] S.M.D. Queiros and C. Tsallis, *Bridging a paradigmatic financial model and nonextensive entropy*, Europhys. Lett. **69**, 893 (2005).
- [9977] S.M.D. Queiros, *Analysing and modelling finance within nonextensive statistical mechanics formalism*, R. Bras. Eco. de Emp. **8** (2), 7-29 (2008).
- [9978] S.M.D. Queiros, *On the connection between ARCH time series and non-extensive statistical mechanics*, Physica A **344**, 619 (2004).
- [9979] S.M.D. Queiros, E.M.F. Curado and F.D. Nobre, *Minding impacting events in a model of stochastic variance*, Plos One **6** (3), e18149 (2011) (9 pages).

- [9980] S.M.D. Queiros, *On anomalous distributions in intra-day financial time series and non-extensive statistical mechanics*, Physica A **344**, 279 (2004).
- [9981] S.M.D. Queiros and C. Tsallis, *On the connection between financial processes with stochastic volatility and nonextensive statistical mechanics*, Eur. Phys. J. B **48**, 139-148 (2005).
- [9982] S.M.D. Queiros, *On discrete stochastic processes with long-lasting time dependent variance. Analytical and numerical analyses*, preprint (2008).
- [9983] S.M.D. Queiros, *On the distribution of high-frequency stock market traded volume: A dynamical scenario*, preprint (2005) [cond-mat/0502337].
- [9984] S.M.D. Queiros, *On superstatistical multiplicative-noise processes*, Braz. J. Physics **38**, 203-209 (2008).
- [9985] S.M.D. Queiros, C. Anteneodo and C. Tsallis, *Power-law distributions in economics: A nonextensive statistical approach*, in *Noise and Fluctuations in Econophysics and Finance*, eds. D. Abbott, J.-P. Bouchaud, X. Gabaix and J.L. McCauley, Proc. of SPIE **5848**, 151 (SPIE, Bellingham, WA, 2005). [physics/0503024].
- [9986] L.G. Moyano, J. Souza and S.M.D. Queiros, *Multi-fractal structure of traded volume in financial markets*, Physica A **371**, 118-121 (2006).
- [9987] S.M.D. Queiros, *Are all highly liquid securities within the same class?*, Eur. Phys. J. B **60**, 265-269 (2007).
- [9988] T. Zhang, G.F. Gu, H.C. Xu, X. Xiong, W. Chen and W.X. Zhou, *Power-law tails in the distribution of order imbalance*, Physica A **483**, 201-208 (2017), doi: <http://dx.doi.org/10.1016/j.physa.2017.04.065>
- [9989] K. Herrmann, *Non-extensivity versus informative moments for financial models: A unifying framework and empirical results*, Europhys. Lett. (2009), in press.
- [9990] S.R. Bentes, R. Menezes and D.A. Mendes, *Long memory and volatility clustering: Is the empirical evidence consistent across stock markets?*, Physica A **387**, 3826-3830 (2008).
- [9991] R.F.P. Neves, C.A.B. Mello, M.S. Silva and B.L.D. Bezerra, *A new algorithm to threshold the courtesy amount of Brazilian bank checks*, 2008 IEEE International Conference on Systems, Man and Cybernetics (SMC) **1-6**, 1225-1229 (2008).
- [9992] R.F.P. Neves, C.A.B. Mello, M.S. Silva and B.L.D. Bezerra, *Thresholding the courtesy amount of brazilian bank checks based on Tsallis entropy*, IEEE Latin America Transactions **7** (6), 726-731 (2009).
- [9993] D.M. Song, Z.Q. Jiang and W.X. Zhou, *Statistical properties of world investment networks*, Physica A **388**, 2450-2460 (2009).
- [9994] P. Zhao, G. Li, M. Shi and J. Pan, *Explicit solution of the mean-variance optimal investment model for defined-contribution pension under non-extensive statistical mechanics*, Acta Physica Polonica B **55**, 7-A4 (2024).
- [9995] L. Liu, L. Zhang and S. Fan, *Optimal investment problem under non-extensive statistical mechanics*, Computers and Mathematics with Applications **75**, 3549-3557(2018).
- [9996] S.R. Bentes, R. Menezes and D.A. Mendes, *Stock market volatility: An approach based on Tsallis entropy*, preprint (2008), 0809.4570 [physics.soc-ph].
- [9997] S.R. Bentes and R. Menezes, *Entropy: A new measure of stock market volatility?*, J. Phys.: Conf. Series **394**, 012033 (2012) (6 pages).
- [9998] S.R. Bentes, *An entropy-based approach to stock market volatility: evidence from the G7's market indices*, Int. J. Industrial and Systems Engineering **24** (2), 158-177 (2016).
- [9999] M. Politi and E. Scalas, *Fitting the empirical distribution of intertrade durations*, Physica A **387**, 2025-2034 (2008).
- [10000] S.M.D. Queiros, *On a generalised model for time-dependent variance with long-term memory*, Europhys. Lett. **80**, 30005 (2007) (6 pages).
- [10001] S.M.D. Queiros, *On discrete stochastic processes with long-lasting time dependent variance*, Eur. Phys. J. B **66**, 137-148 (2008).
- [10002] J. Souza, *Algebras de Heisenberg generalizadas: Formalismo e aplicacao a molecula de CO*, Doctor Thesis (Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro, February 2007).
- [10003] J. Souza, *Algebras de Heisenberg Generalizadas: formalismo e possiveis aplicacoes*, Thesis (2007).
- [10004] S.M.D., Queiros, E.M.F. Curado and F.D. Nobre, *A multi-interacting-agent model for financial markets*, Physica A **374**, 715-729 (2007).
- [10005] S.M.D. Queiros, *Aspectos nao-extensivos de observaveis financeiras: Modelagens analitica e numerica*, Doctor Thesis (Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro, Aug 2006).
- [10006] A.H. Darooneh, *Physical picture of the insurance market*, preprint (2004) [cond-mat/0404680].
- [10007] A.H. Darooneh, *Insurance pricing in small size markets*, Physica A **380**, 109-114 (2007).

- [10008] Z. Ahmad, E. Mahmoudi and S. Dey, *A new family of heavy tailed distributions with an application to the heavy tailed insurance loss data*, Communications in Statistics - Simulation and Computation (2020), doi: doi.org/10.1080/03610918.2020.1741623
- [10009] M. Rajkovic, *Entropic nonextensivity as a measure of time series complexity*, Physica A **340**, 327 (2004).
- [10010] H.Y. Zhang, X. Gu, X.H. Zhang, X. Ye and X.G. Gong, *Structures and properties of Ni nanowires*, Phys. Lett. A **331**, 332 (2004).
- [10011] W. Tedeschi, H.-P. Muller, D.B. de Araujo, A.C. Santos, U.P.C. Neves, S.N. Erne and O. Baffa, *Generalized mutual information fMRI analysis: A study of the Tsallis q parameter*, Physica A **344**, 705 (2004).
- [10012] W. Tedeschi, H.-P. Muller, D.B. de Araujo, A.C. Santos, U.P.C. Neves, S.N. Erne and O. Baffa, *Generalized mutual information tests applied to fMRI analysis*, Physica A **352**, 629-644 (2005).
- [10013] Y. Li and E.R. Hancock, *Face recognition using shading-based curvature attributes*, Proceedings of International Conference on Pattern Recognition (ICPR), Cambridge (2004), IEEE (2004), 538-541.
- [10014] Mamta and M. Hanmandlu, *A new entropy function and a classifier for thermal face recognition*, Engineering Applications of Artificial Intelligence **36**, 269-286 (2014).
- [10015] Mamta and M. Hanmandlu, *Multimodal biometric system built on the new entropy function for feature extraction and the refined scores as a classifier*, Expert Systems with Applications (2015), in press, doi: http://dx.doi.org/10.1016/j.eswa.2014.11.054
- [10016] Mamta and M. Hanmandlu, *A new entropy function for feature extraction with the refined scores as a classifier for the unconstrained ear verification*, J. Electrical Systems Information Technology (2016), in press, http://dx.doi.org/10.1016/j.jesit.2016.10.006
- [10017] C.F.L. Lima, F.M. de Assis and C.P. de Souza, *An empirical investigation of attribute selection techniques based on Shannon, Renyi and Tsallis entropies for network intrusion detection*, American J. Intelligent Systems **2** (5), 111-117 (2012).
- [10018] Y. Li and E.R. Hancock, *Face recognition with generalized entropy measurements*, Proceedings of International Conference on Image Analysis and Recognition, Lecture Notes in Computer Science **3212**, 733 (2004).
- [10019] Q.R. Zhang, J.Y. Zhang and Y. Wang, *The improved relative entropy for face recognition*, MATEC Web of Conferences **63**, 04006 (2016), doi: 10.1051/mateconf/20166304006 MMME 2016
- [10020] L. Bai, L. Rossi, H. Bunke and E.R. Hancock, *Attributed graph kernels using the Jensen-Tsallis q -differences*, Lecture Notes in Computer Science **8724** LNAI, Issue PART 1, 99-114 (2014) [European Conference on Machine Learning and Knowledge Discovery in Databases, ECML PKDD 2014; Nancy; France; 15 September 2014 through 19 September 2014; Code 107499].
- [10021] D. Ghoshdastidar, A.P. Adsul and A. Dukkipati, *Learning with Jensen-Tsallis kernels*, IEEE Transactions on Neural Networks and Learning **27** (10), 2108-2119 (2016) (12 pages).
- [10022] H.F. Pardede, K. Iwano and K. Shinoda, *Feature normalization based on non-extensive statistics for speech recognition*, Speech Comm. **55**, 587-599 (2013).
- [10023] H.F. Pardede, *Nonlinear spectral subtraction based on Tsallis statistics for speech enhancement [Nonlinear spectral subtraction berbasis Tsallis statistics untuk peningkatan kualitas sinyal ucapan]*, INKOM **7** (1), article 228, 51-62 (2013).
- [10024] H.F. Pardede, K. Iwano and K. Shinoda, *Spectral subtraction based on non-extensive statistics for speech recognition*, IEICE Transactions on Information and Systems **E96-D** (8), 1774-1782 (2013).
- [10025] H.F. Pardede, *On noise robust feature for speech recognition based on power function family*, IEEE 2015 International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS), 386-390 (2015).
- [10026] H.F. Pardede, *On the impact of normalizing power-based features on robustness against noise for speech recognition*, IEEE (2017) (6 pages).
- [10027] H.F. Pardede, A.R. Yuliani and A. Subekti, *On the effect of the implementation of human auditory systems on Q -log-based features for robustness of speech recognition against noise*, Journal of Information Science and Engineering **35** (1), 87-104 (2019).
- [10028] R. Dahlan, D. Krisnandi, A. Ramdan and H.F. Pardede, *Unbiased noise estimator for q -spectral subtraction based speech enhancement*, IEEE International Conference on Radar, Antenna, Microwave, Electronics, and Telecommunications 65-68 (2019).
- [10029] H.F. Pardede, P. Adhi, V. Zilvan, A.R. Yuliani and A. Arisal, *A generalization of sigmoid loss function using Tsallis statistics for binary classification*, Neural Processing Letters (2022).
- [10030] R. Silva, G. S. Franca, C. S. Vilar and J. S. Alcaniz, *Nonextensive models for earthquakes*, Phys. Rev. E **73**, 026102 (2006) (5 pages).

- [10031] A.H. Darooneh and C. Dadashinia, *Analysis of the spatial and temporal distributions between successive earthquakes: Nonextensive statistical mechanics viewpoint*, Physica A **387**, 3647-3654 (2008).
- [10032] S. Rezaei, A.H. Darooneh, N. Lotfi and N. Asaadi, *The earthquakes network: retrieving the empirical seismological laws*, Physica A **471**, 80-87 (2017).
- [10033] S.H. Dehkordi, F. Ahmadian, M. Zare and S. Rezaei, *Comparison of different seismic networks efficiencies in earthquake forecasting models*, Eur. Phys. J. Plus **136**, 999 (2021).
- [10034] M. Ausloos and R. Lambiotte, *Time-evolving distribution of time lags between commercial airline disasters*, Physica A **362**, 513-524 (2006).
- [10035] S. Liao, W.K. Law and A.C.S. Chung, *Combining microscopic and macroscopic information for rotation and histogram equalization invariant texture classification*, Lecture Notes in Computer Science **3851**, 100-109 (2006).
- [10036] S. Liao and Q. Zhang, *Approximation for combinatorial network optimisation using Tsallis entropy*, Electronics Letters **49** (14), 882-884 (2013), DOI: 10.1049/el.2013.0830
- [10037] S. Susan and M. Hanmandlu, *A non extensive entropy feature and its application to texture classification*, Neurocomputing **120**, 214-225 (2013), <http://dx.doi.org/10.1016/j.neucom.2012.08.059>
- [10038] R. Rak, S. Drozd and J. Kwapien, *Nonextensive statistical features of the Polish stock market fluctuations*, Physica A **374**, 315-324 (2007).
- [10039] S. Drozd, J. Kwapien and P. Oswiecimka, *Complexity in economic and social systems*, Entropy **23**, 133 (2021), doi: 10.3390/e23020133
- [10040] J. Kwapien and S. Drozd, *Physical approach to complex systems*, Phys. Rep. **515**, 115-226 (2012).
- [10041] G. Ruiz and A.F. de Marcos, *Evidence for criticality in financial data*, Eur. Phys. J. B **91**, 1 (2018) (5 pages).
- [10042] Z. Huang and S. Zheng, *The cross correlation properties of composite systems*, Scientific Reports **8**, 1297 (2018) (6 pages), doi:10.1038/s41598-017-18135-x
- [10043] M. Forczek, *Multiscale characteristics of linear and nonlinear cross-correlations in financial markets*, Doctor Thesis (Polish Academy of Sciences, Department of Complex Systems Theory, Krakow).
- [10044] M. Kozaki and A.-H. Sato, *Application of the Beck model to stock markets: Value-at-risk and portfolio risk assessment*, Physica A **387**, 1225-1246 (2008).
- [10045] Z. Zou, Z. Xia and T. Hu, *Tsallis value-at-risk: generalized entropic value-at-risk*, Probability in the Engineering and Informational Sciences (2022).
- [10046] A.-H. Sato, *q-Gaussian distributions and multiplicative stochastic processes for analysis of multiple financial time series*, J. Phys. C Series **201**, 012008 (2010) (8 pages).
- [10047] P. Zhao and Q. Xiao, *Portfolio selection problem with liquidity constraints under non-extensive statistical mechanics*, Chaos, Solitons and Fractals **82**, 5-10 (2016).
- [10048] P. Zhao and Q. Xiao, *Portfolio selection problem with Value-at-Risk constraints under non-extensive statistical mechanics*, J. Computational Applied Mathematics **298**, 64-71 (2016).
- [10049] A. Hajihassani, A. Namaki, N. Asadi and R. Tehrani, *Non-extensive value-at-risk estimation during times of crisis*, Internat. J. Modern Physics C, 2150099 (2021).
- [10050] I. Elbatal, L.S. Diab, A.B. Ghorbal, H.M. Yousof, M. Elgarhy and E.I.A. Ali, *A new losses (revenues) probability model with entropy analysis, applications and case studies for value-at-risk modeling and mean of order-P analysis*, AIMS Mathematics **9** (3), 7169-7211 (2024).
- [10051] L. Batra and H.C. Taneja, *Portfolio optimization based on generalized information theoretic measures*, Communications in Statistics - Theory and Methods (2020), doi: 10.1080/03610926.2020.1861294
- [10052] P. Zhao, J. Wang and Y. Song, *Optimal portfolio under non-extensive statistical mechanics and value-at-risk constraints*, Acta Physica Polonica A **133** (5), 1170-1173 (2018).
- [10053] J. Wang, P. Zhao and Q. Gao, *Portfolio selection problem with nonlinear wealth equations under non-extensive statistical mechanics for time-varying SDE*, Computers and Mathematics with Applications (2018), in press, doi: 10.1016/j.camwa.2018.09.057
- [10054] I. Gere, S. Kelemen, G. Toth, T.S. Biro and Z. Neda, *Wealth distribution in modern societies: collected data and a master equation approach*, preprint (2021), 2104.04134 [physics.soc-ph].
- [10055] I. Gere, S. Kelemen, T.S. Biro and Z. Neda, *Wealth distribution in villages. Transition from socialism to capitalism in view of exhaustive wealth data and a master equation approach*, Frontiers in Physics **10**, 827143 (2022).
- [10056] A.F. Ducuara and P. Skrzypczyk, *Fundamental connections between utility theories of wealth and information theory*, preprint (2023), 2306.07975 [cs.IT].

- [10057] A.F.P. Rodrigues, I.M. Guerreiro and C.C. Cavalcante, *Deformed exponentials and portfolio selection*, Internat. J. Mod. Phys. C **29** (3), 1850029 (2018).
- [10058] D. Nedela and T. Tichy, *Dual focus on systemic risk in portfolio management*, Proceedings of the 16th International Conference Liberec, Czechia, September 5-6, 2023, Liberec Economic Forum 2023, doi: 10.15240/tul/009/lef-2023-43 396
- [10059] X. Liang, J. Xie, Z. Miao, Y. Xu and Y. Feng, *Two parameter generalized entropy of uncertain random variables and its application*, Journal of Ambient Intelligence and Humanized Computing (2022), doi: 10.1007/s12652-022-03855-4
- [10060] L. Batra and H.C. Taneja, *Comparative study of information measures in portfolio optimization problems*, Journal of Ambient Intelligence and Humanized Computing (2024), in press.
- [10061] A.F.P. Rodrigues and C.C. Cavalcante, *Principal curves for statistical divergences and an application to finance*, Entropy **20**, 333 (2018), doi: 10.3390/e20050333
- [10062] A.F.P. Rodrigues, C.C. Cavalcante and V.L. Crisostomo, *A projection pricing model for non-Gaussian financial returns*, Physica A **534**, 122181(2019).
- [10063] B.M. Tabak and D.O. Cajueiro, *Assessing inefficiency in euro bilateral exchange rates*, Physica A **367**, 319-327 (2006).
- [10064] D.O. Cajueiro and B.M. Tabak, *Is the expression $H = 1/(3 - q)$ valid for real financial data?*, Physica A **373**, 593-602 (2007).
- [10065] M.A. Rivera-Castro, J.G.V. Miranda, E.P. Borges, D.O. Cajueiro and R.F.S. Andrade, *A top-bottom price approach to understanding financial fluctuations*, Physica A (2011), in press.
- [10066] O.J. Tapiero, *A maximum (non-extensive) entropy approach to equity options bid-ask spread*, Physica A **392**, 3051-3060 (2013).
- [10067] N. Gradojevic and M. Caric, *Multi-criteria classification for pricing European options*, The Rimini Centre for Economic Analysis WP 15-14 (2015).
- [10068] I. Kilic and O.Kayakan, *A new nonlinear quantizer for image processing within nonextensive statistics*, Physica A **381**, 420-430 (2007).
- [10069] F. Vallianatos, *A non-extensive approach to risk assessment*, Nat. Hazards Earth Syst. Sci. **9**, 211-216 (2009).
- [10070] F. Vallianatos and P. Sammonds, *Is plate tectonics a case of non-extensive thermodynamics?*, Physica A **389**, 4989-4993 (2010).
- [10071] A. Tzanis, A. Efstathiou and F. Vallianatos, *Are seismogenetic systems random or organized? A treatise of their statistical nature based on the seismicity of the North-Northeast Pacific Rim*, Complexity of Seismic Time Series Measurement and Application 365-418 (2018), doi: 10.1016/B978-0-12-813138-1.00011-0
- [10072] A. Efstathiou and A. Tzanis, *An examination of the nature and dynamics of seismogenesis in South California, USA, based on non-extensive statistical physics*, Physics of the Earth and Planetary Interiors (2018), in press, doi: 10.1016/j.pepi.2018.08.013
- [10073] V.H.A. Dias, A.R.R. Papa and D.S.R. Ferreira, *Analysis of temporal and spatial distributions between earthquakes in the region of California through Non-Extensive Statistical Mechanics and its limits of validity*, Physica A **529**, 121471 (2019).
- [10074] D.S.R. Ferreira, J. Ribeiro, P.S.L. Oliveira, A.R. Pimenta, R.P. Freitas and A.R.R. Papa, *Long-range correlation studies in deep earthquakes global series*, Physica A **560**, 125146 (2020).
- [10075] D.S.R. Ferreira, J. Ribeiro, P.S.L. Oliveira Jr, A.R. Pimenta, R.P. Freitas, R.S. Dutra, A.R.R. Papa and J.F.F. Mendes, *Spatiotemporal analysis of earthquake occurrence in synthetic and worldwide data*, Chaos, Solitons and Fractals **165**, 112814 (2022).
- [10076] F. Vallianatos, *Transient Electromagnetic Method in the Keritis basin (Crete, Greece): Evidence of hierarchy in a complex geological structure in view of Tsallis distribution*, Annals Geophysics **60**, Supplement to **6**, GM675 (2017) (12 pages), doi: 10.4401/ag-7551
- [10077] F. Vallianatos, *A non extensive view of electrical resistivity spatial distribution estimated inverted transient electromagnetic responses in a karstified formation (Keritis basin, Crete, Greece)*, Physica A **505**, 171-178 (2018).
- [10078] F. Vallianatos and P. Sammonds, *A non-extensive statistics of the fault-population at the Valles Marineris extensional province, Mars*, Tectonophysics **509**, 50-54 (2011).
- [10079] F. Vallianatos, *A non-extensive statistical physics approach to the polarity reversals of the geomagnetic field*, Physica A **390**, 1773-1778 (2011).
- [10080] F. Vallianatos, G. Papadakis and G. Michas, *Generalized statistical mechanics approaches to earthquakes and tectonics*, Proc. R. Soc. A **472**, 20160497 (2016) (25 pages), doi: <http://dx.doi.org/10.1098/rspa.2016.0497>

- [10081] C. Barbosa, L. Alves, R. Caraballo, G.A. Hartmann, A.R.R. Papa and R.J. Pirjola, *Analysis of geomagnetically induced currents at a low-latitude region over the solar cycles 23 and 24: comparison between measurements and calculations*, J. Space Weather Space Clim. **5**, A35 (2015) (9 pages), doi: 10.1051/swsc/2015036
- [10082] C.S. Barbosa, R. Caraballo, L. Alves, G.A. Hartmann, C.D. Beggan, A. Viljanen, C.M. Ngwira, A.R.R. Papa and R.J. Pirjola, *The Tsallis statistical distribution applied to geomagnetically induced currents*, Space-Weather - The International Journal of Research and Applications **15** (9), 1094-1101 (2017), doi: 10.1002/2017SW001631
- [10083] S. Javed, N. Rubab, S. Zaheer, S. Poedts and G. Jaffer, *Numerical calculations of charging threshold at GEO altitudes with two temperature non-extensive electrons*, Space Weather **21** (2023).
- [10084] C.S. Barbosa, D.S.R. Ferreira, M.A. do Espirito Santo and A.R.R. Papa, *Statistical analysis of geomagnetic field reversals and their consequences*, Physica A **392** (24), 6554-6560 (2013), doi: <http://dx.doi.org/10.1016/j.physa.2013.08.025>
- [10085] D.S.R. Ferreira, A.R.R. Papa and R. Menezes, *Towards evidences of long-range correlations in seismic activity*, preprint (2014), 1405.0307 [physics.geo-ph].
- [10086] D.S.R. Ferreira, A.R.R. Papa and R. Menezes, *On the agreement between small-world-like OFC model and real earthquakes*, Phys. Lett. A **379**, 669-675 (2015).
- [10087] F. Vallianatos, E. Kokinou and P. Sammonds, *Non-extensive statistical physics approach to fault population distribution. A case study from the Southern Hellenic Arc (Central Crete)*, Acta Geophysica **59** (4), 770-784 (2011).
- [10088] F. Vallianatos, D. Triantis and P. Sammonds, *Non-extensivity of the isothermal depolarization relaxation currents in uniaxial compressed rocks*, Europhys. Lett. **94**, 68008 (2011) (5 pages).
- [10089] A. Cartwright-Taylor, F. Vallianatos and P. Sammonds, *Superstatistical view of stress-induced electric current fluctuations in rocks*, Physica A **414**, 368-377 (2014), <http://dx.doi.org/10.1016/j.physa.2014.07.064>
- [10090] F. Vallianatos, *Could complexity theory and statistical physics be used to support earthquake precursors recognition?*, 35th General Assembly of the European Seismological Commission, ESC2016-634 (2016).
- [10091] M. Kalimeri, C. Papadimitriou, G. Balasis and K. Eftaxias, *Dynamical complexity detection in pre-seismic emissions using nonadditive Tsallis entropy*, Physica A **387**, 1161-1172 (2008).
- [10092] C. Papadimitriou, M. Kalimeri and K. Eftaxias, *Nonextensivity and universality in the earthquake preparation process*, Phys. Rev. E **77**, 036101 (2008) (14 pages).
- [10093] Y.F. Contoyiannis and K. Eftaxias, *Tsallis and Levy statistics in the preparation of an earthquake*, Nonlinear Processes in Geophysics **15**, 1-10 and 379-388 (2008).
- [10094] G. Balasis, I.A. Daglis, C. Papadimitriou, M. Kalimeri, A. Anastasiadis and K. Eftaxias, *Dynamical complexity in D_{st} time series using non-extensive Tsallis entropy*, Geophys. Res. Lett. **35**, L14102 (2008).
- [10095] G. Balasis, I.A. Daglis, A. Anastasiadis and K. Eftaxias, *Detection of dynamical complexity changes in Dst time series using entropy concepts and rescaled range analysis*, in *The Dynamic Magnetosphere*, W. Liu and M. Fujimoto, eds., IAGA Special Sopron Book Series **3**, Chapter 12, 211-220 (Springer, 2016), doi: 10.1007/978-94-007-0501-2_12
- [10096] C. Papadimitriou, M. Kalimeri, G. Antonopoulos, J. Kopanas, A. Peratzakis and K. Eftaxias, *Nonextensivity and universality in the earthquake preparation process in terms of Tsallis statistics*, Geophys. Res. Abstr. **10**, EGU2008-A01566 (2008).
- [10097] S.M. Potirakis, G. Minadakis and K. Eftaxias, *Analysis of electromagnetic pre-seismic emissions using Fisher Information and Tsallis entropy*, Physica A **391**, 300-306 (2012).
- [10098] G. Minadakis, S. M. Potirakis, C. Nomicos and K. Eftaxias, *Linking electromagnetic precursors with earthquake dynamics: an approach based on nonextensive fragment and self-affine asperity models*, Physica A **391**, 2232-2244 (2012).
- [10099] S. M. Potirakis, G. Minadakis, C. Nomicos and K. Eftaxias, *A multidisciplinary analysis for traces of the last state of earthquake generation in preseismic electromagnetic emissions*, Nat. Hazards Earth Syst. Sci. **11**, 2859-2879 (2011).
- [10100] K. Eftaxias, G. Minadakis, S.M. Potirakis and G. Balasis, *Dynamical analogy between epileptic seizures and seismogenic electromagnetic emissions by means of nonextensive statistical mechanics*, Physica A **392**, 497-509 (2012).
- [10101] G. Balasis, A.Z. Boutsis, C. Papadimitriou, S.M. Potirakis, V. Pitsis, I.A. Daglis, A. Anastasiadis and O. Giannakis, *Investigation of dynamical complexity in swarm-derived geomagnetic activity indices using information theory*, Atmosphere **14**, 890 (2023).

- [10102] G. Balasis, I.A. Daglis, C. Papadimitriou, M. Kalimeri, A. Anastasiadis and K. Eftaxias, *Investigating dynamical complexity in the magnetosphere using various entropy measures*, J. Geophys. Res.-Space Phys. **114**, A00D06 (2009).
- [10103] C. Papadimitriou, G. Balasis, A.Z. Boutsis, I.A. Daglis, O. Giannakis, A. Anastasiadis, P. De Michelis and G. Consolini, *Dynamical complexity of the 2015 St. Patrick's day magnetic storm at swarm altitudes using entropy measures*, Entropy **22**, 574 (2020), doi: 10.3390/e22050574
- [10104] G. Balasis, C. Papadimitriou, I.A. Daglis, A. Anastasiadis, L. Athanasopoulou and K. Eftaxias, *Signatures of discrete scale invariance in $D(st)$ time series*, Geophys. Res. Lett. **38** (10), 1029 (2011).
- [10105] G. Balasis and K. Eftaxias, *A study of non-extensivity in the Earth*, Eur. Phys. J. Special Topics **174**, 219-225 (2009).
- [10106] G. Balasis, I.A. Daglis, C. Papadimitriou, A. Anastasiadis, I. Sandberg and K. Eftaxias, *Quantifying dynamical complexity of magnetic storms and solar flares via nonextensive Tsallis entropy*, in *Tsallis Entropy*, Special Issue of *Entropy*, ed. A. Anastasiadis, Entropy **13**, 1865-1881 (2011).
- [10107] N. Farhang, M.S. Wheatland and H. Safari, *Energy balance in avalanche models for solar flares*, preprint (2019), 1909.00195 [astro-ph.SR].
- [10108] A. Di Vita, *On avalanche-like perturbations of relaxed power-law distributions: Richardson's law of warfare as a consequence of the relaxation to a Pareto-like distribution of wealth*, Eur. Phys. J. B **93**, 27 (2020), doi: doi.org/10.1140/ep_jb/e2020-100568-3
- [10109] S. Gopinath, G.S. Kumar and P.R. Prince, *Non-extensive statistical analysis on solar activity dependence of magnetospheric dynamics*, J. Atmospheric and Solar-Terrestrial Physics **167**, 96-106 (2018).
- [10110] S. Gopinath and P.R. Prince, *Nonextensive and distance-based entropy analysis on the influence of sunspot variability in magnetospheric dynamics*, Acta Geodaetica et Geophysica **53**, 639-659 (2018), doi: 10.1007/s40328-018-0235-y
- [10111] K. Eftaxias, G. Minadakis, L. Athanasopoulou, M. Kalimeri, S.M. Potirakis and G. Balasis, *Epileptic seizures: Quakes on the brain? An approach by means of nonextensive Tsallis statistics*, in press, in *Tsallis Entropy*, Special Issue of *Entropy*, edited by A. Anastasiadis (2011).
- [10112] A. Kalimeris, S. M. Potirakis, K. Eftaxias, G. Antonopoulos, J. Kopanas and C. Nomikos, *Multi-spectral detection of statistically significant components in pre-seismic electromagnetic emissions related with Athens 1999, $M = 5.9$ earthquake*, J. Appl. Geophys. **128**, 41-57 (2016), doi: 10.1016/j.jappgeo.2016.03.002
- [10113] G.P. Pavlos, A.C. Iliopoulos, V.G. Tsoutsouras, D.V. Sarafopoulos, D.S. Sfris, L.P. Karakatsanis and E.G. Pavlos, *First and second order non-equilibrium phase transition and evidence for non-extensive Tsallis statistics in Earth magnetosphere*, Physica A **390**, 2819-2839 (2011).
- [10114] G.P. Pavlos, L.P. Karakatsanis, A.C. Iliopoulos, E.G. Pavlos and A.A. Tsonis, *Non-extensive statistical mechanics: Overview of theory and applications in seismogenesis, climate, and space plasma*, Advances in Nonlinear Geosciences, 465-495 (Springer, 2017).
- [10115] L.P. Karakatsanis, A.C. Iliopoulos, E.G. Pavlos and G.P. Pavlos, *Statistical analysis of Geopotential Height (GH) timeseries based on Tsallis non-extensive statistical mechanics*, Physica A **492**, 715-723 (2018).
- [10116] L.P. Karakatsanis, G.P. Pavlos and D.S. Sfris, *Universality of first and second order phase transition in solar activity. Evidence for non-extensive Tsallis statistics*, Internat. J. Bifurcation and Chaos **22** (9) 1250209 (2011).
- [10117] A.C. Iliopoulos, G.P. Pavlos, E.E. Papadimitriou, D.S. Sfris, M.A. Athanasiou and V.G. Tsoutsouras, *Chaos, self-organized criticality, intermittent turbulence and nonextensivity revealed from seismogenesis in North Aegean area*, Internat. J. Bifurcation and Chaos **22** (9), 1250224 (2012) (20 pages).
- [10118] G. Papadakis and F. Vallianatos, *Non-extensive statistical physics analysis of earthquake magnitude sequences in North Aegean Trough, Greece*, Acta Geophys. (2017) (9 pages). doi:10.1007/s11600-017-0047-4
- [10119] K. Eftaxias, *Footprints of nonextensive Tsallis statistics, selfaffinity and universality in the preparation of the L'Aquila earthquake hidden in a pre-seismic EM emission*, Physica A **389**, 133-140 (2010).
- [10120] G. Balasis, I.A. Daglis, A. Anastasiadis and K. Eftaxias, *Investigating magnetospheric dynamics using various complexity measures*, in *Modern Challenges in Nonlinear Plasma Physics: A Festschrift Honoring the Career of Dennis Papadopoulos*, AIP Conference Proceedings **1320**, 65-71 (2010).
- [10121] G. Balasis, M.A. Balikhin, S.C. Chapman, G. Consolini, I.A. Daglis, R.V. Donner, J. Kurths, M. Palus, J. Runge, B.T. Tsurutani, D. Vassiliadis, S. Wing, J.W. Gjerloev, J. Johnson, M. Materassi, T. Alberti, C. Papadimitriou, P. Manshour, A.Z. Boutsis and M. Stumpo, *Complex systems methods characterizing nonlinear processes in the near-Earth electromagnetic environment: Recent advances and open challenges*, Space Science Reviews **219**, 38 (2023).

- [10122] J.S. Ojo, A.O. Adelokun and O.V. Edward, *Comparative study on radio refractivity gradient in the troposphere using chaotic quantifiers*, *Heliyon* **5**, e02083 (2019).
- [10123] A. Adelokun and F. Adelokun, *Chaotic signatures and global solar radiation model estimate over Nigeria, a tropical region*, *Nonlinear Processes in Geophysics* (2020), doi: 10.5194/npg-2020-12
- [10124] K.S. Dyabilin and K.A. Razumova, *Thermodynamic approach to the interpretation of self-consistent pressure profiles in a Tokamak*, ISSN 1063-780X, *Plasma Physics Reports* **41** (9), 685-695 (2015) [Original Russian: *Fizika Plazmy* **41** (9), 747-757 (2015)].
- [10125] S. Banik, M. Amina, S.A. Ema, M.R. Hossen and A.A. Mamun, *Electrostatic solitary pulses in a dusty electronegative magnetoplasma*, *Plasma Physics Reports* **44** (11), 1057-1065 (2018).
- [10126] B. Goncalves, I. Henriques, C. Hidalgo, C. Silva, H. Figueiredo, V. Naulin, A.H. Nielsen and J.T. Mendonca, *Radial structure of vorticity in the plasma boundary of ISTTOK tokamak*, preprint (2018), arxiv 1804.07123
- [10127] B. Goncalves, I. Henriques, C. Hidalgo, C. Silva, H. Figueiredo, V. Naulin, A.H. Nielsen and J.T. Mendonca, *Radial structure of vorticity in the plasma boundary of tokamak plasmas*, 45th EPS Conference on Plasma Physics, 1084 (2018) (4 pages).
- [10128] K. Eftaxias, L. Athanasopoulou, G. Balasis, M. Kalimeri, S. Nikolopoulos, Y. Contoyiannis, J. Kopanas, G. Antonopoulos and C. Nomicos, *Unfolding the procedure of characterizing recorded ultra low frequency, kHz and MHz electromagnetic anomalies prior to the L'Aquila earthquake as pre-seismic ones. Part I*, *Natural Hazards and Earth System Sciences* **9**, 1953-1971 (2009).
- [10129] K. Eftaxias, G. Balasis, Y. Contoyiannis, C. Papadimitriou, M. Kalimeri, L. Athanasopoulou, S. Nikolopoulos, J. Kopanas, G. Antonopoulos, and C. Nomicos, *Unfolding the procedure of characterizing recorded ultra low frequency, kHz and MHz electromagnetic anomalies prior to the L'Aquila earthquake as pre-seismic ones - Part 2*, *Natural Hazards and Earth System Sciences* **10**, 275-294 (2009).
- [10130] S.M.D. Queiros, *On linear and non-linear dependency measures*, preprint, communicated at the Palermo Meeting (2008).
- [10131] S. Hoffmann and A. Hoffmann, *Is there a "true" diversity?*, *Ecological Economics* **65**, 213-215 (2008).
- [10132] S.M.D. Queiros, *On a comparative study of dependence scales determined by linear and non-linear measures*, *Physica D* **238**, 764-770 (2009).
- [10133] R. Ishizaki, T. Shinba, G. Mugishima, H. Haraguchi and M. Inoue, *Time-series analysis of sleep-wake stage of rat EEG using time-dependent pattern entropy*, *Physica A* **387**, 3145-3154 (2008).
- [10134] M. Sharma, A.A. Bhurane and U.R. Acharya, *An expert system for automated classification of phases in cyclic alternating patterns of sleep using optimal wavelet-based entropy features*, preprint (2022).
- [10135] E.J.X. Costa, A.R.B. Tech and A.C.S. Silva, *Linking non-extensive entropy with Lempel-ziv complexity to obtain the entropic Q-index from EEG signals*, 10th International Conference on Bio-inspired Systems and Signal Processing **4**, 101-105, *Biosignals* (2017), doi: 10.5220/0006077901010105
- [10136] Y. Hou, P. Zhang, X. Xu, X. Zhang and W. Li, *Nonlinear dimensionality reduction by locally linear inlaying*, *IEEE Transactions Neural Networks* **20**, 300-315 (2009).
- [10137] N.J. Tustison, S.P. Awate, G. Song, T.S. Cook and J.C. Gee, *A new information-theoretic measure to control the robustness-sensitivity trade-off for DMFFD point-set registration*, *Information Processing in Medical Imaging*, *Proceedings* **5636**, 215-226 (2009).
- [10138] C. Arackaparambil, J. Brody and A. Chakrabarti, *Functional monitoring without monotonicity*, *Automata, Languages and Programming PT I* **5555**, 95-106 (2009).
- [10139] R. Zandie and M.H. Mahoor, *Topical language generation using transformers*, preprint (2021), 2103.06434 [cs.CL].
- [10140] H. Adachi and M. Toda, *Characteristics of language usage in inquires asked to an online help desk*, *International Conference on Data Mining and Big Data 2017*, *Springer Series Lecture Notes and Computer Science* **10387**, 422-429 (2017).
- [10141] K. Yang, *Contributions to robust and efficient methods for analysis of high-dimensional data*, Doctor Thesis (Department of Epidemiology, Biostatistics and Occupational Health, McGill University, Montreal, Quebec, 2024).
- [10142] M. Geerts, S. van den Broucke and J. De Weerd, *GeoRF: a geospatial random forest*, *Data Mining and Knowledge Discovery* (2024).
- [10143] M. Mattone, E. Miraldi and A.M. Scarfone, *Statistical analysis of the time base distortion of a digital oscilloscope*, *Mod. Phys. Lett. B* **23**, 3179-3189 (2009).
- [10144] H.X. Yan, X.H. Zhao and Y.J. Liu, *Algorithm of image enhancement based on order morphology transformation*, 2009 International Forum on Information Technology and Applications, *Proceedings* **2**, 251-253 (2009).

- [10145] J.S. Gill, M.P. Woods, C.M. Salafia and D.D. Vvedensky, *Probability distributions for measures of placental shape and morphology*, *Physiol. Meas.* **35**, 483-500 (2014), doi:10.1088/0967-3334/35/3/483
- [10146] G.L. Ferri, M.F. Reynoso Savio and A. Plastino, *Tsallis' q-triplet and the ozone layer*, *Physica A* **389**, 1829-1833 (2010).
- [10147] G.L. Ferri, A. Figliola and O.A. Rosso, *Tsallis' statistics in the variability of El Nino/Southern Oscillation during the Holocene epoch*, *Physica A* **391**, 2154-2162 (2012).
- [10148] A. Spiridonov, L. Balakauskas, R. Stankevicius, G. Kluczynska, L. Gedminiene and M. Stancikaite, *Holocene vegetation patterns in southern Lithuania indicate astronomical forcing on the millennial and centennial time scales*, *Scientific Reports* **9**, 14711 (2019), doi: doi.org/10.1038/s41598-019-51321-7
- [10149] A. Chiolerio, M.M. Dehshibi, G. Vitiello, A. Bernard, P. Ceretto, M. Arvat and A. Adamatzky, *Bioelectric potentials in superior plants: electric collective behaviour*, preprint (2022).
- [10150] A. Chiolerio, M.M. Dehshibi, G. Vitiello and A. Adamatzky, *Molecular collective response and dynamical symmetry properties in biopotentials of superior plants: Experimental observations and quantum field theory modeling*, *Symmetry* **14**, 1792 (2022).
- [10151] A. Chiolerio, A. Adamatzky, G. Vitiello and M.M. Dehshibi, *Living plants ecosystem sensing: A quantum bridge between thermodynamics and bioelectricity*, *Biomimetics* **8**, 122 (2023).
- [10152] K. Vandekerckhove, A. Thomaes, L. De Keersmaecker, P. Van de Kerckhove, T. Onkelinx, H. Van Calster and K. Verheyen, *Enjoying tranquility - Development of ground vegetation after cessation of management in forests on loamy soils in Flanders (Belgium)*, *Applied Vegetation Science* **24**, e12593 (2021).
- [10153] L. Telesca, *Nonextensive analysis of seismic sequences*, *Physica A* **389**, 1911-1914 (2010).
- [10154] L. Telesca, *A non-extensive approach in investigating the seismicity of L' Aquila area (central Italy), struck by the 6 April 2009 earthquake (ML = 5.8)*, *Terra Nova* **22**(2), 87-93 (2010).
- [10155] L. Telesca and C.-C. Chen, *Nonextensive analysis of crustal seismicity in Taiwan*, *Nat. Hazards Earth Syst. Sci* **10**, 1293-1297 (2010).
- [10156] L. Telesca, *Analysis of Italian seismicity by using a nonextensive approach*, *Tectonophysics* **494**, 155-162 (2010).
- [10157] C.C. Chen, L. Telesca, C.T. Lee and Y.S. Sun, *Statistical physics of landslides: New paradigm*, *Europhys. Lett.* **95**, 49001 (2011) (3 pages).
- [10158] Q. Rodriguez-Perez and F.R. Zuniga, *Seismicity characterization of the Maravatio-Acambay and Actopan regions, central Mexico*, *J. South American Earth Sciences* **76**, 264-275 (2017).
- [10159] S. Ogunjo, I. Fuwape, S. Oluyamo and B. Rabiou, *Spatial dynamical complexity of precipitation and temperature extremes over Africa and South America*, *Asia-Pacific Journal of Atmospheric Sciences* **60**, 15-28 (2024).
- [10160] J.L. Gonzalez, E.L. de Faria, Marcelo P. Albuquerque and Marcio P. Albuquerque, *Nonadditive Tsallis entropy applied to the Earth's climate*, *Physica A* **390**, 587-594 (2011).
- [10161] I. Hoyos and B. Anghelo Rodriguez, *Drawing the complexity of Colombian climate from non-extensive extreme behavior*, *Physica A* (2019), in press, doi: doi.org/10.1016/j.physa.2019.123673
- [10162] S.C.C. de Aviz, *Entropia de Tsallis aplicada ao clima da Terra*, Master Thesis (Universidade Federal do Espirito Santo, 2018).
- [10163] S.V. Iyengar, J. Balakrishnan and J. Kurths, *Impact of climate change on larch budmoth cyclic outbreaks*, *Scientific Reports* **6**, 27845 (2016) (8 pages), doi: 10.1038/srep27845
- [10164] J. Balakrishnan, S.V. Iyengar and J. Kurths, *Missing cycles: Effect of climate change on population dynamics*, *Indian Academy of Sciences Conference Series* **1**, 1 (2017), doi: 10.29195/iascs.01.01.0014
- [10165] S.V. Iyengar, J. Balakrishnan and J. Kurths, *Co-existence of periodic bursts and death of cycles in a population dynamics system*, *Chaos* **26**, 093111 (2016) (15 pages).
- [10166] K. Sienicki, *Comments on the "Regional climate variability driven by foehn winds in the McMurdo Dry Valley, Antarctica"*, preprint (2013).
- [10167] M. Bhagat, C. Bhushan, G. Saha, S. Shimjo, K. Watanabe and J. Bhattacharya, *Investigating neuromagnetic brain responses against chromatic flickering stimuli by wavelet entropies*, *Plos One* **4** (9), e7173 (2009).
- [10168] A.C. Iliopoulos and G.P. Pavlos, *Global low dimensional seismic chaos in the hellenic region*, *Int. J. Bifurcation and Chaos*, **20** (7), 2071-2095 (2010).
- [10169] G.P. Pavlos, L.P. Karakatsanis, M.N. Xenakis, D. Sarafopoulos and E.G. Pavlos, *Tsallis statistics and magnetospheric self-organization*, *Physica A* **391**, 3069-3080 (2012).
- [10170] G.P. Pavlos, L.P. Karakatsanis and M.N. Xenakis, *Tsallis non-extensive statistics, intermittent turbulence, SOC and chaos in the solar plasma. Part one: Sunspot dynamics*, *Physica A* **391**, 6287-6319 (2012).

- [10171] L.P. Karakatsanis, G.P. Pavlos and M.N. Xenakis, *Tsallis non-extensive statistics, intermittent turbulence, SOC and chaos in the solar plasma. Part two: Solar flares dynamics*, Physica A **392**, 3920-3944 (2013).
- [10172] S. Patsourakos, M.K. Georgoulis, A. Vourlidis, A. Nindos, T. Sarris, G. Anagnostopoulos, A. Anastasiadis, G. Chintzoglou, I.A. Dagleis, C. Gontikakis, N. Hatzigeorgiu, A.C. Iliopoulos, C. Katsavrias, A. Koulounvakos, K. Moraitis, T. Nieves-Chinchilla, G. Pavlos, D. Sarafopoulos, P. Syntelis, C. Tsironis, K. Tziotziou, I.I. Vogiatzis, G. Balasis, M. Georgiou, L.P. Karakatsanis, O.E. Malandraki, C. Papadimitriou, D. Odstrcil, E. G. Pavlos, O. Podlachikova, I. Sandberg, D.L. Turner, M. N. Xenakis, E. Sarris, K. Tsinganos and L. Vlahos, *The major geoeffective solar eruptions of 2012 March 7: Comprehensive Sun-Earth analysis*, Astrophys. J., **817**, 14 (2016) (21 pages), doi:10.3847/0004-637X/817/1/14
- [10173] M.N. Xenakis, *Generalizing the Wells-Riley infection probability: A superstatistical scheme for indoor infection risk estimation*, Entropy **25**, 896 (2023).
- [10174] G.P. Pavlos, O.E. Malandraki, E.G. Pavlos, A.C. Iliopoulos and L.P. Karakatsanis, *Non-extensive statistical analysis of magnetic field during the March 2012 ICME event using a multi-spacecraft approach*, Physica A **464**, 149-181 (2016).
- [10175] A.N. Rubab, K. Nawaz and S. Sarwar, *A comparative study of spacecraft charging onset at Geosynchronous altitudes: A nonextensive particle approach*, J. Geophysical Research: Space Physics **125** (9), (2020), doi: 10.1029/2020JA028107
- [10176] G.P. Pavlos, *Understanding the multi-scale and multi-fractal dynamics of space plasmas through Tsallis non-extensive statistical theory*, preprint (2012), 1203.4003 [nlin.CD].
- [10177] T.T.S. Chang, *Introduction to space plasma complexity*, Cambridge Atmospheric and Space Science Series 1-160 (Cambridge University Press, 2015).
- [10178] G.P. Pavlos, *Complexity in theory and practice: Toward the unification of non-equilibrium physical processes*, Chaotic Modeling and Simulation **1**, 123-145 (2012).
- [10179] G.P. Pavlos, *Complexity theory and Tsallis non-extensive statistics: Theory and applications*, IJRRAS **16** (4), 101-133 (2013).
- [10180] G.P. Pavlos, L.P. Karakatsanis, M.N. Xenakis, A.E.G. Pavlos, A.C. Iliopoulos and D.V. Sarafopoulos, *Tsallis non-extensive statistics. Theory and applications*, preprint (2012), 1203.5582 [nlin.CD].
- [10181] G.P. Pavlos, M.N. Xenakis, L.P. Karakatsanis, A.C. Iliopoulos, A.E.G. Pavlos and D.V. Sarafopoulos, *Universality of Tsallis non-extensive statistics and fractal dynamics for complex systems*, preprint (2012), 1203.5556 [nlin.CD].
- [10182] G.P. Pavlos, L.P. Karakatsanis, M.N. Xenakis, E.G. Pavlos, A.C. Iliopoulos and D.V. Sarafopoulos, *Universality of Tsallis non-extensive statistics and time series analysis: Theory and applications*, Physica A **395**, 58-95 (2014).
- [10183] I.P. Antoniadis, G. Marinos, L.P. Karakatsanis, E.G. Pavlos, S.G. Stavrinides, D. Tassis and G.P. Pavlos, *Tsallis non-extensive statistics and multifractal analysis of the dynamics of a fully-depleted MOSFET nano-device*, Physica A **533**, 121820 (2019).
- [10184] I.P. Antoniadis, L.P. Karakatsanis and E.G. Pavlos, *Dynamical characteristics of global stock markets based on time dependent Tsallis non-extensive statistics and generalized Hurst exponents*, Physica A **578**, 126-121 (2021).
- [10185] G.P. Pavlos, A.C. Iliopoulos, L.P. Karakatsanis, V.G. Tsoutsouras and E.G. Pavlos, *Complexity theory and physical unification: From microscopic to macroscopic level*, preprint (2012).
- [10186] L.P. Karakatsanis, G.P. Pavlos, A.C. Iliopoulos, E.G. Pavlos, P.M. Clark, J.L. Duke and D.S. Monos, *Assessing information content and interactive relationships of subgenomic DNA sequences of the MHC using complexity theory approaches based on the non-extensive statistical mechanics*, Physica A **505**, 77-93 (2018).
- [10187] G.P. Pavlos, A.C. Iliopoulos, G.N. Zastenker, L.M. Zelenyi, L.P. Karakatsanis, M. Riazantseva, M.N. Xenakis and E.G. Pavlos, *Studying complexity in solar wind plasma during shock events. Part I: Nonextensive Tsallis statistics*, preprint (2013), 1310.0525 [nlin.CD].
- [10188] J. Ye, J.A. le Roux and A.D. Arthur, *Interstellar pickup ion acceleration in the turbulent magnetic field at the solar wind termination shock using a focused transport approach*, Astrophys. J. **826**, 117 (2016) (17 pages), doi:10.3847/0004-637X/826/2/117
- [10189] G.P. Pavlos, A.C. Iliopoulos, G.N. Zastenker, L.M. Zelenyi, L.P. Karakatsanis, M. Riazantseva, M.N. Xenakis and E.G. Pavlos, *Tsallis non-extensive statistics and solar wind plasma complexity*, Physica A **422**, 113-135 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2014.12.007>
- [10190] M.O. Riazantseva, V.P. Budaev, L.M. Zelenyi, G.N. Zastenker, G.P. Pavlos, J. Safrankova, Z. Nemecek, L. Prech and F. Nemecek, *Dynamic properties of small-scale solar wind plasma fluctuations*, Phil. Trans. R. Soc. A **373**, 20140146 (2015) (19 pages), doi: <http://dx.doi.org/10.1098/rsta.2014.0146>

- [10191] G.P. Pavlos, A.C. Iliopoulos, L.P. Karakatsanis, M. Xenakis and E. Pavlos, *Complexity of economical systems*, J. Engineering Science Technology Review **8** (1), 41-55 (2015).
- [10192] A.C. Iliopoulos, G.P. Pavlos, L. Magafas, L. Karakatsanis, M. Xenakis and E. Pavlos, *Tsallis q -triplet and stock market indices: The cases of S and P 500 and $TVIX$* , J. Engineering Science Technology Review **8** (1), 34-40 (2015).
- [10193] R.S. Mendes, L.C. Malacarne, R.P.B. Santos, H.V. Ribeiro and S. Picoli Jr., *Earthquake-like patterns of acoustic emission in crumpled plastic sheets*, Europhys. Lett. **92**, 29001 (2010) (5 pages).
- [10194] H.V. Ribeiro, *Identificacao e modelagem de padroes em sistemas complexos*, Doctoral Thesis (Universidade Estadual de Maringa, Brazil, 2012).
- [10195] F.M. Lopes, E.A. de Oliveira and R.M. Cesar, *Inference of gene regulatory networks from time series by Tsallis entropy*, BMC Systems Biology **5**, 61 (2011) (13 pages).
- [10196] C.Y. Koike and C.H.A. Higa, *Inference of gene regulatory networks using coefficient of determination, Tsallis entropy and biological prior knowledge*, IEEE 16th International Conference on Bioinformatics and Bioengineering 64-70 (2016), doi: 10.1109/BIBE.2016.54
- [10197] C. Koukouvinos, E. Massou, K. Mylon and C. Parpoula, *Analyzing supersaturated designs with entropic measures*, J. Statistical Planning and Inference **141**, 1307-1312 (2011).
- [10198] N. Balakrishnan, C. Koukouvinos and C. Parpoula, *An information theoretical algorithm for analyzing supersaturated designs for a binary response*, Metrika **76**, 1-18 (2013).
- [10199] N.J. Tustison, S.P. Awate, G. Song, T.S. Cook and J.C. Gee, *Point set registration using Havrda-Charvat-Tsallis entropy measures*, IEEE Transactions on Medical Imaging **30** (2), 451-460 (2011).
- [10200] R. Fabbri, W.N. Goncalves, F.J.P. Lopes and O.M. Bruno, *Multi- q pattern analysis: A case study in image classification*, Physica A **391** (19), 4487-4496 (2012).
- [10201] R. Fabbri, I.N. Bastos, F.D. Moura-Neto, F.J.P. Lopes, W.N. Goncalves and O.M. Bruno, *Multi- q pattern classification of polarization curves*, Physica A **395**, 332-339 (2014).
- [10202] H.B.M.A. El-Owny, *Edge detection in gray level images based on non-Shannon entropy*, preprint (2013).
- [10203] A.E.A. Elaraby, H.B.M. El-Owny, M. Heshmat, M. Hassaballah and A.S. Abdel Rady, *Edge detection of noisy medical images based mixed entropy*, Computer Engineering Intelligent Systems **4** (13), 97-107 (2013).
- [10204] A.E.A. Elaraby, El-Owny, H.B.M. Ahmed, M. Heshmat, M. Hassaballah4 and A.S. Abel Rardy, *A novel algorithm for edge detection of noisy medical images*, Internat. J. Signal Processing, Image Processing and Pattern Recognition **6** (6), 365-374 (2013), doi: <http://dx.doi.org/10.14257/ijcip.2013.6.6.33>
- [10205] H.A. Jalab, R.W. Ibrahim, A.M. Hasan, F.K. Karim, A.R. Al-Shamasneh and D. Baleanu, *A new medical image enhancement algorithm based on fractional calculus*, Computers, Materials and Continua **68** (2), 1467-1483 (2021), doi: 10.32604/cmc.2021.016047
- [10206] V. Gal, *Image similarity in medical images*, Doctor Thesis (Gent University, 2015).
- [10207] A. Rizal, R. Hidayat and H.A. Nugroho, *Pulmonary crackle feature extraction using Tsallis entropy for automatic lung sound classification*, IEEE, Proceedings of 2016 1st International Conference on Biomedical Engineering: Empowering Biomedical Technology for Better Future, IBIOMED 2016, 7869823 (2017).
- [10208] A. Rizal, R. Hidayat and H.A. Nugroho, *Entropy measurement as features extraction in automatic lung sound classification*, IEEE ICCEREC (2017).
- [10209] A. Rizal, R. Hidayat and H.A. Nugroho, *Multiscale Tsallis entropy for pulmonary crackle detection*, Internat. J. Advances in Intelligent Informatics **4** (3), 192-201 (2018).
- [10210] A. Rizal, R. Hidayat and H.A. Nugroho, *Comparison of multilevel wavelet packet entropy using various entropy measurement for lung sound classification*, Internat. J. Advanced Computer Science and Applications **10** (2), 77-82 (2019).
- [10211] C. Li and P. Shang, *Multiscale Tsallis permutation entropy analysis for complex physiological time series*, Physica A (2019), in press, doi: 10.1016/j.physa.2019.01.031
- [10212] P.G. Massa, M.P. Ribeiro, G.A. Wachs-Lopes and P.S. Rodrigues, *Realce de regioes em imagens de ultrassom de cancer mamario baseado em funcoes q -sigmoides*, preprint (2016).
- [10213] P.S. Rodrigues, G. Wachs-Lopes, R.M. Santos, E. Coltri and G.A. Giralardi, *A q -extension of sigmoid functions and the application for enhancement of ultrasound images*, Entropy **21**, 430 (2019), doi: 10.3390/e21040430
- [10214] L. Assirati, N.R. da Silva, L. Berton, A.A. Lopes and O.M. Bruno, *Performing edge detection by difference of Gaussians using q -Gaussian kernels*, J. Phys.: Conference Series **490**, 012020 (2014) (4 pages), doi:10.1088/1742-6596/490/1/012020
- [10215] Z. Wu, X. Lu and Y. Deng, *Image edge detection based on local dimension: A complex networks approach*, Physica A (2015), in press, doi: <http://dx.doi.org/10.1016/j.physa.2015.07.020>

- [10216] L. Assirati, N.R. da Silva and O.M. Bruno, *Improving texture classification with nonextensive statistical mechanics*, X Workshop de Visao Computacional - WVC 249-252 (2014).
- [10217] H.J. Rabal, N. Cap, M. Trivi and M.N. Guzman, *Q-statistics in dynamical speckle pattern analysis*, Optics and Lasers in Engineering **50**, 855-861 (2012).
- [10218] H.C. Soares, J.B. Meireles, A.O. Castro Junior, J.A.O. Huguenin, A.G.M. Schmidt and L. da Silva, *Tsallis's threshold analysis of digital speckle patterns generated by rough surfaces*, Physica A **432**, 1-8 (2015).
- [10219] A. Rey, J. Gambini, M. Lucini and A.C. Frery, *Despeckling filter based on the Tsallis entropy of the G_T^0 distribution*, IEEE (2024).
- [10220] M.R.B. Dias, *Analise de superficies metalicas via padroes de speckle*, Doctor Thesis (Universidade Federal Fluminense, 2020).
- [10221] M.R.B. Dias, A.O. Castro Junior, C.P. Dias, S.A. de Carvalho, J.A.O. Huguenin and L. da Silva, *Monitoring defects of a moving metallic surface through Tsallis entropic segmentation*, Physica A **534**, 122175 (2019).
- [10222] A.C. Frery, R.J. Cintra and A.D.C. Nascimento, *Entropy-based statistical analysis of PolSAR data*, IEEE Transactions Geoscience Remote Sensing **51** (6), 3733-3743 (2013).
- [10223] M. Yasuda, *Fuzzy c-means clustering, entropy maximization, and deterministic and simulated annealing*, Intec, Chapter 13 (20 pages), <http://dx.doi.org/10.5772/48659>
- [10224] M. Yasuda, *Deterministic annealing: A variant of simulated annealing and its application to fuzzy clustering*, in *Computational Optimization in Engineering - Paradigms and Applications*, Ed. H. Peyvandi (2017).
- [10225] Y. Xiang, S. Gubian and F. Martin, *Generalized simulated annealing*, in *Computational Optimization in Engineering - Paradigms and Applications*, Ed. H. Peyvandi (2017).
- [10226] E. Cohen, M. Shnitser, T. Avraham, O. Hadar and Y. Dotan, *Automatic detection and correction of defective pixels for medical and space imagers*, MEDIAN 2014, 44-47 (28 March 2014, Dresden, Germany).
- [10227] O. Hadar, *Real-time detection and correction of defective pixels in space cameras*, Report (University of Massachusetts, Amherst, 2014).
- [10228] E. Cohen and B. Tamir, *D-Wave and predecessors: From simulated to quantum annealing*, Internat. J. Quantum Information **12** (3), 1430002 (2014) (37 pages), doi: 10.1142/S0219749914300022
- [10229] J.M. Angulo and F.J. Esquivel, *Structural complexity in space-time seismic event data*, Stoch. Environ. Res. Risk Assess **28**, 1187-1206 (2014), doi: 10.1007/s00477-013-0807-x
- [10230] Y. He and Y. Mei, *An efficient registration algorithm based on spin image for LiDAR 3D point cloud models*, Neurocomputing **151**, 354-363 (2015), doi: <http://dx.doi.org/10.1016/j.neucom.2014.09.029>
- [10231] M.Z. Ansari, H. Cabrera and E.E. Ramirez-Miquet, *Imaging functional blood vessels with the laser speckle imaging (LSI) technique using Q-statistics of the generalized differences algorithm*, Microvascular Research **107**, 46-50 (2016), doi: 10.1016/j.mvr.2016.04.012 YMVRE 3632
- [10232] A. Ramirez-Reyes, A.R. Hernandez-Montoya, G. Herrera-Corral and I. Dominguez-Jimenez, *Determining the entropic index q of Tsallis entropy in images through redundancy*, Entropy **18**, 299 (2016), doi:10.3390/e18080299
- [10233] M. Ilunga., *Tsallis entropy for assessing spatial uncertainty associated with mean annual runoff of quaternary catchments of the Middle Vaal Basin in South Africa*, Entropy **22**, 1050 (2020), doi: 10.3390/e22091050
- [10234] S. Nalband, R.R. Sreekrishna and A.A. Prince, *Analysis of knee joint vibration signals using ensemble empirical mode decomposition*, Twelfth International Multi-Conference on Information Processing-2016 (IMCIP-2016), Procedia Computer Science **89**, 820-827 (2016).
- [10235] M.P. Wachowiak, D.C. Hay, R. Wachowiak-Smolikova, D.J. DuVal and M.J. Johnson, *Analyzing multiresolution wavelet entropy of ECG with visual analytics techniques*, IEEE Canadian Conference on Electrical and Computer Engineering (2016) (5 pages).
- [10236] L. Luo, B. Zhang, Z. Peng, Y.K. Cheung, G. Zhang, Z. Li, M.Y. Wang and H. Yu, *CompdVision: Combining near-field 3D visual and tactile sensing using a compact compound-eye imaging system*, IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) (October 14-18, 2024, Abu Dhabi, UAE).
- [10237] M.S. Kang, J.H. Bae, S.H. Lee and K.T. Kim, *Efficient ISAR autofocus via minimization of Tsallis entropy*, IEEE Transactions on Aerospace and Electronic Systems **52**, 2950-2960 (2016).
- [10238] J. Dudik, V. Polito, E. Dzifcakova, G. Del Zanna and P. Testa, *Non-Maxwellian analysis of the transition-region line profiles observed by the interface region imaging spectrograph*, Astrophys. J. **842**, 19 (2017) (18 pages).
- [10239] L. Zheng and K. Tian, *Detection of small objects in sidescan sonar images based on POHMT and Tsallis entropy*, Signal Processing **142**, 168-177 (2017), doi: 10.1016/j.sigpro.2017.07.022
- [10240] A. Caplin, M. Dean and J. Leahy *Rationally inattentive behavior: Characterizing and generalizing Shannon entropy*, NBER Working Paper No. 23652 (2017), JEL No. D8,D83

- [10241] A. Meyer-Gohde, *Generalized entropy and model uncertainty*, SFB 649 Discussion Paper 017 (2017).
- [10242] A. Dmitriev, V. Dmitriev, O. Tsukanova and S. Maltseva, *A nonlinear dynamical approach to the interpretation of microblogging network complexity*, International Workshop on Complex Networks and their Applications, Complex Networks & Their Applications VI, 390-400 (2016-2017), Part of the *Studies in Computational Intelligence* book series **689**.
- [10243] S. Araujo, *Calculo del parametro de no extensividad en el modelo de interaccion fragmento-aspereza para los sismos del Ecuador mediante un metodo Bayesiano [Computation of the nonextensivity para meter in the fragment-asperity model for the Equatorian seismic catalog by a Bayesian approach]*, Rev. Cub. Fis. **34**, 112-115 (2017).
- [10244] X. Mao, P. Shang, J. Wang and Y. Ma, *Characterizing time series by extended complexity-entropy curves based on Tsallis, Renyi, and power spectral entropy*, Chaos **28**, 113106 (2018), doi: 10.1063/1.5038758
- [10245] M.A. Kaljahi, P. Shivakumara, T. Ping, H.A. Jalab, R.W. Ibrahim, M. Blumenstein, T. Lu and M.N.B. Ayub, *A geometric and fractional entropy-based method for family photo classification*, Expert Systems with Applications (2019), in press.
- [10246] V.N. Sychev and N.A. Sycheva, *The earthquakes aftershock processes of the Tien Shan and its surrounding area*, IOP Conf. Series: Earth and Environmental Science **324**, 012003 (2019), doi:10.1088/1755-1315/324/1/012003
- [10247] V. Sychev and N. Sycheva, *Analysis of the seismic process of the Bishkek geodynamic test site (Northern Tien Shan)*, STRPEP 2020, E3S Web of Conferences **196**, 02006 (2020), doi: 10.1051/e3sconf/202019602006
- [10248] V.N. Sychev and N.A. Sycheva, *Nonextensive analysis of aftershocks following moderate earthquakes in Tien Shan and North Pamir*, Journal of Volcanology and Seismology **15** (1), 58-71 (2021).
- [10249] N.A. Sycheva, *Seismicity and crustal seismotectonic deformations of the Anatolian Plate (Turkey)*, Geodynamics and Tectonophysics **15** (1), 0743 (2024).
- [10250] A. Nunes, M. Alda, T. Bardouille and T. Trappenberg, *Representational Renyi heterogeneity*, Entropy **22**, 417 (2020), doi: 10.3390/e22040417
- [10251] A. Nunes, T. Trappenberg and M. Alda, *Supplementary materials for the definition and measurement of heterogeneity*, preprint (2020).
- [10252] S.B. Hadid, R.W. Ibrahim and S. Momani, *On the entropic order quantity model based on the conformable calculus*, Progr. Fract. Differ. Appl. **7** (4), 263-273 (2021).
- [10253] J.E. Rojas-Lima, A. Dominguez-Pacheco, C. Hernandez-Aguilar, L.M. Hernandez-Simon and A. Cruz-Orea, *Statistical methods for the analysis of thermal images obtained from corn seeds*, SN Applied Sciences **3**, 499 (2021).
- [10254] W. Liu, Q. Ma and X. Liu, *Research on the dynamic evolution and its influencing factors of stock correlation network in the Chinese new energy market*, Finance Research Letters (2021), in press.
- [10255] M. Zanin and F. Olivares, *Ordinal patterns-based methodologies for distinguishing chaos from noise in discrete time series*, Communications Physics **4**, 190 (2021), doi: 10.1038/s42005-021-00696-z
- [10256] G. Qin and P. Shang, *Analysis of time series using a new entropy plane based on past entropy*, Chaos, Solitons and Fractals **152**, 111477 (2021).
- [10257] A.F. Martins, *Analise de series temporais via curvas complexidade-entropia em multiplas escalas*, Trabalho de Conclusao de Curso, (Universidade Estadual de Maringa, Centro de Ciencias Exatas, Departamento de Fisica, 2018).
- [10258] D. Tian, *Pricing principle via Tsallis relative entropy in incomplete market*, preprint (2022), 2201.05316 [q-fin.MF].
- [10259] M. Van Waerebeke, G. Lodygensky and J. Dolz, *On the pitfalls of entropy-based uncertainty for multi-class semi-supervised segmentation*, preprint (2022), 2203.03587 [cs.CV].
- [10260] L. Liu, X. Liu and H. Li, *The origin moment of q-Gaussian process*, Applied Mathematical Sciences **16** (6), 273-278 (2022).
- [10261] J. Zhang and Q. Dai, *Latent adversarial regularized autoencoder for high-dimensional probabilistic time series prediction*, Neural Networks (2022), in press, doi: 10.1016/j.neunet.2022.08.025
- [10262] B. Shang and P. Shang, *Generalized Shannon-Fisher index: An effective method to quantify the instability of multivariate time series*, Communications in Nonlinear Science and Numerical Simulation **117**, 106904 (2023).
- [10263] Aishwaraya, D. Gupta and V.V.M.S. Chandramouli, *Dynamics of q deformed Ricker map*, Journal of Difference Equations and Applications (2022), doi: 10.1080/10236198.2022.2142468

- [10264] D. Ferreira, J. Ribeiro, P. Oliveira Jr, A. Pimenta, R. Freitas, R. Dutra, A. Papa and J. Mendes, *Spatiotemporal analysis of earthquakes occurrence in small-world-like OFC model synthetic data and actual earthquakes*, preprint (2023).
- [10265] J. Radojicic and O. Radovic, *The effects of Covid-19 on multifractality and long-memory in ethereum's returns*, (2023), doi: 10.22190/TEME221228014R
- [10266] M. Rose-Teres Vanderpuye, *Investigating spatio-temporal randomness of large earthquakes*, Thesis (University College London, 2023).
- [10267] D. Wu, J.Y.C. Hu, W. Li, B.Y. Chen and H. Liu, *STANHOP: Sparse Tandem Hopfield Model for memory-enhanced time series prediction*, preprint (2023), 2312.17346 [cs.LG].
- [10268] R. Jiang and P. Shang, *Dispersion complexity-entropy curves: An effective method to characterize the structures of nonlinear time series*, *Chaos* **34**, 033137 (2024).
- [10269] S. Santos, V. Niculae, D. McNamee and A.F.T. Martins, *Sparse and structured Hopfield networks*, Proceedings of the 41 st International Conference on Machine Learning, Vienna, Austria, PMLR 235 (2024).
- [10270] S. Santos, V. Niculae, D. McNamee and A.F. T. Martins, *Hopfield-Fenchel-Young networks: A unified framework for associative memory retrieval*, 2411.08590 [cs.LG].
- [10271] R. Kluszczyński, S. Drozd, J. Kwapien, T. Stanisław and M. Watorek, *Disentangling sources of multifractality in time series*, *Mathematics* **13**, 205 (2025).
- [10272] O. Kharazmi, M. Khosravi and F. Yalcin, *Discrete inaccuracy information measure: extension and application to image processing*, *Communications in Statistics - Simulation and Computation* (2025).
- [10273] J.F.E. Bruggeman, K. Stockman and J.D.M. De Koning, *Edge detection with machine vision using derivative of Gaussian filters with q-Gaussian kernels*, 11th International Conference on Mechatronics and Robotics Engineering (2025).
- [10274] D. Zaccagnino and C. Doglioni, *A statistical approach to foreshocks discrimination in Italy*, preprint (2025).
- [10275] G. Datsleris and K.A. Haaga, *ComplexityMeasures.jl: scalable software to unify and accelerate entropy and complexity timeseries analysis*, *PLoS One* **20** (6), e0324431 (2025).
- [10276] S. Abe and N. Suzuki, *Time interval distribution of earthquakes*, preprint (2002) [cond-mat/0207657].
- [10277] S. Abe and N. Suzuki, *Law for the distance between successive earthquakes*, *J. Geophys. Res. (Solid Earth)* **108**, B2, 2113 (2003).
- [10278] I.A. Esquef, Ma.P. de Albuquerque and M.P. de Albuquerque, *Entropia nao extensiva em segmentacao otimizada de imagens*, Proposal for Master Thesis in Scientific Instrumentation (Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro, February 2002).
- [10279] O. Sotolongo-Costa and A. Posadas, *Fragment-asperity interaction model for earthquakes*, *Phys. Rev. Lett.* **92**, 048501 (2004).
- [10280] O. Sotolongo-Costa, *Non-extensive framework for earthquakes: The role of fragments*, *Acta Geophys.* **60**, 526-534 (2012).
- [10281] G. Gervino, C. Cigolini, A. Lavagno, C. Marino, P. Prati, L. Pruiti and G. Zangari, *Modelling temperature distributions and radon emission at Stromboli Volcano using a non-extensive statistical approach*, *Physica A* **340**, 402 (2004).
- [10282] F.J. Esquivel and J.M. Angulo, *Non-extensive analysis of the seismic activity involving the 2011 volcanic eruption in El Hierro*, *Spatial Statistics* **14**, 208-221 (2015).
- [10283] K. Chochlaki, G. Michas and F. Vallianatos, *Complexity of the Yellowstone park volcanic field seismicity in terms of Tsallis entropy*, *Entropy* **20**, 721 (2018), doi: 10.3390/e20100721
- [10284] E. Petraki, D. Nikolopoulos, A. Fotopoulos, D. Panagiotaras, C. Nomicos, P. Yannakopoulos, S. Kottou, A. Zisos, A. Louizi and J. Stonham, *Long-range memory patterns in variations of environmental radon in soil*, *Anal. Methods* (2013), in press, DOI: 10.1039/C3AY26486F
- [10285] D. Nikolopoulos, E. Petraki, E. Vogianis, Y. Chaldeos, P. Yannakopoulos, S. Kottou, C. Nomicos and J. Stonham, *Traces of self-organisation and long-range memory in variations of environmental radon in soil: Comparative results from monitoring in Lesbos Island and Ilea (Greece)*, *J. Radioanal. Nucl. Chem.* **299**, 203-219 (2014), DOI 10.1007/s10967-013-2764-8
- [10286] R.A. Costa-Junior, R.R. Rosa, A.P. Mattedi and F.M. Ramos, *Gradient pattern analysis of extended convection-diffusion*, *Physica A* **344**, 447 (2004).
- [10287] A.M. Hamza, *On the relevance of fractal diffusion to auroral backscatter*, *J. Atmospheric and Solar-Terrestrial Physics* **67**, 1559-1565 (2005).
- [10288] R. Remya and K. Unnikrishnan, *Chaotic behaviour of interplanetary magnetic field under various geomagnetic conditions*, *J. Atmospheric Solar-Terrestrial Phys.* **72**, 662-675 (2010).

- [10289] D. Koutsoyiannis, *The scaling properties in the distribution of hydrological variables as a result of the maximum entropy principle*, communicated at European Geosciences Union General Assembly (24-29 April 2005, Vienna).
- [10290] H. Cui and V.P. Singh, *Computation of suspended sediment discharge in open channels by combining Tsallis entropy-based methods and empirical formulas*, J. Hydrologic Eng. **19**, 18-25 (2014), doi: 10.1061/(ASCE)HE.1943-5584.0000782
- [10291] H. Cui and V.P. Singh, *Two dimensional velocity distribution in open channels using Tsallis entropy*, J. Hydrol. Eng. **18** (3), 331-339 (2013).
- [10292] H. Cui and V.P. Singh, *Suspended sediment concentration in open channels using Tsallis entropy*, J. Hydrol. Eng. **11**, 966-977 (2014), doi:10.1061/(ASCE)HE.1943-5584.0000865
- [10293] V.P. Singh and H. Cui, *Suspended sediment concentration distribution using Tsallis entropy*, Physica A **414**, 31-42 (2014), doi: <http://dx.doi.org/10.1016/j.physa.2014.06.075>
- [10294] X. Wang and H. Cui, *Application of entropy method to quantify future ecological flow in the Yellow River basin*, Entropy **24**, 72 (2022).
- [10295] M. Kumbhakar, K. Ghoshal and V.P. Singh, *Renyi entropy and random walk hypothesis to study suspended sediment concentration*, J. Hydrol. Eng., **22** (8), 04017027 (2017) (15 pages).
- [10296] K.Ghoshal, M. Kumbhakar and V.P. Singh, *Suspended sediment concentration and discharge in open channels using Renyi entropy*, J. Hydrol. Eng. **23**, (9), 04018038 (2018), (15 pages).
- [10297] V.P. Singh, *Entropy in hydrology*, Perspectives of Earth and Space Scientists (2025).
- [10298] G. Singh, R. Khosa, M.K. Jain, T. Moramarco and V.P. Singh, *Influence of the channel bed slope on Shannon, Tsallis, and Renyi entropy parameters*, Journal Hydroinformatics (2023), in press.
- [10299] M. Moazammia and H. Bonakdari, *Discharge estimation by using Tsallis entropy concept*, J. Water Sciences Research **5** (2), 43-55 (2013).
- [10300] Z.S. Khozani and H. Bonakdari, *Formulating the shear stress distribution in circular open channels based on the Renyi entropy*, Physica A **490**, 114-126 (2018).
- [10301] Z.S. Khozani and W.H.M.W. Mohtar, *Investigation of new Tsallis-based equation to predict shear stress distribution in circular and trapezoidal channels*, Entropy **21**, 1046 (2019), doi: 10.3390/e21111046
- [10302] D. Koutsoyiannis, *A critical review of probability of extreme rainfall: Principles and models*, preprint (2007).
- [10303] S.M. Papalexiou and D. Koutsoyiannis, *Entropy based derivation of probability distributions: A case study to daily rainfall*, Advances Water Resources **45**, 51-57 (2012).
- [10304] V. Pecorino, A. Pluchino and A. Rapisarda, *Tsallis q-statistics fingerprints in precipitation data across Sicily*, Entropy **26**, 623 (2024).
- [10305] D. Koutsoyiannis and G.F. Sargentis, *Entropy and wealth*, Entropy **23**, 1356 (2021).
- [10306] K. Chochołaki and F. Vallianatos, *Spatio-temporal analysis of aftershock sequences in terms of non extensive statistical physics*, Geophysical Research Abstracts **19**, EGU2017, 10080 (2017).
- [10307] G.C. Yalcin, P. Rabassa and C. Beck, *Extreme event statistics of daily rainfall: Dynamical systems approach*, J. Phys. A: Math. Theor. **49**, 154001 (2016) (18 pages), doi:10.1088/1751-8113/49/15/154001
- [10308] T. Princy and S. Babu, *Bivariate block and Basu's exponential distribution through entropy optimization and its application to rainfall data*, Journal of the Indian Society for Probability and Statistics (2023).
- [10309] A. Molini, G.G. Katul and A. Porporato, *Scale-wise evolution of rainfall probability density functions fingerprints the rainfall generation mechanism*, Geophys. Research Lett. **37**, L07403 (2010).
- [10310] G. Poveda, *Mixed memory, (non) Hurst effect, and maximum entropy of rainfall in the tropical Andes*, Advances Water Resources **34**, 243-256 (2011).
- [10311] G. Poveda and H.D. Salas, *Statistical scaling, Shannon entropy, and generalized space-time q-entropy of rainfall fields in tropical South America*, Chaos **25**, 075409 (2015) (15 pages).
- [10312] M. Kretzschmar, G. Consolini, E. Amata, S. Savin and W. Macek, *Scaling of magnetic field fluctuations in the geotail neutral sheet*, Geophysical Research Abstracts **6**, 04686 (2004).
- [10313] Z. Voros, M. Leitner, Y. Narita, G. Consolini, P. Kovacs, A. Toth and J. Lichtenberger, *Probability density functions for the variable solar wind near the solar cycle minimum*, J. Geophys. Res. - Space Physics **120** (18), 6152-6166 (2015).
- [10314] R.L. Kaufmann and W.R. Paterson, *Entropy distribution in the plasma sheet*, J. Geophysical Research-Space Physics **116**, A08206 (2011).
- [10315] M. Stepanova and E.E. Antonova, *Role of turbulent transport in the evolution of the κ distribution functions in the plasma sheet*, J. Geophys. Research A: Space Physics **120** (5), 3702-3714 (2015).
- [10316] G.S. Franca, C.S. Vilar, R. Silva and J.S. Alcaniz, *Nonextensivity in geological faults?*, Physica A **377**, 285-290 (2007).

- [10317] M. Ausloos and F. Petroni, *The Southern Oscillation Index characterizing El Nino: A complex signal adequately described through a Beck-like Turbulence Model and Tsallis non-extensive statistics*, communication at the Workshop on Complex Systems: New Trends and Expectations (Santander, 5-9 June 2006).
- [10318] M. Ausloos and F. Petroni, *Tsallis nonextensive statistical mechanics of El Nino Southern Oscillation Index*, Physica A **373**, 721-736 (2007).
- [10319] F. Petroni and M. Ausloos, *High frequency (daily) data analysis of the Southern Oscillation Index. Tsallis nonextensive statistical mechanics approach*, in *Complex Systems - New Trends and Expectations*, eds. H.S. Wio, M.A. Rodriguez and L. Pesquera, Eur. Phys. J. Special Topics **143**, 201-208 (2007).
- [10320] K. Ivanova, H.N. Shirer, T.P. Ackerman and E.E. Clothiaux, *Dynamical model and nonextensive statistical mechanics of liquid water path fluctuations in stratus clouds*, J. Geophys. Research-Atmospheres **112**, D10211 (2007).
- [10321] G. Chisham and M.P. Freeman, *On the non-Gaussian nature of ionospheric vorticity*, Geophys. Res. Lett. **37**, L12103 (2010).
- [10322] G. Chisham and M.P. Freeman, *A statistical model of vorticity in the polar ionosphere and implications for extreme values*, J. Geophysical Research: Space Physics **126**, e2021JA029307 (2021).
- [10323] O. Babalola, *Low latitude ionospheric TEC responses to dynamical complexity quantifiers during transient events over Nigeria*, Advances in Space Research (2017), in press, doi: <http://dx.doi.org/10.1016/j.asr.2017.08.031>
- [10324] A.A. Chernyshov, M.M. Mogilevsky and B.V. Kozelov, *Application of nonlinear methods to the study of ionospheric plasma*, J. Phys. Conference Series **574**, 012128 (2015) (4 pages), doi:10.1088/1742-6596/574/1/012128
- [10325] K.R. Chernyshov, *Remarks on definitions of the anisotropic norm of a random vector*, Proceedings of 2017 IEEE 2nd International Conference on Control in Technical Systems, CTS 8109541, 263-266 (2017).
- [10326] K.R. Chernyshov, *Towards an extension and normalization of the random vector anisotropy magnitude*, ICSEng 2021: Advances in Systems Engineering, 200-208 (2021).
- [10327] K. Chernyshov, *Identification of stochastic MIMO systems: Statistical linearization and anisotropic norm based on Hellinger-Tsallis divergence*, IEEE 2018 International Russian Automation Conference (RusAutoCon, 9-16 Sept 2018), doi: 10.1109/RUSAUTOCON.2018.8501808
- [10328] A.E. Hilali, M. Chergui and B. El Wahbi, *On some Tsallis relative operator entropy properties related to Hellinger metrics*, Proceedings of the Institute of Mathematics and Mechanics, National Academy of Sciences of Azerbaijan (2022), in press.
- [10329] L. Tarik, M. Chergui and B. El Wahbi, *On a new generalized Tsallis relative operator entropy*, Mathematics Applied Science Engineering **4** (1) (2023).
- [10330] K.R. Chernyshov, *The anisotropic norm of signals: Towards possible definitions*, IFAC PapersOnLine **51-32**, 169-174 (2018).
- [10331] K.R. Chernyshov, *Constructing a symmetric Tsallis divergence as a system identification criterion*, IFAC PapersOnLine **51-32**, 550-555 (2018).
- [10332] K.R. Chernyshov, *The anisotropic norm of random vectors: Defining via a symmetric Tsallis divergence*, IEEE Conference on Control Technology and Applications (Copenhagen, 21-24 August 2018).
- [10333] A.A. Chernyshov, B.V. Kozelov and M.M. Mogilevsky, *Using Q-statistics to study pulsating auroras*, Geomagnetism and Aeronomy **64** (1), 49-60 (2024).
- [10334] K.R. Chernyshov, E.Ph. Jharko and E.A. Sakrutina, *Non-linear measures of dependence in the MIMO systems identification with applications to NPP efficiency evaluation*, IEEE (2020).
- [10335] N.O. Ermakova and E.E. Antonova, *Particle acceleration by double layers during kappa distributions*, Geomagnetism and Aeronomy **47**, 423-428 (2007).
- [10336] I.P. Kirpichev, E.E. Antonova and M. Stepanova (2017), *Ion leakage at dayside magnetopause in case of high and low magnetic shears*, J. Geophys. Res. Space Physics **122**, 8078-8095 (2017), doi:10.1002/2016JA023735.
- [10337] D. Wang, V.P. Singh, Y. Zhu and J. Wua, *Stochastic observation error and uncertainty in water quality evaluation*, Advances in Water Resources **32**, 1526-1534 (2009).
- [10338] V.P. Singh, *Entropy theory for movement of moisture in soils*, Water Resources Research **46**, W03516 (2010).
- [10339] V.P. Singh and J. Oh, *A Tsallis entropy-based redundancy measure for water distribution networks*, Physica A **421**, 360-376 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2014.11.044>
- [10340] V.P. Singh, H. Cui and A.R. Byrd, *Tsallis entropy-Based flow duration curve*, Transactions of the ASABE **57** (3), 837-849 (2014).
- [10341] H. Luo and V.P. Singh, *Entropy theory for two-dimensional velocity distribution*, J. Hydrologic Engineering **16** (4), 303-315 (2011).

- [10342] V.P. Singh and H. Luo, *Entropy theory for distribution of one-dimensional velocity in open channels*, J. Hydrologic Engineering **16** (9), 725-735 (2011).
- [10343] V.P. Singh, *Introduction to Tsallis entropy theory in water engineering*, (CRC Press, Taylor and Francis, 2016) (436 pages).
- [10344] V.P. Singh, B. Sivakumar and H. Cui, *Tsallis entropy theory for modeling in water engineering: A review*, Entropy **19**, 641 (2017) (25 pages), doi: 10.3390/e19120641
- [10345] H. Cui, B. Sivakumar and V.P. Singh, *Entropy applications in environmental and water engineering*, Entropy **20**, 598 (2018), doi:10.3390/e20080598
- [10346] V.P. Singh and L. Zhang, *Copula?entropy theory for multivariate stochastic modeling in water engineering*, Geosci. Lett. **5**, 6 (2018), doi: 10.1186/s40562-018-0105-z
- [10347] T. Stosic, B. Stosic and V.P. Singh, *Q-triplet for Brazos river discharge: the edge of chaos?*, Physica A **495**, 137-142 (2018).
- [10348] B. Schafer, C.M. Heppell, H. Rhys and C. Beck, *Fluctuations of water quality time series in rivers follow superstatistics*, preprint (2021), 2106.12047 [physics.ao-ph].
- [10349] H. He, B. Schafer and C. Beck, *Spatial analysis of tails of air pollution PDFs in Europe*, preprint (2024), 2407.18268 [physics.ao-ph].
- [10350] T. Hasumi, *Interoccurrence time statistics in the two-dimensional Burridge-Knopoff earthquake model*, Phys. Rev. E **76**, 026117 (2007) (8 pages).
- [10351] T. Hasumi, *Hypocenter interval statistics between successive earthquakes in the two-dimensional Burridge-Knopoff model*, Physica A **388**, 477-482 (2009).
- [10352] A. Kuki, S. Lipcsei, I. Gere, F. Jarai-Szabo, A. Gergely, D. Ugi, P.D. Ispanovity, Z. Dankhazi, I. Groma and Z. Neda, *Statistical analogies between earthquakes, micro-quakes in metals and avalanches in the 1D Burridge-Knopoff model*, Geofizika **40** (2023), doi: 10.15233/gfz.2023.40.4
- [10353] P. Wang, Z. Chang, H. Wang and H. Lu, *Scale-invariant structure of earthquake energy fluctuations for different faulting styles*, Eur. Phys. J. B **88**, 206 (2015) (6 pages), doi: 10.1140/epjb/e2015-60441-6
- [10354] T. Hasumi, *Precursory measure of interoccurrence time associated with large earthquakes in the Burridge-Knopoff model*, in *Let's Face Chaos Through Nonlinear Dynamics*, American Institute of Physics Conference Proceedings **1076**, 76-79 (2008).
- [10355] A.H. Darooneh and A. Mehri, *A nonextensive modification of the Gutenberg-Richter law: q-stretched exponential form*, Physica A **389**, 590-514 (2010).
- [10356] N. Lotfi and A.H. Darooneh, *Nonextensivity measure for the earthquakes network*, Physica A **392**, 3061-3065 (2013).
- [10357] Z. Koochi Lai, S.V. Farahani and G.R. Jafari, *Non-Gaussianity effect of petrophysical quantities by using q-entropy and multifractal random walk*, Physica A **391**, 5076-5081 (2012).
- [10358] Z. Koochi Lai and G.R. Jafari, *Non-Gaussianity effects in petrophysical quantities*, Physica A **392**, 5132-5137 (2013).
- [10359] A. De Santis, G. De Franceschi, L. Spogli, L. Perrone, L. Alfonsi, E. Qamili, G. Cianchini, R. Di Giovambattista, S. Salvi, E. Filippi, F.J. Pavon-Carrasco, S. Monna, A. Piscini, R. Battiston, V. Vitale, P.G. Picozza, L. Conti, M. Parrot, J.L. Pincon, G. Balasis, M. Tavani, A. Argan, G. Piano, M.L. Rainone, W. Liu and D. Tao, *Geospace perturbations induced by the Earth: the state of the art and future trends*, Physics and Chemistry of the Earth **85-86**, 17-33 (2015), doi: <http://dx.doi.org/10.1016/j.pce.2015.05.004>
- [10360] S. Monna, C. Montuori, F. Frugoni, C. Piromallo, L. Vinnik and AlpArray Working Group, *Moho and LAB across the Western Alps (Europe) from P and S receiver function analysis*, JGR Solid Earth **127** (10) (2022).
- [10361] I. Koutalonis and F. Vallianatos, *Evidence of non-extensivity in Earth's ambient noise*, Pure Appl. Geophys. (2017), doi: 10.1007/s00024-017-1669-9
- [10362] F. Vallianatos, I. Koutalonis, M. Moisiidi and G. Chatzopoulos, *Can we use the q-Gaussian of ambient noise fluctuations as a vulnerability index? A case study in Cultural Heritage buildings*, Physica A **497**, 9-14 (2018).
- [10363] F. Vallianatos, I. Koutalonis and G. Chatzopoulos, *Evidence of Tsallis Entropy signature on Mediane induced ambient seismic signals*, Physica A (2019), in press, doi: 10.1016/j.physa.2018.12.045
- [10364] I. Koutalonis and F. Vallianatos, *Observational evidence of non-extensive behavior of seismic coda waves*, Physica A **550**, 124523 (2020).
- [10365] F. Ferraro, I. Koutalonis, F. Vallianatos and F. Agosta, *Application of Non-Extensive Statistical Physics on the particle size distribution in natural carbonate fault rocks*, Tectonophysics **771**, 228219 (2019).
- [10366] S.L.E.F. Silva, C.A.N. Costa, P.T.C. Carvalho, J.M. Araujo, L.S. Lucena and G. Corso, *Robust full-waveform inversion using q-statistics*, Physica A **548**, 124473 (2020).

- [10367] S.L.E. F. Silva, G.Z.S. Lima, E.V. Volpe, J.M. Araujo and G. Corso, *Robust approaches for inverse problems based on Tsallis and Kaniadakis generalised statistics*, Eur. Phys. J. Plus **136**, 518 (2021), doi: 10.1140/epjp/s13360-021-01521-w
- [10368] S.L. da Silva, C.A. da Costa, P. Carvalho, J. Araujo, L. Lucena and G. Corso, *An objective function based on q-Gaussian distribution for full-waveform inversion*, Conference Proceedings, 82nd EAGE Annual Conference & Exhibition, (European Association of Geoscientists & Engineers, 2020) (5 pages), doi: 10.3997/2214-4609.202010536
- [10369] S.L.E.F. Silva, G.Z.S. Lima, J.M. Araujo and G. Corso, *Extensive and nonextensive statistics in seismic inversion*, Physica A **563**, 125496 (2021), doi: 10.1016/j.physa.2020.125496
- [10370] S.L.E.F. Silva, *Inversao da forma de onda completa baseada em mecanicas estatisticas generalizadas*, Doctor Thesis (Universidade Federal do Rio Grande do Norte, Departamento de Fisica Teorica e Experimental, 2021).
- [10371] E. de la Barra and P. Vega-Jorquera, *On q-pareto distribution: some properties and application to earthquakes*, Eur. Phys. J. B (2021), doi: 10.1140/ep_jb/s10051-021-00045-7
- [10372] A. Posadas, J. Morales and A. Posadas-Garzon, *Earthquakes and entropy: Characterization of occurrence of earthquakes in southern Spain and Alboran Sea*, Chaos **31**, 043124 (2021).
- [10373] A. Posadas, J. Morales, J.M. Ibanez and A. Posadas-Garzon, *Shaking earth: Non-linear seismic processes and the second law of thermodynamics: A case study from Canterbury (New Zealand) earthquakes*, Chaos, Solitons and Fractals **151**, 111243 (2021).
- [10374] G. Ovando, J.J. Pena and J. Morales, *Connection between the q-deformed quantum mechanics and the position-dependent mass Schrodinger equation*, 13th International Conference on Mathematical Modeling in Physical Sciences, Journal of Physics: Conference Series **3027**, 012022 (2025).
- [10375] T. Abbaszadeh and H. Zahed, *Kinetic approach on the DIA wave propagation in a non-extensive distributed dusty plasma*, Contributions to Plasma Physics, e202100049 (2021) (14 pages).
- [10376] A. Karakonstantis, K. Pavlou, M. Kouli, G. Michas, S.E. Avgerinou, E.A. Anyfadi, G. Chatzopoulos, G. Hloupis, J.P. Makris, V. Saltas and F. Vallianatos, *Preliminary results of the 2021-2022 central Crete seismic sequences: seismological, satellite and geophysical observations*, communication at the 3rd European Conference on Earthquake Engineering and Seismology (Bucharest, Romania, 2022).
- [10377] R. Jayapal, C.P. Anilkumar, K. Unnikrishnan and C. Venugopal, *Tsallis' analysis of the horizontal component of the Earth's magnetic field over India during 2002*, Asian Journal of Research and Reviews in Physics **6** (4), 39-47 (2022).
- [10378] V. Kapetanidis, G. Michas, I. Spingos, G. Kaviris and F. Vallianatos, *Cluster analysis of seismicity in the Eastern Gulf of Corinth based on a waveform template matching catalog*, Sensors **23**, 2923 (2023).
- [10379] E. Sanchez, *Analysis of seismic magnitude-frequency distribution in northern and central Chile*, Acta Geophys. (2023), doi: 10.1007/s11600-023-01068-7
- [10380] J. Barman, M. Roy and B. Kumar, *Velocity estimation in compound channels with different bank slopes using Renyi and Tsallis entropy*, Stochastic Environmental Research and Risk Assessment (2023), doi: 10.1007/s00477-023-02423-2
- [10381] K. Pavlou, G. Michas and F. Vallianatos, *Scaling law analysis and aftershock spatiotemporal evolution of the three strongest earthquakes in the Ionian sea during the period 2014-2019*, Geosciences **15**, 84 (2025).
- [10382] W. Tedeschi, H.-P. Muller, D.B. de Araujo, A.C. Santos, U.P.C. Neves, S.N. Erne and O. Baffa, *Generalized mutual information fMRI analysis: A study of the Tsallis q parameter*, Physica A **344**, 629-644 (2004).
- [10383] H. Amaral-Silva, L. Wichert-Ana, L.O. Murta, L. Romualdo-Suzuki, E. Itikawa, G. Filho Bussato and P. Azevedo-Marques, *The superiority of Tsallis entropy over traditional cost functions for brain MRI and SPECT registration*, Entropy **16**, 1632-1651 (2014), doi:10.3390/e16031632
- [10384] R.R. Kamireddy, R.N.V.P.S. Kandala, R. Dhuli, S. Polinati, K. Sonti, R. Tadeusiewicz and P. Plawiak, *Brain MRI detection and classification: Harnessing convolutional neural networks and multi-level thresholding*, Plos One **19** (8), e0306492 (2024).
- [10385] K.S. Manic, R. Biju, W. Patel, M.A. Khan, N.S.M. Raja and S. Uma, *Extraction and evaluation of Corpus Callosum from 2D brain MRI slice: A study with cuckoo search algorithm*, Computational and Mathematical Methods in Medicine ID 5524637 (2021) (15 pages), doi: 10.1155/2021/5524637
- [10386] H. Abdallahi, *Automatic analysis of malaria infected red blood cell digitized microscope images*, Doctor Thesis (University College London, 2016)
- [10387] H.M. Torres, J.A. Gurlekian, H.L. Rufiner and M.E. Torres, *Self-organizing maps clustering based on continuous multiresolution entropy*, Physica A **361**, 337-354 (2006).

- [10388] R. Sneddon, W. Shankle, J. Hara, J. Fallon and U. Saha, *The Tsallis entropy in the EEGs of normal and demented individuals*, communicated at the 11th Joint Symposium on Neural Computation (15 May 2004, University of Southern California) [deposited on 8 July 2004, Caltech].
- [10389] L. Telesca, *Tsallis-based nonextensive analysis of the Southern California seismicity*, *Entropy* **13**, 1267-1280 (2011).
- [10390] L. Telesca, *Maximum likelihood estimation of the nonextensive parameters of the earthquake cumulative magnitude distribution*, *Bulletin Seismological Soc. America* **102** (2), 886-891, (2012).
- [10391] R. Sneddon, W.R. Shankle, J. Hara, A. Rodriguez, D. Hoffman and U. Saha, *qEEG monitoring of Alzheimer's disease treatment: A preliminary report of three case studies*, *Clinical EEG and Neuroscience* **37**, 54-59 (2006).
- [10392] X. Wang, Y. Jiao, T. Tang, H. Wang and Z. Lu, *Investigating univariate temporal patterns for intrinsic connectivity networks based on complexity and low frequency oscillation: A test-retest reliability study*, *Neuroscience* **254**, 404-426 (2013), <http://dx.doi.org/10.1016/j.neuroscience.2013.09.009>
- [10393] J. McBride, X. Zhao, T. Nichols, V. Vagnini, N. Munro, D. Berry and Y. Jiang, *Scalp EEG-based discrimination of cognitive deficits after traumatic brain injury using event-related Tsallis entropy analysis*, *IEEE Transactions Biomedical Engineering* **60** (1), 90-96 (2013).
- [10394] A. Lay-Ekuakille, P. Vergallo, G. Griffo, F. Conversano, S. Casciaro, S. Urooj, V. Bhateja and A. Trabacca, *Entropy index in quantitative EEG measurement for diagnosis accuracy*, *IEEE Transactions on Instrumentation and Measurement* **63** (6), 1440-1450 (2014).
- [10395] T.T. Xing, Y. Zeng, Z. Meng and X.L. Guo, *A fault diagnosis method of rolling bearing based on VMD Tsallis entropy and FCM clustering*, *Multimedia Tools and Applications* (2020) (17 pages), doi: 10.1007/s11042-020-09534-w
- [10396] X. Xie, X.F. Li, Q.Z. Zhou and Y.L. Xie, *Tsallis entropy based q-Gaussian density model and its application in measurement accuracy improvement*, *J. Electronic Science and Technology* **15** (1), 77-82 (2017), doi: 10.11989/JEST.1674-862X.5060821
- [10397] P.A. Ritto, *Statistical non-extensive Tsallis in the heartbeat of healthy humans*, *Revista Mexicana de Fisica* **57** (4), 362-367 (2011).
- [10398] D. La Vecchia, L. Camponovo and D. Ferrari, *Robust heart rate variability analysis by generalized entropy minimization*, *Computational Statistics and Data Analysis* **82**, 137-151 (2015).
- [10399] J. Poza, R. Hornero, J. Escudero, A. Fernandez and C.I. Sanchez, *Regional analysis of spontaneous MEG rhythms in patients with Alzheimer's disease using spectral entropies*, *Annals Biomedical Engineering* **36**, 141-152 (2008).
- [10400] W.L. Shi, Y. Li, Y. Miao and Y. Hu, *Research on the key technology of image guided surgery*, *Electrical Review* **88**, 29-33 (2012).
- [10401] P.R.B. Diniz, A.C. dos Santos and L.O. Murta Junior, *Cerebral tissue segmentation using q-entropy in multiple sclerosis magnetic resonance images*, preprint (2007).
- [10402] A.C.S. Senra Filho and L.O. Murta Junior, *Filtro espacial baseado em equacao de difusao isotropica anomala*, XXIII Congresso Brasileiro em Engenharia Biomedica XXIII CBEB
- [10403] I.J.A. Soares and L.O. Murta Junior, *Noise reduction using nonadditive q-Gaussian filters in magnetic resonance images*, in *Medical Imaging 2013: Image Processing*, eds. S. Ourselin, D.R. Haynor, Proc. of SPIE **8669** (2013) (6 pages), doi: 10.1117/12.2007119
- [10404] F.S. Fazan, F. Brognara, R. Fazan Junior, L.O. Murta Junior and L.E.V. Silva, *Changes in the complexity of heart rate variability with exercise training measured by multiscale entropy-based measurements*, *Entropy* **20**, 47 (2018) (10 pages), doi:10.3390/e20010047
- [10405] T. Princy, *Modeling SAR images by using a pathway model*, *J. Indian Soc. Remote Sens.* (2016), in press, doi: 10.1007/s12524-015-0511-z
- [10406] T. Princy, *Some useful pathway models for reliability analysis*, *R I and A* **18**, 1 (72) (2023).
- [10407] M.S. Kang and K.T. Kim, *Automatic SAR image registration via Tsallis entropy and iterative search process*, *IEEE Sensors Journal* **20** (14), art. 9039720, 7711-7720 (2020).
- [10408] I.J.A. Soares and L.O. Murta Junior, *O uso de filtros espaciais baseados em difusao anomala para a diminuicao do tempo de aquisicao em MRI-DTI*, XVIII Congresso Brasileiro de Fisica Medica - Simposio de Instrumentacao e Imagens Medicas (12 to 15 August 2013, Sao Pedro - Sao Paulo, Brazil).
- [10409] A.C.S. Senra Filho, G.C. Barizon and L.O. Murta Junior, *Myocardium segmentation improvement with anisotropic anomalous diffusion filter applied to cardiac magnetic resonance imaging*, preprint (2014).

- [10410] A.C. S. Senra Filho, F.H. Simozo, C.E.G. Salmon and L.O. Murta Junior, *Anisotropic anomalous filter as a tool for decreasing patient exam time in diffusion weighted MRI protocols*, XXIV Brazilian Congress on Biomedical Engineering CBEB (2014) (4 pages).
- [10411] G.C. Barizon, A.C.S. Senra Filho, M.V. Simoes, A. Schmidt, L.P. Gadioli and L.O. Murta Junior, *Tissue characterization from myocardial perfusion and autonomic innervation using MRI and SPECT images in Chagas disease*, preprint (2014).
- [10412] G.C. Barizon, L.P. Gadioli, A. Schmidt, M.V. Simoes and L.O. Murta Junior, *Segmentation and Registration methods in short axis cardiac MRI and SPECT images in Chagas Disease*, ?IEEE 28th International Symposium on Computer-Based Medical Systems, 72-77 (2015), doi: 10.1109/CBMS.2015.52
- [10413] P.R.B. Diniz, L.O. Murta, D.G. Brum, D.B. de Araujo and A.C. Santos, *Brain tissue segmentation using q-entropy in multiple sclerosis magnetic resonance images*, Brazilian J. Medical Biological Research **43**, 77-84 (2010).
- [10414] O.H. Menin, A.S. Martinez and V. Rolnik, *Tomografia de impedancia eletrica: metodos computacionais*, Serie Topicos de Fisica Aplicada a Medicina e Biologia (Editora Livraria da Fisica, 2016) (177 paginas).
- [10415] H.T. Amaral Silva, L.O. Murta Jr., L. Wichert-Ana, A.C. Sakamoto and P.M. Azevedo-Marques, *Medical image registration using Tsallis entropy in statistical parametric mapping (SPM)*, 32nd Annual International Conference of the IEEE EMBS Buenos Aires, Argentina, August 31 - September 4, 2010, 6276-6279.
- [10416] L.E.V. Silva and L.O. Murta Jr., *Evaluation of physiologic complexity in time series using generalized sample entropy and surrogate data analysis*, Chaos **22**, 043105 (2012) (7 pages).
- [10417] A.C.S. Senra Filho, C.E.G. Salmon, A.C. Santos, L.O. Murta Junior, *Enhancing quality in Diffusion Tensor Imaging with anisotropic anomalous diffusion filter*, Res. Biomed. Eng. (2017), doi: <http://dx.doi.org/10.1590/2446-4740.02017>
- [10418] A.C.S. Senra Filho, J.J. Duque and L.O. Murta Junior, *Isotropic anomalous filtering in diffusion-weighted magnetic resonance imaging*, communicated at 35th Annual International Conference of the IEEE EMBS (Osaka, Japan, 3-7 July 2013), 4022-4025 (2013).
- [10419] A.C.S. Senra Filho, C. Rondinoni, A.C. dos Santos, L.O. Murta Junior, *Brain activation inhomogeneity highlighted by the isotropic anomalous diffusion filter*, IEEE 3313-3316 (2014).
- [10420] L.E.V. Silva, A.C.S. Senra Filho, V.P.S. Fazan, J.C. Felipe and L.O. Murta Junior, *Two-dimensional sample entropy: assessing image texture through irregularity*, Biomed. Phys. Eng. Express **2**, 045002 (2016), doi:10.1088/2057-1976/2/4/045002
- [10421] Y.D. Zhang, S.H. Wang, X.J. Yang, Z.C. Dong, G. Liu, P. Phillips and T.F. Yuan, *Pathological brain detection in MRI scanning by wavelet packet Tsallis entropy and fuzzy support vector machine*, SpringerPlus **4**, 716 (2015), doi: 10.1186/s40064-015-1523-4
- [10422] L.E.V. Silva, B.C.T. Cabella, U.P.C. Neves and L.O. Murta Junior, *Multiscale entropy-based methods for heart rate variability complexity analysis*, Physica A **422**, 143-152 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2014.12.011>
- [10423] R. Bruna, J. Poza, C. Gomez, A. Fernandez and R. Hornero, *Analysis of spontaneous MEG activity in mild cognitive impairment using spectral entropies and disequilibrium measures*, 32nd Annual International Conference of the IEEE EMBS Buenos Aires, Argentina, August 31 - September 4, 2010, 6296-6299.
- [10424] R. Bruna, J. Poza, C. Gomez, M. Garcia, A. Fernandez and R. Hornero, *Analysis of spontaneous MEG activity in mild cognitive impairment and Alzheimer's disease using spectral entropies and statistical complexity measures*, J. Neural Eng. **9**, 036007 (2012) (14 pages).
- [10425] B.C.T. Cabella, M.J. Sturzbecher, D.B. de Araujo and U.P.C. Neves, *Generalized relative entropy in functional magnetic resonance imaging*, Physica A **388**, 41-50 (2008).
- [10426] N.C.J. Cardoso, V.J.C. Farias, M.P.P.C. Rocha and J.H.R. Lira, *O estudo das entropias: Shannon e Tsallis, no imagiamento funcional por ressonancia magnetica*, SBMAC, Anais do CNMAC **2**, 140-141 (2009) [ISSN 1984-820X].
- [10427] M.J. Sturzbecher, W. Tedeschi, B.C.T. Cabella, O. Baffa, U.P.C. Neves and D.B. de Araujo, *Non-extensive entropy and the extraction of BOLD spatial information in event-related functional MRI*, Physics in Medicine and Biology **54**, 161-174 (2009).
- [10428] L.S. dos Santos, B.C.T. Cabella and A.S. Martinez, *Generalized Allee effect model*, Theory Biosci. **133**, 117-124 (2014), doi: 10.1007/s12064-014-0199-6
- [10429] D. Li and Y. Yang, *Impact of time delay on population model with Allee effect*, Communications in Nonlinear Science and Numerical Simulation **72**, 282-293 (2019).
- [10430] O. Sotolongo-Grau, D. Rodriguez-Perez, J.A. Santos-Miranda, J.C. Antoranz and O. Sotolongo-Costa, *Statistical mechanics formulation of radiobiology*, preprint (2009), 0907.5551 [physics.med-ph].

- [10431] O. Sotolongo-Grau, D. Rodriguez-Perez, J.C. Antoranz and O. Sotolongo-Costa, *Generalized calculus in radiobiology: Physical implications*, preprint (2009), 0908.2449 [physics.bio-ph].
- [10432] B.W.Q. Tan, H.Q. Tan and A.H. Chan, *A Boltzmann-Tsallis approach towards cell survival curve in radiobiology*, EPJ Web of Conferences **206**, 09014 (2019), doi: 10.1051/epjconf/201920609014
- [10433] A.J. da Silva, R.F. Lima and M.A. Moret, *Nonextensivity and self-affinity in mammalian neuromuscular junction*, Phys. Rev. E **84**, 041925 (2011) (6 pages).
- [10434] R. Sassi, *Characterizing histograms of heartbeat interval differences with Gaussian mixture densities*, CINC, 36th Annual Computers in Cardiology Conference, 157-160 (2009).
- [10435] K. Kayser, J. Gortler, S. Borkenfeld and G. Kayser, *How to measure diagnosis-associated information in virtual slides*, Diagnostic Pathology **6** Suppl. 1 (S9), (2011) (9 pages).
- [10436] A. Sobiecki, C.D. Gallao, D.C. Cosme and P.S.S. Rodrigues, *Comparacao de imagens tomograficas Cone-Beam e Multi-Slice atraves da entropia de Tsallis e da divergencia de Kullback-Leibler*, Thesis (2012).
- [10437] T.I. Arsenyan, O.M. Vokhnik, A.M. Zotov, A.G. Komarov, A.V. Nesterov, and N.A. Suhareva, *Superstatistics of optical beam scintillations over thermally nonequilibrium paths*, Atmospheric and Oceanic Optics **29** (5), 415-421 (2016) [Original Russian text in Optika Atmosfery i Okeana].
- [10438] J. Huang, W.A. Yong and L. Hong, *Generalization of Kullback-Leibler divergence in Tsallis statistics*, J. Math. Anal. Appl. **436**, 501-512 (2016), doi: <http://dx.doi.org/10.1016/j.jmaa.2015.12.008>
- [10439] H. Saba, J.G.V. Miranda and M.A. Moret, *Self-organized critical phenomenon as a q-exponential decay - Avalanche epidemiology of dengue*, Physica A **413**, 205-211 (2014), doi: <http://dx.doi.org/10.1016/j.physa.2014.06.045>
- [10440] L.L. Lima and A.P.F. Atman, *Complexity in the dengue spreading: A network analysis approach*, PLoS ONE **18** (8), e0289690 (2023).
- [10441] G.L. Vasconcelos, A.M.S. Macedo, R. Ospina, F.A.G. Almeida, G.C. Duarte-Filho, A.A. Brum and I.C.L. Souza, *Modelling fatality curves of COVID-19 and the effectiveness of intervention strategies*, PeerJ **8**, e9421 (2020), doi: 10.7717/peerj.9421
- [10442] G.L. Vasconcelos, A.M.S. Macedo, G.C. Duarte-Filho, A.A. Brum, R. Ospina and F.A.G. Almeida, *Complexity signatures in the COVID-19 epidemic: power-law behaviour in the saturation regime of fatality curves*, preprint (2020), medRxiv doi: 10.1101/2020.07.12.20152140
- [10443] G.L. Vasconcelos, A.A. Brum, F.A.G. Almeida, A.M.S. Macedo, G.C. Duarte-Filho and R. Ospina, *Standard and anomalous second waves in the COVID-19 pandemic*, preprint (2021), medRxiv doi: 10.1101/2021.01.31.21250867
- [10444] A. Denaj, D. Prenga and V. Tahiri, *General features of the time data series of Covid-19 in Albania*, AIP Conf. Proc. **2872**, 030003 (2023).
- [10445] G.L. Vasconcelos, A.M.S. Macedo, G.C. Duarte-Filho, A.A. Brum, R. Ospina and F.A.G. Almeida, *Power law behaviour in the saturation regime of fatality curves of the COVID-19 pandemic*, Scientific Reports **11**, 4619 (2021), doi: 10.1038/s41598-021-84165-1
- [10446] C. Tsallis and U. Tirnakli, *Predicting COVID-19 peaks around the world*, Frontiers in Physics **8**, 217 (2020).
- [10447] M.L. Penafiel and G.M. Ramirez-Avila, *COVID-19 en Bolivia: Estudios y consecuencias del modelo epidemiologico SIRASD*, Revista Boliviana de Fisica **37**, 3-11 (2020).
- [10448] A.A.A. Rahman, G. Rajasekaran, R. Ramalingam, A. Meero and D. Seetharaman, *From data to diagnosis: Machine learning revolutionizes epidemiological predictions*, Information **15**, 719 (2024).
- [10449] O. Sotolongo Costa and F. Guzman Martinez, *Propagacion del SARS-CoV-2 en Cuba. Una vision cualitativa desde la teoria de sistemas complejos*, Nova Scientia **30** (15) (2023) (19 pages).
- [10450] G.L. Vasconcelos, N.L. Pessoa, N.B. Silva, A.M.S. Macedo, A.A. Brum, R. Ospina and U. Tirnakli, *Multiple waves of COVID-19: A pathway model approach*, Nonlinear Dynamics (2022), doi: 10.1007/s11071-022-08179-8
- [10451] Y. Liu, C. Yu and K.M. Shen, *Researches on the COVID-19 epidemic in the world within a nonextensive SIR model*, Medical Research Archives **10** (6) (2022), doi: 10.18103/mra.v10i6.2904
- [10452] T.G. Lewis and W.I. Al Mannai, *Predicting the size and duration of the COVID-19 pandemic*, Frontiers in Applied Mathematics and Statistics **6**, 611854 (2021).
- [10453] J.L. Wang, Y. Liu, X.S. Liu and K.M. Shen, *A modified SIR model for the COVID-19 epidemic in China*, preprint (2021), doi: 10.21203/rs.3.rs-556631/v1
- [10454] Y. Li, C.Y. Yu and K.M. Shen, *A nonextensive view on the COVID-19 in the world*, preprint (2022).
- [10455] A.M. Karakas, M. Dogan and S. Calik, *The impact of the SARS-CoV-2 epidemic on world indices: The entropy approach*, Mathematical Problems in Engineering, ID 6617668 (2021) (9 pages), doi: 10.1155/2021/6617668

- [10456] C.Z. Radulescu, M. Radulescu and R. Boncea, *A multi-criteria decision support and application to the evaluation of the fourth wave of COVID-19 pandemic*, Entropy **24**, 642 (2022).
- [10457] O. Sotolongo-Costa and F. Guzman-Martinez, *Propagacion del SARS-COV-2 en Cuba. Una vision cualitativa desde la teoria de sistemas complejos*, preprint (2022), arxiv 2201.07162
- [10458] M.G. Andrade, K.S. Conceicao, J.A. Achcar and N. Ravishanker, *Time series regression models for COVID-19 deaths*, Journal of Data Science, 1-24 (2020), in press.
- [10459] M. Santana-Cibrian, M.A. Acuna-Zegarra, M.T. Angulo, A. Comas-Garcia, E.A. Hernandez-Vargas and J.X. Velasco-Hernandez, *Modeling SARS-CoV-2: mitigation interventions and increased mobility events*, in *Modelling, Control and Drug Development for COVID-19 Outbreak Prevention*, Studies in System Decisions and Control (Springer Verlag, Germany, 2020), in press.
- [10460] F.C. Batista and A. Cunha Jr., *Inferencia dos estagios iniciais da COVID-19 em Portugal*, XXIII Congresso Brasileiro de Automatica (2020).
- [10461] A. Anirudh, *Mathematical modeling and the transmission dynamics in predicting the Covid-19 - What next in combating the pandemic*, Infectious Disease Modelling **5**, 366-374 (2020).
- [10462] S. Momani, R.W. Ibrahim and S.B. Hadid, *Susceptible-Infected-Susceptible epidemic discrete dynamic system based on Tsallis entropy*, Entropy **22**, 769 (2020), doi: 10.3390/e22070769
- [10463] U. Tirnakli and C. Tsallis, *Epidemiological model with anomalous kinetics – Early stages of the Covid-19 pandemic*, Front. Phys. **8**, 613168 (2020), doi: 10.3389/fphy.2020.613168
- [10464] G.I. Choudhary, *Predicting disease onset and progression*, Publications of the University of Eastern Finland, Dissertations in Science, Forestry, and Technology **35** (2024).
- [10465] M. Abbasi, A.L. Bollini, J.L.B. Castillo, A. Deppman, J.P. Guidio, P.T. Matuoka, A.D. Meirelles, J.M.P. Policarpo, A.A.G.F. Ramos, S. Simionatto, A.R.P. Varona, E. Andradell, H. Panjeh, L.A. Trevisan, *Fractal signatures of the COVID-19 spread*, Chaos, Solitons and Fractals **140**, 110119 (2020), doi: 10.1016/j.chaos.2020.110119
- [10466] J.M.P. Policarpo, A.D. Meirelles, A.A.G.F. Ramos and A. Deppman, *Fractal aspects of epidemic spread*, J. Clin. Immunol. Immunother. **6** (5), 100052 (2020).
- [10467] A.M. Hasan, M.M. AL-Jawad, H.A. Jalab, H. Shaiba, R.W. Ibrahim and A.R. AL-Shamasneh, *Classification of Covid-19 coronavirus, pneumonia and healthy lungs in CT scans using Q-deformed entropy and deep learning features*, Entropy **22**, 517 (2020), doi:10.3390/e22050517
- [10468] J.J. Pena and J. Morales, *λ -deformed quantum mechanics: Generalized statistical functions*, 11th International Eurasian Conference (August 29-September 1, Istanbul, 2022).
- [10469] A.M. Hasan, H.A. Jalab, R.W. Ibrahim, F. Meziane, A.R. AL-Shamasneh and S.J. Obaiys, *MRI brain classification using the quantum entropy LBP and deep-learning-based features*, Entropy **22**, 1033 (2020), doi: 10.3390/e22091033
- [10470] K. Arias-Calluari, F. Alonso-Marroquin, M.N. Najafi and M. Harre, *Forecasting the effect of COVID-19 on the S&P500*, preprint (2020), 2005.03969 [q-fin.ST].
- [10471] L.S. Lima, *Modelling based in the stochastic dynamics for the time evolution of the COVID-19*, preprint (2020).
- [10472] F.V. Mendes, J.L.E. da Silva and R.V. Ramos, *Using a dynamic growth rate in the estimation of the fatality curve of COVID-19 around the world*, preprint (2020).
- [10473] O. Sotolongo Costa, *Covid 19: No solo el tamaño importa (scaling)*, preprint (2021).
- [10474] J.M.P. Policarpo, A.A.G.F. Ramos, C. Dye, N.R. Faria, F.E. Leal, O.J.S. Moraes, K.V. Parag, P.S. Peixoto, E.C. Sabino, V.H. Nascimento and A. Deppman, *Scale-free dynamics of Covid-19 in a Brazilian city*, medRxiv (2021), doi: 10.1101/2021.09.10.21263332
- [10475] J.M.P. Policarpo, *Dinamica livre de escala da COVID-19*, Master Thesis (Universidade de Sao Paulo, 2023).
- [10476] S.W. Park, D. Champredon, J.S. Weitz and J. Dushoff, *A practical generation-interval-based approach to inferring the strength of epidemics from their speed*, Epidemics (2019), in press, doi: doi.org/doi:10.1016/j.epidem.2018
- [10477] A. Mehri, *Non-extensive distribution of human eye photoreceptors*, J. Theoretical Biology **419**, 305-309 (2017).
- [10478] S.M. Salman, *Long-term dynamics of a q-deformed discrete susceptible-infected-susceptible epidemic model with delay*, Pramana - J. Phys. **92**, 74 (2019), doc: 10.1007/s12043-019-1731-5
- [10479] J.A. Gonzalez, Z. Akhtar, D. Andrews, S. Jimenez, L. Maldonado, T. Ocegüera, I. Rondon and O. Sotolongo-Costa, *Combination anti-coronavirus therapies based on nonlinear mathematical models*, Chaos **31**, 023136 (2021), doi: 10.1063/5.0026208

- [10480] J.A. Gonzalez, Z. Akhtar, D. Andrews, S. Jimenez, L. Maldonado, T. Ocegüera-Becerra, I. Rondon and O. Sotolongo-Costa, *SARS-CoV-2 dynamics under the influence of immunological activity and therapy*, Physica A (2000), in press.
- [10481] O. Alzey, *Epidemic via superstatistics and random walk on a torus*, Computational Mathematical Methods (2020), doi: 10.1002/cmm4.1126
- [10482] O. Alzey, *Modern Probabilistic Methods With Applications*, Doctor Thesis (School of Mathematics and Actuarial Science, University of Leicester, England, 2020).
- [10483] M.M. Dehshibi, A. Chiolerio, A. Nikolaidou, R. Mayne, A. Gandia, M. Ashtari and A. Adamatzky, *On stimulating fungi Pleurotus ostreatus with Cortisol*, preprint (2021), 2106.00837 [cs.ET].
- [10484] M.M. Dehshibi, A. Chiolerio, A. Nikolaidou, R. Mayne, A. Gandia, M. Ashtari and A. Adamatzky, *Stimulating fungi Pleurotus ostreatus with Hydrocortisone*, ACS Biomaterials Science and Engineering (2021), doi: 10.1021/acsbiomaterials.1c00752
- [10485] R.W.S. Pessoa, *q-formalismo na dinamica adaptativa por Extremum Seeking e na Termodinamica de eletrolitos no contexto da digestao anaerobia*, Doctor Thesis (Universidade Federal da Bahia, Programa de Pos Graduacao em Engenharia Industrial - PEI, Escola Politecnica, 2023).
- [10486] B. Naffeti, Z. Ounissi, A.K. Srivastav, N. Stollenwerk, J.B. Van Dierdonck and M. Aguiar, *Modeling COVID-19 dynamics in the Basque Country: characterizing population immunity profile from 2020 to 2022*, BMC Infectious Diseases **25**, 9 (2025).
- [10487] Z. Huang, *Conditional statistical physical properties in two-joint complex systems having long-range interactions*, preprint (2013), 1306.1992 [cond-mat.stat-mech].
- [10488] H.M. Gupta and J.R. Campanha, *The exponentially truncated q-distribution: A generalized distribution for real complex systems*, preprint (2008), 0807.0563 [cond-mat.stat-mech].
- [10489] N. Scafetta, P. Hamilton and P. Grigolini, *The thermodynamics of social processes: The teen birth phenomenon*, Fractals **9**, 193 (2001).
- [10490] P. Klimek and S. Thurner, *Triadic closure dynamics drives scaling laws in social multiplex networks*, New J. Phys. **15**, 063008 (2013) (9 pages).
- [10491] A. Chmiel, P. Klimek and S. Thurner, *Spreading of diseases through comorbidity networks across life and gender*, New Journal of Physics **16**, 115013 (2014) (14 pages), doi:10.1088/1367-2630/16/11/115013
- [10492] S. Thurner, P. Klimek and R. Hanel, *Introduction to the theory of complex systems*, (Oxford University Press, 2018).
- [10493] L. Hong, Z. Yang, Y. Zhu and W.A. Yong, *A novel construction of thermodynamically compatible models and its correspondence with Boltzmann-equation-based moment-closure hierarchies*, J. Non-Equilib. Thermodyn. **40** (4), 247-256 (2015), doi:10.1515/jnet-2015-0017
- [10494] D.R. White, L. Tambayong and N. Kejzar, *Discovering city-curve oscillations: Historical dynamics as a reactive system for China, 900 CE to the present*, preprint (2006).
- [10495] D.R. White, L. Tambayong and N. Kejzar, *Oscillatory dynamics of city-size distributions in world historical systems*, in *Globalization as Evolutionary Process: Modeling, Simulating, and Forecasting Global Change*, eds. G. Modelski, T. Devezas and W. Thompson (Routledge, London, 2008).
- [10496] D.R. White and L. Tambayong, *Oscillatory dynamics of urban hierarchies 900-2000 vulnerability and resilience*, Intelligent Systems Reference Library **53**, 141-169 (2014).
- [10497] R. Tinos and S. Yang, *Use of the q-Gaussian mutation in evolutionary algorithms*, Soft Comput. **15**, 1523-1549 (2011).
- [10498] W.J. Xie, G.F. Gu and W.X. Zhou, *On the growth of primary industry and population of China's counties*, Physica A **389**, 3876-3882 (2010).
- [10499] M.A. Montemurro, *Beyond the Zipf-Mandelbrot law in quantitative linguistics*, Physica A **300**, 567 (2001).
- [10500] K. Tanaka-Ishii, *Statistical universals of language: Mathematical chance vs. human choice*, (Springer, 2021).
- [10501] V.D. Nguyen, O.A. Markelov, A.D. Serdyuk, A.N. Vasenev and M.I. Bogachev, *Universal rank-size statistics in network traffic: Modeling collective access patterns by Zipf's law with long-term correlations*, EPL **123**, 50001 (2018), doi: www.epljournal.org doi: 10.1209/0295-5075/123/50001
- [10502] Y. Neuman, *How to identify a needle in a haystack: A lesson from nonextensive entropy*, preprint (2017).
- [10503] Y. Neuman, Y. Cohen and Y. Neuman, *How to (better) find a perpetrator in a haystack*, J. Big Data **6**, 9 (2019).
- [10504] M.A. Montemurro, *A generalization of the Zipf-Mandelbrot law in linguistics*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).

- [10505] T. Takaguchi and S. Miyazaki, *New statistical properties of the fluctuations in natural language*, communicated at the Research Institute of Mathematical Science Workshop on Mathematical Aspects of Generalized Entropies and their Applications (7-9 July 2009, Kyoto).
- [10506] K. Toliás, *Natural language processing with deep neural networks*, Doctor Thesis (Cyprus University of Technology, Faculty of Engineering and Technology, 2020).
- [10507] S. Abe and N. Suzuki, *A law behind congestion of the Internet*, preprint (2002) [cond-mat/0204336].
- [10508] S. Abe and N. Suzuki, *Iteration of the Internet over nonequilibrium stationary states in Tsallis statistics*, Phys. Rev. E **67**, 016106 (2003).
- [10509] S. Abe and N. Suzuki, *Omori's law in the Internet traffic*, Europhys. Lett. **61**, 852-855 (2003).
- [10510] N. Scafetta, P. Grigolini, P. Hamilton and B.J. West, *Non-extensive diffusion entropy analysis: Non-stationarity in teen-birth phenomena*, preprint (2002) [cond-mat/0205524].
- [10511] N. Scafetta, P. Grigolini, P. Hamilton and B.J. West, *Non-extensive diffusion entropy analysis: Non-stationarity in teen birth phenomena*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [10512] E.P. Borges, *Comment on "The individual success of musicians, like that of physicists, follows a stretched exponential distribution"*, Eur. Phys. J. B **30**, 593 (2002).
- [10513] G.E. Crooks and D.A. Sivak, *Measures of trajectory ensemble disparity in nonequilibrium statistical dynamics*, J. Stat. Mech. P06003 (2011) (10 pages).
- [10514] S. Abe and N. Suzuki, *Scale-free network of earthquakes*, Europhys. Lett. **65**, 581 (2004).
- [10515] S. Abe and N. Suzuki, *Aging and scaling of aftershocks*, Physica A **332**, 533 (2004) [cond-mat/0305509].
- [10516] S. Abe, N.V. Sarlis, E.S. Skordas, H. Tanaka and P.A. Varotsos, *Optimality of natural time representation of complex time series*, Phys. Rev. Lett. **94**, 170601 (2005).
- [10517] P.A. Varotsos, N.V. Sarlis, E.S. Skordas, T. Nagao and M. Kamogawa, *Natural time analysis together with non-extensive statistical mechanics shorten the time window of the impending 2011 Tohoku M9 earthquake in Japan*, Communications in Nonlinear Science and Numerical Simulation **125**, 107370 (2023).
- [10518] P.A. Varotsos, E.S. Skordas, N.V. Sarlis and S.R.G. Christopoulos, *Review of the natural time analysis method and its applications*, Mathematics **12**, 3582 (2024).
- [10519] N.V. Sarlis, E.S. Skordas, S.R.G. Christopoulos and P.K. Varotsos, *Identifying the occurrence time of the destructive Kahramanmaraş-Gazientep earthquake of magnitude M7.8 in Turkey on 6 February 2023*, Applied Sciences **14**, 1215 (2024).
- [10520] P. Varotsos, N. Sarlis and E. Skordas, *Compatibility of the SES generation model with the precursory phenomena before the Tohoku M9 earthquake in Japan in 2011*, Natural Time Analysis: The New View of Time, Part II, 189-208 (Springer, 2023).
- [10521] P. Varotsos, N. Sarlis and E. Skordas, *Fluctuations of the entropy change of seismicity under time reversal before major earthquakes in natural time analysis*, Natural Time Analysis: The New View of Time, Part II, 153-172 (Springer, 2023).
- [10522] H.N. Karakavak, H.O. Cekim, G. Ozel and S. Tekin, *Seismic microzonation and earthquake forecasting in Western Anatolia using K-means clustering and entropy-based magnitude volatility analysis*, Geotech. Geol. Eng. **43**, 99 (2025).
- [10523] Y. Dai, J. He, Y. Wu, S. Chen and P. Shang, *Generalized entropy plane based on permutation entropy and distribution entropy analysis for complex time series*, Physica A **520**, 217-231 (2019).
- [10524] N.V. Sarlis, E.S. Skordas, P.A. Varotsos, A. Ramirez-Rojas and E.L. Flores-Marquez, *Natural time analysis: On the deadly Mexico M8.2 earthquake on 7 September 2017*, Physica A **506**, 625-634 (2018).
- [10525] P.A. Varotsos, N.V. Sarlis and E.S. Skordas, *Phenomena preceding major earthquakes interconnected through a physical model*, Ann. Geophys. **37**, 315-324 (2019), doi: 10.5194/angeo-2019-29
- [10526] A. Ramirez-Rojas, E.L. Flores-Marquez, N.V. Sarlis and P.A. Varotsos, *The complexity measures associated with the fluctuations of the entropy in natural time before the deadly Mexico M8.2 earthquake on 7 September 2017*, Entropy **20**, 477 (2018), doi: 10.3390/e20060477
- [10527] N.V. Sarlis, E.S. Skordas, P.A. Varotsos, A. Ramirez-Rojas and E.L. Flores-Marquez, *Investigation of the temporal correlations between earthquake magnitudes before the Mexico M8.2 earthquake on 7 September 2017*, Physica A **517**, 475-483 (2019).
- [10528] N.V. Sarlis, E.S. Skordas, P.A. Varotsos, A. Ramirez-Rojas and E.L. Flores-Marquez, *Identifying the occurrence time of the deadly Mexico M8.2 earthquake on 7 September 2017*, Entropy **21**, 301 (2019), doi: 10.3390/e21030301

- [10529] P.A. Varotsos, N.V. Sarlis and E.S. Skordas, *Tsallis entropy index q and the complexity measure of seismicity in natural time under time before the M9 Tohoku earthquake in 2011*, Entropy **20**, 757 (2018), doi: 10.3390/e20100757
- [10530] E.S. Skordas, N.V. Sarlis and P.A. Varotsos, *Precursory variations of Tsallis non-extensive statistical mechanics entropic index associated with the M9 Tohoku earthquake in 2011*, Eur. Phys. J. Special Topics **229**, 851-859 (2020).
- [10531] P.A. Varotsos, N.V. Sarlis, E.S. Skordas, T. Nagao, M. Kamogawa, E.L. Flores-Marquez, A. Ramirez-Rojas and J. Perez-Oregon, *Improving the estimation of the occurrence time of an impending major earthquake using the entropy change of seismicity in natural time analysis*, Geosciences **13**, 222 (2023).
- [10532] P.A. Varotsos, N.V. Sarlis, H.K. Tanaka and E.S. Skordas, *Some properties of the entropy in the natural time*, Phys. Rev. E **71**, 032102 (2005) (4 pages).
- [10533] N.V. Sarlis, E.S. Skordas and P.A. Varotsos, *Nonextensivity and natural time: the case of seismicity*, Phys. Rev. E **82**, 021110 (2010).
- [10534] N.V. Sarlis, E.S. Skordas and P.A. Varotsos, *Natural time analysis of seismic time series*, Complexity of Seismic Time Series Measurement and Application, 199-235 (2018), doi: 10.1016/B978-0-12-813138-1.00007-9
- [10535] P.A. Varotsos, N.V. Sarlis, and E.S. Skordas, *Study of the temporal correlations in the magnitude time series before major earthquakes in Japan*, J. Geophysical Research A: Space Physics **119** (11), 9192-9206 (2014).
- [10536] P.A. Varotsos, N.V. Sarlis and E.S. Skordas, *Temporal correlations in the magnitude time series before major earthquakes in Japan*, preprint (2016), 1612.07032 [physics.geo-ph].
- [10537] P.A. Varotsos, N.V. Sarlis, E.S. Skordas, Q. Huang, J.Y. Liu, M. Kamogawa and T. Nagao, *Twenty-five years after the Chi-Chi earthquake in the light of natural time analysis*, Geosciences **15**, 198 (2025).
- [10538] P.A. Varotsos, N.V. Sarlis and E.S. Skordas, *Order parameter and entropy of seismicity in natural time before major earthquakes: Recent results*, Geosciences **12**, 225 (2022).
- [10539] N.V. Sarlis, *Magnitude correlations in global seismicity*, Phys. Rev. E **84**, 022101 (2011) (4 pages).
- [10540] S.-R.G. Christopoulos, N.V. Sarlis, *q -exponential relaxation of the expected avalanche size in the coherent noise model*, Physica A **407**, 216-225 (2014), <http://dx.doi.org/10.1016/j.physa.2014.03.090>
- [10541] P.A. Varotsos, N.V. Sarlis and T. Nagao, *Complexity measure in natural time analysis identifying the accumulation of stresses before major earthquakes*, Scientific Reports **14**, 30828 (2024).
- [10542] S. Abe and N. Suzuki, *Scale-free statistics of time interval between successive earthquakes*, Physica A **350**, 588 (2005).
- [10543] S. Abe, U. Tirnakli and P.A. Varotsos, *Complexity of seismicity and nonextensive statistics*, Europhysics News **36**, 206 (2005) [Europhysics News Special Issue *Nonextensive Statistical Mechanics: New Trends, new perspectives*, eds. J.P. Boon and C. Tsallis (November/December 2005)].
- [10544] S. Abe and N. Suzuki, *Complex network of seismicity*, in *Complexity and Nonextensivity: New Trends in Statistical Mechanics*, eds. M. Sakagami, N. Suzuki and S. Abe, Prog. Theor. Phys. Suppl. **162**, 138-146 (2006).
- [10545] S. Abe and N. Suzuki, *Complex-network description of seismicity*, Nonlinear Processes Geophys. **13**, 145-150 (2006).
- [10546] S. Abe and N. Suzuki, *Statistical similarities*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 310 (2004).
- [10547] T. Shimada, S. Yukawa and N. Ito, *Life-span of families in fossil data forms q -exponential distribution*, Int. J. Mod. Phys. C **14**, 1267 (2003).
- [10548] M.L. Lyra, U.M.S. Costa, R.N. Costa Filho and J.S. Andrade Jr., *Generalized Zipf's law in proportional voting processes*, Europhys. Lett. **62**, 131 (2003).
- [10549] D. Campos, *A thermodynamic-like characterization of Colombia's presidential elections in 2010, and a comparison with other Latin American countries*, Physica A **390**, 1779-1790 (2011).
- [10550] S. Marmani, V. Ficcadenti, P. Kaur and G. Dhesei, *Entropic analysis of votes expressed in Italian elections between 1948 and 2018*, Entropy **22**, 523 (2020), doi: 10.3390/e22050523
- [10551] A.C. Tsallis, C. Tsallis, A.C.N. Magalhaes and F.A. Tamarit, *Human and computer learning: An experimental study*, Complexus **1**, 181-189 (2004).
- [10552] C. Tsallis and A.C. Tsallis, *Entropy, a unifying concept: From physics to cognitive psychology*, Proceedings of the First CHESS Interactions Conference (Saskatchewan, 17-20 August 2009), eds. C. Rangacharyulu and E. Haven (World Scientific, Singapore, 2010), ISBN-13 978-981-4295-88-8.
- [10553] D. Rocha, *Enunciados de potencial metaforicidade: o dito e o implicito*, Signo, Santa Cruz do Sul, **48** (91), 153-165 (2023).

- [10554] B. Meder, V. Crupi and J.D. Nelson, *What makes a good question? Prospects for a comprehensive theory of human information acquisition*, preprint (2021).
- [10555] A. Nunes, *Measurement of heterogeneity in computational psychiatry*, Doctor Thesis (Dalhousie University Halifax, Nova Scotia, 2020).
- [10556] F.C. Morabito, M. Cacciola and G. Occhiuto, *Creative brain and abstract art: a quantitative study on Kandinskij paintings*, IEEE Proceedings of International Joint Conference on Neural Networks (San Jose, California, USA, July 31 - August 5, 2011), 2387-2394 (2011).
- [10557] P. Leleux, S. Courtaïn, G. Guex and M. Sauerens, *Sparse randomized shortest paths routing with Tsallis divergence regularization*, preprint (2020), 2007.00419 [cs.LG].
- [10558] F.M. del Prado Martin, *Macroscopic thermodynamics of reaction times*, J. Math. Psychology **55**, 302-319 (2011).
- [10559] Y. Lu, J. Wang, C. Li, H. Huang and X. Zhuang, *Price attractiveness and price complexity: Why people prefer level-payment loans*, Frontiers in Psychology **12**, 532696 (2021).
- [10560] R.C. Venkatesan and A. Plastino, *Deformed statistics free energy model for source separation using unsupervised learning*, preprint (2011), 1102.5396 [cond-mat.stat-mech].
- [10561] K. Klede, T. Altstidl, D. Zanca and B. Eskofier, *p-value adjustment for monotonous, unbiased, and fast clustering comparison*, communicated at 37th Conference on Neural Information Processing Systems (NeurIPS 2023).
- [10562] X. Li, W. Yang and Z. Zhang, *A regularized approach to sparse optimal policy in reinforcement learning*, preprint (2019), 1903.00725 [stat.ML].
- [10563] A. Watanabe and K. Hidaka, *Route choice model with sparse output based on generalized entropy regularization*, communicated at The 37th Annual Conference of the Japanese Society for Artificial Intelligence (2023).
- [10564] O. Kai, X. Xu, C. Tang, W. Chen and H.T. Zheng, *Social-aware sparse attention network for session-based social recommendation*, Findings of the Association for Computational Linguistics: EMNLP, 2173-2183 (2022).
- [10565] D.J. Sutherland, *Scalable, flexible and active learning on distributions*, Doctor Thesis (School of Computer Science, Carnegie Mellon University, 2016).
- [10566] A. Dukkipati, D. Ghoshdastidar and J. Krishnan, *Mixture modeling with compact support distributions for unsupervised learning*, Proceedings of the International Joint Conference on Neural Networks, Article 7727539, 2706-2713 (24-29 July 2016, Vancouver) 2016)
- [10567] K.M. Lempert and D.A. Pizzagalli, *Delay discounting and future-directed thinking in anhedonic individuals*, J. Behav. Ther. Exp. Psychiat. **41**, 258-264 (2010).
- [10568] R.S. Wedemann, R. Donangelo and L.A.V. de Carvalho, *Properties of a memory network in psychology*, in *Complexity, Metastability and Nonextensivity*, eds. S. Abe, H.J. Herrmann, P. Quarati, A. Rapisarda and C. Tsallis, American Institute of Physics Conference Proceedings **965**, 342-345 (New York, 2007).
- [10569] R.S. Wedemann and A.R. Plastino, *Associative memory networks with multidimensional neurons*, International Conference on Artificial Neural Networks and Machine Learning, 503-514 (2022).
- [10570] V. Pyragas and K. Pyragas, *Mean-field equations for neural populations with q-Gaussian heterogeneities*, preprint (2022), 2201.11493 [nlin.CD].
- [10571] V. Pyragas and K. Pyragas, *Effect of Cauchy noise on a network of quadratic integrate-and-fire neurons with non-Cauchy heterogeneities*, preprint (2023), 2305.02193v1 [q-bio.NC].
- [10572] M. Siddiqui, R.S. Wedemann and H. Jensen, *Avalanches and generalized memory associativity in a network model for conscious and unconscious mental functioning*, Physica A **490**, 127-138 (2018).
- [10573] R.S. Wedemann and A.R. Plastino, *Asymmetries in synaptic connections and the nonlinear Fokker-Planck formalism*, in *Artificial Neural Networks and Machine Learning - ICANN 2016, Part I*, LNCS 9886 (Springer, 2016) (9 pages), in press, doi: 10.1007/978-3-319-44778-0_3
- [10574] R.S. Wedemann and A.R. Plastino, *q-maximum entropy distributions and memory neural networks*, communication in ICANN 2017-International Conference on Neural Networks (Sardinia, Italy), Artificial Neural Networks and Machine Learning 300-308 (2017); A. Lintas et al, Eds.: ICANN 2017, Part I, LNCS 10613, 300-308 (Springer, 2017), doi: doi.org/10.1007/978 - 3 - 319 - 68600 - 4_35
- [10575] R.S. Wedemann and A.R. Plastino, *A nonlinear Fokker-Planck description of continuous neural network dynamics*, Artificial Neural Networks and Machine Learning - ICANN 2019, Theoretical Neural Computation 43-56 (2019).

- [10576] R.S. Wedemann and A.R. Plastino, *Nonlinear, nonequilibrium landscape approach to neural network dynamics*, I. Farkas et al, Eds., International Conference on Artificial Neural Networks: Artificial Neural Networks and Machine Learning - ICANN, LNCS 12397, 180-191 (2020), doi: 10.1007/978-3-030-61616-8
- [10577] K. Gajowniczek, A. Orłowski and T. Zabkowski, *Simulation study on the application of the generalized entropy concept in artificial neural networks*, Entropy **20**, 249 (2018), doi:10.3390/e20040249
- [10578] K. Gajowniczek, L.J. Chmielewski, A. Orłowski and T. Zabkowski, *Generalized entropy cost function in neural networks*, International Conference on Artificial Neural Networks ICANN 2017: Artificial Neural Networks and Machine Learning 128-136 (2017).
- [10579] R.S. Wedemann, R. Donangelo and L.A.V. de Carvalho, *A nonextensive memory network in psychology*, communication at SigmaPhi2008 (July 2008, Kolymbari, Crete).
- [10580] A.J. da Silva, S. Floquet and D.O.C. Santos, *Statistical crossover and nonextensive behavior of neuronal short-term depression*, J. Biol. Phys. (2017) (13 pages), doi: 10.1007/s10867-017-9474-3
- [10581] E. Ostrovsky, L. Sirota and A. Zeldin, *Rate of convergence in the maximum likelihood estimation for partial discrete parameter, with applications to the cluster analysis and philology*, preprint (2014), 1402.6409 [math.ST].
- [10582] R.S. Wedemann, R. Donangelo and L.A.V. de Carvalho, *Nonextensivity in a memory network access mechanism*, Braz. J. Phys. **39**, 495-499 (2009).
- [10583] R.S. Wedemann, R. Donangelo and L.A.V. de Carvalho, *Generalized memory associativity in a network model for the neuroses*, Chaos **19**, 015116 (2009).
- [10584] X. Sun, H. Lin and K. Xu, *A social network model driven by events and interests*, Expert Systems with Applications **42** (9), 4229-4238 (2015).
- [10585] N. Vafaei, F. Sheikhi and A. Ghasemi, *A community-based entropic method to identify influential nodes across multiple social networks*, Social Network Analysis and Mining **15**, 23 (2025).
- [10586] A. Dmitriev, O. Tsukanova and S. Maltseva, *Modeling of microblogging social networks: Dynamical system vs. random dynamical system*, Information Technology and Quantitative Management (ITQM 2017), Procedia Computer Science **122**, 812-819 (2017).
- [10587] A. Dmitriev, V. Dmitriev, O. Sagaydak and O. Tsukanova, *The application of stochastic bifurcation theory to the early detection of economic bubbles*, Procedia Computer Science **122**, 354-361 (2017).
- [10588] R.S. Wedemann, *Sistemas complexos, associatividade, processos mentais e a simbolizacao*, communicated at the 2nd Workshop of the National Institute of Science and Technology for Complex Systems (Rio de Janeiro, 1-5 March 2010).
- [10589] R.S. Wedemann and L.A.V. de Carvalho, *Some things psychopathologies can tell us about consciousness*, in *Artificial Neural Networks and Machine Learning - ICANN 2012*, Lecture Notes in Computer Science **7552**, 379-386 (2012).
- [10590] T. Hadzibeganovic and S.A. Cannas, *Nonextensivity in nonword learning: Human and perceptron performance in simple memorization tasks*, communicated at "Modern Methods in Linguistics" (Mathematical and Computer Methods)" (Budmerice, Slovakia, 23-24 October 2006).
- [10591] T. Hadzibeganovic and S.A. Cannas, *A Tsallis' statistics based neural network model for novel word learning*, Physica A **388**, 732-746 (2009).
- [10592] T. Takahashi, T. Hadzibeganovic, S.A. Cannas, T. Makino, H. Fukui and S. Kitayama, *Cultural neuroeconomics of intertemporal choice*, Neuroendocrinology Lett. **30**, 185-191 (2009).
- [10593] A. Mehri and A.H. Darooneh, *Keyword extraction by nonextensivity measure*, Phys. Rev. E **83**, 056106 (2011) (6 pages).
- [10594] EMSME 2020, *Keyword extraction methodologies based on Renyi entropy and Tsallis relative entropy*, Journal Engineering Research, University of Kuwait, National Institute of Technology Delhi (2021), doi: 10.36909/jer.EMSME.13893
- [10595] A. Singhal and D.K. Sharma, *Keyword extraction using Renyi entropy: a statistical and domain independent method*, 7th International Conference on Advanced Computing and Communication Systems (ICACCS), IEEE, 1970 (2021).
- [10596] A. Mehri, A.H. Darooneh and A. Shariati, *The complex networks approach for authorship attribution of books*, Physica A **391**, 2429-2437 (2012).
- [10597] M. Stella and M. Brede, *A κ -deformed model of growing complex networks with fitness*, preprint (2014), 1404.3276 [cond-mat.stat-mech].
- [10598] W.N. Wang, J.Y. Lee and Z.K. Mi, *Scale-free statistics of bulletin-board-system server visiting*, Chinese Phys. Lett. **21**, 243 (2004).

- [10599] K. Krishnamachari and A. Krishnamachari, *Sequence variability and long-range dependence in DNA; An information theoretic perspective*, Neural Information Processing, Lecture Notes in Computer Science **3316**, 1354 (2004).
- [10600] G.P. Pavlos, L.P. Karakatsanis, A.C. Iliopoulos, E.G. Pavlos, M.N. Xenakis, P. Clark, J. Duke and D.S. Monos, *Measuring complexity, nonextensivity and chaos in the DNA sequence of the major histocompatibility complex*, Physica A **438**, 188-209 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2015.06.044>
- [10601] O.B. Naimark, *Structural-scaling transitions and localized distortion modes in the DNA double helix*, Physical Mesomechanics **10**, 33-45 (2007).
- [10602] L. Sui, K. Zhao, M.N. Ni, J.Y. Guo, F.Q. Kong, M.H. Cai, X.Q. Lu and P. Zhou, *Atomic force microscopy measurement of DNA fragment induced by heavy ions*, Chinese Phys. Lett. **22**, 1010 (2005).
- [10603] C.J. Keylock, *Describing the recurrence interval of extreme floods using nonextensive thermodynamics and Tsallis statistics*, Advances in Water Resources **28**, 773 (2005).
- [10604] H.D. Salas and G. Poveda, *Scaling of entropy and multi-scaling of the time - Generalized q-entropy in rainfall and streamflows*, Physica A **423**, 11-26 (2015), doi: <http://dx.doi.org/10.1016/j.physa.2014.12.015>
- [10605] H. Yoshioka, H. Tomobe and Y. Yoshioka, *Orlicz risks for assessing stochastic streamflow environments: a static optimization approach*, Stochastic Environmental Research and Risk Assessment (2023), doi: 10.1007/s00477
- [10606] M. Alvioli, F. Guzzetti and M. Rossi, *Scaling properties of rainfall-induced landslides predicted by a physically based model*, Geomorphology **213**, 38-47 (2014).
- [10607] I.T. Pedron, M.F. Cornelio and C.R. Bach, *Extremos de precipitacao e tempos de retorno no Oeste e Sudoeste do Parana*, communicated at the XVII Congresso Brasileiro de Meteorologia (Gramado-RS, 2012).
- [10608] T. Pedron and M.F. Cornelio, *Densidades de distribuicao de frequencias de velocidades de vento medio diario e rajadas maximas no Estado do Parana*, communicated at the XVII Congresso Brasileiro de Meteorologia (Gramado-RS, 2012).
- [10609] G. Poveda, *The time generalized q-entropy of selected stochastic and deterministic low-dimensional chaotic processes*, preprint (2013).
- [10610] K. Nelson, *Nonextensive entropy and complexity*, communicated at TOPS in Cyberspace Conference (15-17 June 2004, Clinton, New York, USA).
- [10611] J. Marsh, K. Nelson, T. Knapik, and S. Earl, *Information theory applications in intelligence analysis*, communicated at International Conference on Intelligence Analysis (2-6 May 2005, McLean, VA, USA).
- [10612] J. Marsh, T. Knapik, E. Lo and C. Heitzenrater, *Application of conditional entropy measures to steganalysis*, Proc. SPIE Electronic Imaging Vol. 6072-04 (San Jose, CA, January 2006).
- [10613] J. Marsh and K. Nelson, *Application of Tsallis entropy to analysis of noisy data*, Proc. Canadian Workshop on Information Theory (5-8 June 2005, Montreal, Quebec, Canada), 363.
- [10614] K. Nelson and P.E. Losiewicz, *The application of Tsallis entropy to bitstream analysis*, communicated at the Canadian Workshop on Information theory (18-21 May 2003, Waterloo, Ontario, Canada).
- [10615] T.G. Dedovich and M.V. Tokarev, *Criteria of fractal reconstruction and suppressing background events with the SePaC method*, Physics of Particles and Nuclei Letters **18**, 93-106 (2021).
- [10616] C. Ricotta, *On parametric diversity indices in ecology: A historical note*, Community Ecology **6**, 241-244 (2005).
- [10617] S. Pavoine and C. Ricotta, *A simple translation from indices of species diversity to indices of phylogenetic diversity*, Ecological Indicators **101**, 552-561 (2019).
- [10618] A. Kondratyeva, P. Grandcolas and S. Pavoine, *Reconciling the concepts and measures of diversity, rarity and originality in ecology and evolution*, Biol. Rev. (2019) (21 pages), doi: 10.1111/brv.12504
- [10619] D. Campos and M.R. Campos, *Underlying thermodynamic relations of a species diversity index: Freshwater crabs from Colombia*, Ecological Indicators **15**, 198-207 (2012).
- [10620] O. Komori and S. Eguchi, *Maximum power entropy method for ecological data analysis*, in Bayesian inference and maximum entropy methods in science and engineering (MAXENT 2014), eds. A. MohammadDjafari and F. Barbaresco, AIP Conference Proceedings **1641**, 337-344 (2015), doi: 10.1063/1.4905996
- [10621] H. Zhang, W. Xu, Q. Guo, P. Han and Y. Qiao, *First escape probability and mean first exit time for a time-delayed ecosystem driven by non-Gaussian colored noise*, Chaos, Solitons and Fractals **135**, 109767 (2020).
- [10622] L.V. Xuan, N.T. Lan and N.A. Viet, *On application of non-extensive statistical mechanics to studying ecological diversity*, J. Phys.: Conference Series **726**, 012024 (2016), doi:10.1088/1742-6596/726/1/012024
- [10623] M. Bokanga and J.L. Martin, *Duality, dissimilarity, and diversity: The use of ecological approaches to cross-nested affiliation data*, Social Networks **82**, 134-152 (2025).

- [10624] K. Ozkan, *Generalization of the energy based entropy for ecological communities in the frame of Tsallis statistics*, Proceedings of International Conference on Science and Technology ICONST 2018 (5-9 September 2018, Prizren - Kosovo).
- [10625] K. Ozkan, *A proposed novel approach in estimation of unbiased community rarity using the locked matrix and Tsallis entropy*, *Forestist* **74** (2), 211-217 (2024).
- [10626] M. Pietrzak, G.A. Rempala, M. Seweryn and J. Wesolowski, *Limit theorems for empirical Renyi entropy and divergence with applications to molecular diversity analysis*, *Test* **25**, 654-673 (2016), doi: 10.1007/s11749-016-0489-z
- [10627] E. Karanja, A. Sharma and I. Salama, *What does MIS survey research reveal about diversity and representativeness in the MIS field? A content analysis approach*, *Scientometrics* (2019), doi: doi.org/10.1007/s11192-019-03331-5
- [10628] S.T. Buckland, Y. Yuan and E. Marcon, *Measuring temporal trends in biodiversity*, *Adv. Stat. Anal.* **101**, 461-474 (2017), doi: 10.1007/s10182-017-0308-1
- [10629] B. Muzellec, R. Nock, G. Patrini and F. Nielsen, *Tsallis regularized optimal transport and ecological inference*, 31st AAAI Conference on Artificial Intelligence, 2387-2393 (2017).
- [10630] J. Harte and E.A. Newman, *Maximum information entropy: a foundation for ecological theory*, *Trends in Ecology and Evolution* **29** (7), 384-389 (2014), doi: http://dx.doi.org/10.1016/j.tree.2014.04.009
- [10631] A. Cerquetti, *Bayesian nonparametric estimation of Patil-Taillie-Tsallis diversity under Gnedin-Pitman priors*, preprint (2014), 1404.3441 [math.ST].
- [10632] K. Watanabe and S. Ikeda, *Entropic risk minimization for nonparametric estimation of mixing distributions*, *Mach. Learn.* (2014), doi: 10.1007/s10994-014-5467-7
- [10633] M. Kobayashi and K. Watanabe, *Generalized Dirichlet-process-means for f-separable distortion measures*, preprint (2019), 1901.11331 [cs.LG].
- [10634] O. Olendski, *Renyi and Tsallis entropies of the Dirichlet and Neumann one-dimensional quantum wells*, *Int J Quantum Chem.* e26220 (2020).
- [10635] O. Olendski, *Comparative analysis of information measures of the Dirichlet and Neumann two-dimensional quantum dots*, *Int J Quantum Chem.*, e26455 (2020), doi: 10.1002/qua.26455
- [10636] O. Olendski, *Quantum information measures of the Dirichlet and Neumann hyperspherical dots*, *Eur. Phys. J. Plus* **136**, 390 (2021).
- [10637] O. Olendski, *Quantum-information theory of a Dirichlet ring with Aharonov-Bohm field*, preprint (2022), 2202.04692 [cond-mat.mes-hall].
- [10638] H.B.A. Evangelista, S.M. Thomaz, R.S. Mendes and L.R. Evangelista, *Generalized entropy indices to measure α - and β -diversities of macrophytes*, *Braz. J. Phys.* **39**, 396-401 (2009).
- [10639] D. Horvath, B. Brutovsky, J. Kocisova and S. Sprinc, *Manipulation with heterogeneity within a species population formulated as inverse problem*, *Physica A* **389**, 5028-5036 (2010).
- [10640] D. Horvath and G. Zoldak, *Entropy-based strategies for rapid pre-processing and classification of time series data from single-molecule force experiments*, *Entropy* **22**, 701 (2020), doi: 10.3390/e22060701
- [10641] C. Liu, R.J. Whittaker, K. Ma and J.R. Malcolm, *Unifying and distinguishing diversity ordering methods for comparing communities*, *Popul. Ecol.* **49**, 89-100 (2007).
- [10642] H.-S. Yu, Y.-H. Han, K.-Y. Baik, J. Kim, S.-S. Lee, and K.-S. Soh, *Motion analysis of floating micro-granules: Microscale beads, inactivated Escherichia coli and platelets*, *Physica A* **377**, 565-575 (2007).
- [10643] C.A.B. Mello, *A new Tsallis entropy-based thresholding algorithm for images of historical documents*, communicated at ACM Symposium on Document Engineering (28-31 August 2007, Winnipeg, Canada).
- [10644] R.F.P. Neves and C.A.B. Mello, *A local thresholding algorithm for images of handwritten historical documents*, *IEEE* 2934-2939 (2011)
- [10645] Y.G. Tang, Q.Y. Di and X.P. Guan, *Fast recursive algorithm for two-dimensional Tsallis entropy thresholding method*, *J. Systems Engineering and Electronics* **20**, 619-624 (2009).
- [10646] H.S. Yamada and K. Iguchi, *q-exponential fitting for distributions of family names*, *Physica A* **387**, 1628-1636 (2008).
- [10647] J. Gillet and M. Ausloos, *A comparison of natural (english) and artificial (esperanto) languages. A Multi-fractal method based analysis*, preprint (2008), 0801.2510 [cs.CL].
- [10648] M. Schwaab, J.L. Monteiro and J.C. Pinto, *Sequential experimental design for model discrimination - Taking into account the posterior covariance matrix of differences between model predictions*, *Chem. Eng. Science* **63**, 2408-2419 (2008).
- [10649] B.R. Gadjeiev, M.A. Korolev and T.B. Progulova, *Formation dynamics and distribution function of cities population*, preprint (2008), 0806.1909.

- [10650] R. Gonzalez-Val, A. Ramos, F. Sanz and M. Vera-Cabello, *Size distributions for all cities: Which one is best?*, Munich Personal RePEc Archive (2013), Papers in Regional Science **94**, 177-197 (2015), doi: 10.1111/pirs.12037
- [10651] B.R. Gadjev and T.B. Progulova, *Topology properties of written human language*, preprint (2008), 0808.0276 [physics.soc-ph].
- [10652] J.R.L. Oler, D. Butturi-Gomes and M.C.M. Amorozo, *A utilizacao do indice unificado de Tsallis para mensurar a diversidade em etnobotanica: Um estudo preliminar de plantas alimenticias em quintais do distrito de Rubiao Jr. (Botucatu, SP, Brasil)*, Anais do IX Congresso de Ecologia do Brasil (13 a 17 de Setembro de 2009, Sao Lourenco-MG).
- [10653] D. Butturi-Gomes, M. Petrere Junior, H.C. Giacomini and P. De Marco Junior, *Computer intensive methods for controlling bias in a generalized species diversity index*, Ecological Indicators **37**, 90-98 (2014).
- [10654] D. Butturi-Gomes, M. Petrere Junior, H.C. Giacomini and S. Sandoval Zocchi, *Statistical performance of a multicomparison method for generalized species diversity indices under realistic empirical scenarios*, Ecological Indicators **72**, 545-552 (2017).
- [10655] C. Guisande, J. Heine, E. Garcia-Rosello, J. Gonzalez-Dacosta, L. Gonzalez Vilas, B.J.G. Perez-Schofield, *DER: An algorithm for comparing species diversity between assemblages*, Ecological Indicators **81**, 41-46 (2017).
- [10656] L. Shao and B.-Q. Ma, *First-digit law in nonextensive statistics*, Phys. Rev. E **82**, 041110 (2010) (4 pages).
- [10657] M. Ishihara, *A study of the x^4 model in the Tsallis nonextensive statistics*, Physica A **391**, 278-284 (2012).
- [10658] M. Ishihara, *Application of optimization method to the x^4 model in the Tsallis nonextensive statistics*, Internat. J. Modern Phys. B **29** (1), 1450234 (2015) (14 pages), doi: 10.1142/S0217979214502348
- [10659] P. Rupsys and E. Petrauskas, *Development of q -exponential models for tree height, volume and stem profile*, Internat. J. Physical Sc. **5** (15), 2369-2378 (2010).
- [10660] P. Rupsys, *On the use of q -exponential functions for developing stem profile and volume models*, Internat. J. Biological Engineering **2** (5), 48-55 (2012).
- [10661] G.P. Karev and E.V. Koonin, *Parabolic replicator dynamics and the principle of minimum Tsallis information gain*, Biology Direct **8**, 19 (2013) (5 pages).
- [10662] D. Stys, J. Korbel, R. Rychtarikova, D. Soloviov, P. Cisar and J. Urban, *Point information gain, point information gain entropy and point information gain entropy density as measures of semantic and syntactic information of multidimensional discrete phenomena*, preprint (2015), 1501.02891 [physics.data-an].
- [10663] J. Korbel, *Generalized entropies: What are they good for?*, communication (2016).
- [10664] W. Tang, *Divergence measurements of empty parking spaces*, preprint (2012).
- [10665] Lifan, M. Tao and X. Hong, *The research on email classification based on q -Gaussian kernel SVM*, J. Theor. Appl. Information Technology **48** (2), 1292-1299 (2013).
- [10666] S.K. Katiyar and P.V. Arun, *A comparative analysis on the applicability of entropy in remote sensing*, preprint (2013), 1303.6926 [cs.CV].
- [10667] P. V. Arun, *A comparative analysis on the applicability of entropy in remote sensing*, J. Indian Soc. Remote Sens. **42** (1), 217-226 (2014), doi: 10.1007/s12524-013-0304-1
- [10668] M. Ausloos and R. Cerqueti, *A universal rank-size law*, Plos One (2016) (15 pages), doi:10.1371/journal.pone.0166011
- [10669] Yu.G. Puzachenko, *Rank distribution in ecology and nonextensive statistical mechanics*, Archives of Zoological Museum of Lomonosov Moscow State University **54**, 42-71 (2016).
- [10670] Yu.G. Puzachenko, A.N. Krenke, M. Yu. Puzachenko, R.B. Sandlerskii and I.I. Shironya, *Estimation of the thermodynamic parameters of land cover from multispectral measurements of reflected solar radiation (Landsat) in terms of nonextensive statistical mechanics*, Academy **487** (3), 310-316 (2019), doi: doi.org/10.31857/S0869-56524873310-316
- [10671] N. Fernandez, J. Aguilar, C.A. Pina-Garcia and C. Gershenson, *Complexity of lakes in a latitudinal gradient*, Ecological Complexity **31**, 1-20 (2017).
- [10672] S. Sula, E. Vuka and D. Prenga, *Alternative analysis of hydrologic data series using empiric mode decomposition algorithms*, The International Physics Conference Tirana 2015, 212-215 (University of Tirana, Faculty of Natural Sciences, Department of Physics, 2015).
- [10673] D. Prenga and S. Sula, *Some suggestions for graduate students and scholars undertaking quantitative interdisciplinary research: remarks from the practice*, preprint (2018).
- [10674] M. Iacchei, E. Butcher, E. Portner and E. Goetze, *It's about time: Insights into temporal genetic patterns in oceanic zooplankton from biodiversity indices*, Limnology and Oceanography (2017) (17 pages), doi: 10.1002/lno.10538

- [10675] Q. Rodriguez-Perez, V.H. Marquez-Ramirez and F.R. Zuniga, *Seismicity characterization of oceanic earthquakes in the Mexican territory*, Solid Earth **11**, 791-806 (2020).
- [10676] E. Ser-Giacomi, L. Zinger, S. Malviya, C. De Vargas, E. Karsenti, C. Bowler and S. De Monte, *Ubiquitous abundance distribution of non-dominant plankton across the world's ocean*, bioRxiv preprint (2018), doi: <http://dx.doi.org/10.1101/269068>
- [10677] P.M. Locatelli, *Proposta de um instrumento economico para viabilizar o pagamento por servicos ambientais urbanos aos catadores de materiais reciclaveis*, Capitulo 21, preprint (2017).
- [10678] L.V. Xuan, N.K. Ngoc, N.T. Lan and N.A. Viet, *A non-extensive thermodynamic theory of ecological systems*, J.Phys. Conf. Series **865**, 012012 (2017), doi: 10.1088/1742-6596/865/1/012012
- [10679] H. Saiz, J. Gomez-Gardenes, J.P. Borda and F.T. Maestre, *The structure of plant spatial association networks is linked to plant diversity in global drylands*, J. Ecology (2018), in press.
- [10680] N.A. Makarevich, *Non-ideality factor in multifractal and entropy-based analysis of self-organized structures of plant polymers (lignins)*, (2019), doi: 10.37482/0536-1036-2021-2-194-212
- [10681] O. Nachum, Y. Chow and M. Ghavamzadeh, *Path consistency learning in Tsallis entropy regularized MDPs*, Proceedings of the 35th International Conference on Machine Learning **3**, 1578-1594 (2018), PMLR 80 (Stockholm, Sweden, 2018).
- [10682] G. Chen, Y. Peng and M. Zhang, *Effective exploration for deep reinforcement learning via bootstrapped Q-ensembles under Tsallis entropy regularization*, preprint (2018), 1809.00403 [cs.LG].
- [10683] X. Li, W. Yang and Z. Zhang, *A unified framework for regularized reinforcement learning*, preprint (2019), 1903.00725 [stat.ML].
- [10684] M. Elhoseiny and M. Elfeki, *Creativity inspired zero-shot learning*, IEEE International Conference Computer Vision (2020).
- [10685] N. Thorne, J.J. Honisch, T. Kondo, S. Nasuto and Y. Hayashi, *Temporal structure in haptic signaling under a cooperative task*, Front. Hum. Neurosci. **13**, 372 (2019), doi: 10.3389/fnhum.2019.00372
- [10686] F.L.B. Martins and J.C. Nascimento, *Power law dynamics in genealogical graphs*, preprint (2020), 2010.05463 [stat.CO].
- [10687] M. Lee, A. Herdagdelen, M. Park and J.L. Martin, *Measuring Mohr social capital*, Poetics (2021), in press.
- [10688] M. Carey, J. Boland and G. Keppel, *Constructing a unified and dynamic niche apportionment model: An application of the generalised exponential function*, preprint (2021).
- [10689] M. Carey, J. Boland and G. Keppel, *Generalized logarithmic species-area relationship resolves the Arrhenius-Gleason debate*, Environmental Modeling and Assessment (2023).
- [10690] K.E. Haynes, F. Phillips and M.C.Y. Yu, *Recent applications of entropy in social and environmental sciences*, in *Handbook on Entropy, Complexity and Spatial Dynamics: A Rebirth of Theory?* (2021).
- [10691] S. Zhao, T. He and J. Wen, *Sparse summary generation*, Applied Intelligence (2022), doi: 10.1007/s10489-022-03450-2
- [10692] S. Buk and A. Rovenchak, *Attempting at parametrization of moderate-length poetic texts: Moses, a poem by Ivan Franko*, Glottometrics **53** (2022).
- [10693] K. Ozkan, S. Gulsoy, A. Mert and A. Senol, *How to determine best diversity ordering method for a community data set?*, Cerne **28** (2022).
- [10694] P. Gheorghiadu, V. Vasiliauskaite, A. Diachenko, H. Price, T. Evans and R. Rivers, *Entropology: an information-theoretic approach to understanding archaeological data*, preprint (2023), doi: 10.21203/rs.3.rs-2686626/v1
- [10695] Y. Neuman, *Unraveling the complexities of chronic armed conflicts: Patterns, predictability, and uncertainties*, (Springer, 2024).
- [10696] Y. Neuman, *Non-linearity in the emergence of political nationalism: A lesson from Hungary*, (Springer, 2024).
- [10697] M.B. Lamsal and R. Rastogi, *A hypergraph embedded entropy approach to gene selection*, Knowledge and Information Systems (2025).
- [10698] R. Ferreira, *Motion proposed: Beyond Boltzmann*, Physics Today **49**, 84 (August 1996).
- [10699] A.R. Plastino, *Nova teoria ajuda a explicar distribuicoes de Lévy*, Ciencia Hoje **21**, 24 (Agosto 1996).
- [10700] C. Tsallis, *Lévy distributions*, Physics World **10**, 42 (July 1997).
- [10701] C. Tsallis, *Rozklady Levy'ego*, Postepy Fizyki **48**, 555 (1997) [Polish version of the Physics World 1997 article; translated by the Polish Physical Society].
- [10702] C. Tsallis, *Lévy distributions*, Japanese Physics Magazine Parity, **13**, 23 (1998) [Japanese version of the Physics World 1997 article; translated by Emer. Prof. Nobuhiko Saito - Waseda University].

- [10703] C. Tsallis, *As distribuicoes de Lévy*, Revista Brasileira de Ensino de Fisica **22**, 156 (2000) [Portuguese version of the Physics World 1997 article; translated by Prof. Ildeu de Castro Moreira - Universidade Federal do Rio de Janeiro].
- [10704] U. Tirnakli, F. Buyukkilic and D. Demirhan, *A new formalism for nonextensive physical systems: Tsallis thermostatics*, Tr. J. Phys. (Turkey) **23**, 21-28 (1999).
- [10705] C. Tsallis and S. Abe, *Advancing Faddeev: Math can deepen Physics understanding*, Physics Today **51**, 114 (October 1998).
- [10706] E. P. Borges, *Irreversibilidade, desordem e incerteza: tres visoes da generalizacao do conceito de entropia*, Revista Brasileira de Ensino de Fisica **21**, 453 (1999).
- [10707] C. Tsallis, *Nonextensive statistics: Theoretical, experimental and computational evidences and connections*, in *Nonextensive Statistical Mechanics and Thermodynamics*, eds. S.R.A. Salinas and C. Tsallis, Braz. J. Phys. **29**, 1-35 (1999). [cond-mat/9903356]
- [10708] S. Abe, *Tsallis entropy and generalization of Boltzmann-Gibbs statistical mechanics*, Magazine of the Physical Society of Japan "Butsuri" **54**, 287 (1999) [In Japanese].
- [10709] S. Abe, *Tsallis' nonextensive statistical mechanics - I*, Mathematical Sciences **439**, 71 (2000) [In Japanese].
- [10710] S. Abe, *Tsallis' nonextensive statistical mechanics - II*, Mathematical Sciences **440**, 78 (2000) [In Japanese].
- [10711] S. Abe, *Tsallis' nonextensive statistical mechanics - III*, Mathematical Sciences **441**, 68 (2000) [In Japanese].
- [10712] S. Abe, *Tsallis' nonextensive statistical mechanics - IV*, Mathematical Sciences **442**, 56 (2000) [In Japanese].
- [10713] C. Tsallis, *Nonextensive statistical mechanics and thermodynamics: Historical background and present status*, in *Nonextensive Statistical Mechanics and Its Applications*, eds. S. Abe and Y. Okamoto, Series *Lecture Notes in Physics* (Springer-Verlag, Heidelberg, 2001) [ISBN 3-540-41208-5].
- [10714] C. Tsallis, *Entropic nonextensivity: A possible measure of complexity*, in *Classical and Quantum Complexity and Nonextensive Thermodynamics*, eds. P. Grigolini, C. Tsallis and B.J. West, Chaos, Solitons and Fractals **13**, Number 3, 371 (Pergamon-Elsevier, Amsterdam, 2002).
- [10715] C. Tsallis, *Nonextensive statistical mechanics: A brief review of its present status*, Annals of the Brazilian Academy of Sciences **74**, 393 (2002) [<http://www.scielo.br/scielo.php>] [cond-mat/0205571].
- [10716] C. Tsallis, *Nonextensive statistical mechanics: Construction and physical interpretation*, in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [10717] M. Gell-Mann and C. Tsallis, *Preface* in *Nonextensive Entropy - Interdisciplinary Applications*, eds. M. Gell-Mann and C. Tsallis (Oxford University Press, New York, 2004).
- [10718] D. Bradley, *Gambling on tough turbulence*, Fisika Indonesia (2000) [http://www.egroups.com/message/fisika_indonesia/1767].
- [10719] S.A. Ellingsen and P.A. Krogstad, *Nonextensive statistical dynamics applied to wall turbulence*, Trans. R. Norw. Soc. Sci. Lett. (2013), in press.
- [10720] I. Ivanov, *Revolution in Thermodynamics*, Articles and Remarks [In Russian] [<http://www.scientific.ru/journal/tsallis/tsallis.html>]
- [10721] C. Beck, *Generalized statistical mechanics approach*, Chapter 6 in *Spatio-temporal chaos and Vacuum fluctuations of quantized fields* (World Scientific, Singapore, 2002).
- [10722] C. Beck, *Statistical mechanics of the vacuum*, Modern Phys. Lett. B **26** (10), 1250060 (2012) (13 pages).
- [10723] M. Consoli, C. Matheson and A. Pluchino, *The classical ether-drift experiments: a modern re-interpretation*, preprint (2013), 1302.3508 [physics.gen-ph].
- [10724] M. Consoli and A. Pluchino, *Gravity as an emergent phenomenon: experimental signatures*, preprint (2013), 1311.4301 [gr-qc].
- [10725] M. Consoli and A. Pluchino, *Detecting the CMB dipole within the earth laboratory*, preprint (2018), 1801.03775 [physics.gen-ph].
- [10726] R. Graham, *Constantino Tsallis - Describing a new entropy*, Santa Fe Institute Bulletin **15**, 18 (Fall 2000 issue) [<http://www.santafe.edu/sfi/publications/Bulletins/bulletinFall00/features/tsallis.html>].
- [10727] A. Cho, *A fresh take on disorder, or disorderly science?*, Science **297**, 1268 (23 August 2002).
- [10728] R. Luzzi, A.R. Vasconcellos and J. Galvao Ramos, *Trying to make sense of disorder*, Science **298**, 1171 (2002).
- [10729] R.V. Chamberlin, *Adrian Cho's article on Tsallis entropy*, Science **298**, 1172 (2002).
- [10730] R.V. Chamberlin, *The big world of nanothermodynamics*, Entropy **17**, 52-73 (2015), doi:10.3390/e17010052
- [10731] S. Abe and A.K. Rajagopal, *Revisiting disorder and Tsallis statistics*, Science **300**, 249 (2003).
- [10732] A. Plastino, *Revisiting disorder and Tsallis statistics*, Science **300**, 250 (2003).

- [10733] V. Latora, A. Rapisarda and A. Robledo, *Revisiting disorder and Tsallis statistics*, Science **300**, 250 (2003).
- [10734] C. Tsallis, *Algumas reflexões sobre a natureza das teorias físicas em geral e da mecânica estatística em particular*, in *Tendências da Física Estatística no Brasil*, ed. T. Tome, volume honoring S.R.A. Salinas (Editora Livraria da Física, Sao Paulo, 2003), page 10.
- [10735] A. Plastino, *Why Tsallis' statistics?*, Physica A **344**, 608 (2004).
- [10736] J. Voit, *The Statistical Mechanics of Financial Markets*, (Springer, Berlin, 2003).
- [10737] H. Kleinert, *Integrais de trajetória e mercados financeiros*, in *Path Integrals*, Chapter 20 (2013).
- [10738] E.H. de Freitas, *Análise de séries temporais de mercados financeiros com curvas complexidade-entropia*, Thesis (Universidade Estadual de Maringá, 2017).
- [10739] L. Kristoufek and J. Skuhrovec, *Exponential and power laws in public procurement markets*, EPL **99**, 28005 (2012) (6 pages).
- [10740] S. Dey and S. Juneja, *Incorporating fat tails in financial models using entropic divergence measures*, preprint (2012), 1203.0643 [q-fin.ST].
- [10741] Y.A. Katz and L. Tian, *q-Gaussian distributions of leverage returns, first stopping times, and default risk valuations*, Physica A **392**, 4989-4996 (2013).
- [10742] Y.A. Katz and L. Tian, *Erratum to "q-Gaussian distributions of leverage returns, first stopping times, and default risk valuations" [Physica A 392 (20) (2013) 4989-4996]*, Physica A (2013), in press.
- [10743] M. Sugiyama, ed., *Nonadditive entropy and nonextensive statistical mechanics*, Continuum Mechanics and Thermodynamics **16**, 221 (Springer-Verlag, Heidelberg, 2004).
- [10744] D. Stauffer, *Earthquakes power up*, Physics World (10 June 2004).
- [10745] H.J. Haubold, A.M. Mathai and R.K. Saxena, *Boltzmann-Gibbs entropy versus Tsallis entropy: Recent contributions to resolving the argument of Einstein concerning "Neither Herr Boltzmann nor Herr Planck has given a definition of W"?*, Proc. XIth United Nations / European Space Agency Workshop on Basic Space Science (9-13 September 2002, Cordoba, Argentina), eds. H. Haubold and M. Rabolli, Astrophysics and Space Science **290**, 241 (Kluwer, 2004); [physics/0406112].
- [10746] H.L. Swinney and C. Tsallis, *Preface*, in *Anomalous Distributions, Nonlinear Dynamics and Nonextensivity*, eds. H.L. Swinney and C. Tsallis, Physica D **193**, 1 (2004).
- [10747] D. Sornette, *Critical Phenomena in Natural Sciences*, 2nd Edition (Springer, Berlin, 2004), pp. 220, 357, 360.
- [10748] G. Ali Mansoori, *Principles of Nanotechnology - Molecular-Based Study of Condensed Matter Small Systems*, Chapter 3, 105-113 (World Scientific, Singapore, 2006).
- [10749] C. Tsallis, *Some thoughts on theoretical physics*, Physica A **344**, 718 (2004).
- [10750] J.D. Farmer, M. Shubik and E. Smith, *Economics: the next physical science*, Physics Today (2005), in press.
- [10751] C.S. Tapiero, *Uncertainty economics*, in *Engineering Risk and Finance*, Springer International Series in Operation Research and Management Science **188**, 333-374 (2013).
- [10752] B. Trivellato, *Deformed exponentials and applications to finance*, Entropy **15**, 3471-3489 (2013), doi:10.3390/e15093471
- [10753] E. Moretto, S. Pasquali and B. Trivellato, *Option pricing under deformed Gaussian distributions*, Physica A **446**, 246-263 (2016), doi: <http://dx.doi.org/10.1016/j.physa.2015.11.026>
- [10754] E. Moretto, S. Pasquali and B. Trivellato, *A non-Gaussian option pricing model based on Kaniadakis exponential deformation*, Eur. Phys. J. B **90**, 179 (2017), doi: 10.1140/epjb/e2017-80112-x
- [10755] R. Zhou, R. Cai and G. Tong, *Applications of entropy in finance: A review*, Entropy **15**, 4909-4931 (2013), doi: 10.3390/e15114909
- [10756] M. Buchanan, *Entropy: The new order*, New Scientist, **187**, 34-37 (27 August 2005).
- [10757] C. Tsallis, *Letter to the Editor*, New Scientist, **187**, 25 (24 September 2005).
- [10758] J.P. Boon and C. Tsallis, *Special issue overview: Nonextensive statistical mechanics - new trends, new perspectives*, Europhysics News **36**, 183 (2005) [Europhysics News Special Issue *Nonextensive Statistical Mechanics: New Trends, new perspectives*, eds. J.P. Boon and C. Tsallis (November/December 2005)].
- [10759] E.P. Borges, *Complexidade e mecânica estatística não extensiva*, Ciência Hoje **223** (Janeiro/Fevereiro 2006) [in Portuguese].
- [10760] H. Gould, J. Tobochnik and W. Christian, *Measuring weak chaos, Entropy of the logistic map, Entropy of weak and strong chaotic systems*, in *The Chaotic Motion of Dynamical Systems*, in *An Introduction to Computer Simulation Methods: Applications to Physical Systems* (3rd Edition), Chapter 6 (Addison Wesley, 2007), pages 161-162 (Problems 6.10-12).
- [10761] J. Yan and C. Beck, *Information shift dynamics described by Tsallis $q = 3$ entropy on a compact phase space*, Entropy **24**, 1671 (2022).

- [10762] C. Tsallis, *Creativity – The moment between fascination and knowledge*, Euresis Journal **2**, 37-52 (2012). to appear in *Creativity in Science*, Proceedings of the 2007 San Marino Symposium, Ed. M. Bersanelli et al (University of Notre Dame Press, 2009).
- [10763] C. Beck, *Generalized information and entropy measures in physics*, Contemporary Physics **50**, 495-510 (2009).
- [10764] C. Tsallis, *Nonadditive entropy and nonextensive statistical mechanics - An overview after 20 years*, Braz. J. Phys. **39**, 337-356 (2009).
- [10765] C. Tsallis, *Nonadditive entropy and nonextensive statistical mechanics: Concepts and applications*, communicated at the Research Institute of Mathematical Science Workshop on Mathematical Aspects of Generalized Entropies and their Applications (7-9 July 2009, Kyoto).
- [10766] C. Tsallis, *Entropy*, in *Encyclopedia of Complexity and Systems Science*, ed. R.A. Meyers (Springer, Berlin, 2009), 11 volumes [ISBN: 978-0-387-75888-6].
- [10767] C. Tsallis, G. Kaniadakis, A. Carbone, A.M. Scarfone and K. Malarz, eds., *Advances in Statistical Physics*, Central European Journal of Physics **7** (3) (Versita, 2009).
- [10768] H.J. Haubold and A.M. Mathai, *Preface to the Proceedings of the Third UN/ESA/NASA Workshop on the International Heliophysical Year 2007 and Basic Space Science*, Astrophysics and Space Science Proceedings, eds. H.J. Haubold and A.M. Mathai, DOI 10.1007/978-3-642-03325-4 (Springer-Verlag, Berlin, 2010).
- [10769] P.K. Das, J. Selvaganapathy, C. Sharma, T.K. Jha and V.S. Kumar, *Tsallis statistics and the role of a stabilized radion in the supernovae SN1987A cooling*, Internat. J. Mod. Phys. A **28** (29), 1350152 (2013) (20 pages), doi: 10.1142/S0217751X13501522
- [10770] H.N. Lin and Y. Sang, *Scale-invariance in the repeating fast radio burst 121102*, MNRAS **491**, 2156-2161 (2020).
- [10771] Y. Sang and H.N. Lin, *Statistical similarity between soft gamma repeaters and the repeating fast radio bursts*, preprint (2021), 2108.01534 [astro-ph.HE].
- [10772] J.J. Wei, *Scale invariance in X-ray flares of gamma-ray bursts*, Phys. Rev. Res. **5**, 013019 (2023).
- [10773] P.H. Chavanis, B. Denet, M. Le Berre and Y. Pomeau, *Supernova implosion-explosion in the light of catastrophe theory*, Eur. Phys. J. B **92**, 271 (2019).
- [10774] C. Tsallis, *Some open points in nonextensive statistical mechanics*, in Special Issue edited by G. Nicolis, M. Robnik, V. Rothos and H. Skokos, Int. J. Bifurcation and Chaos **22** (9), 1230030 (2012) (24 pages).
- [10775] A. Sengupta, ed., *Chaos, Nonlinearity, Complexity - The Dynamical Paradigm of Nature*, in *Studies in Fuzziness and Soft Computation* (Springer, Berlin, 2006).
- [10776] A. Sengupta, *Study of cognitive fatigue using EEG entropy analysis*, IEEE (2020).
- [10777] C.G. Antonopoulos and H. Christodoulidi, *Weak chaos detection in the Fermi-Pasta-Ulam- α system using q -Gaussian statistics*, in Special Issue edited by G. Nicolis, M. Robnik, V. Rothos and H. Skokos, Int. J. Bifurcation and Chaos, **21** (8), 2285-2296 (2011).
- [10778] C.G. Antonopoulos, T. Bountis, C. Skokos and L. Drossos, *Complex statistics and diffusion in nonlinear disordered particle chains*, Chaos **24**, 024405 (2014) (7 pages), doi: 10.1063/1.4871477
- [10779] C.G. Antonopoulos, C. Skokos, T. Bountis and S. Flach, *Analyzing chaos in higher order disordered quartic-sextic Klein-Gordon lattices using q -statistics*, preprint (2017), 1705.06127 [nlin.CD].
- [10780] H. Christodoulidi, C. Tsallis and T. Bountis, *Fermi-Pasta-Ulam model with long-range interactions: Dynamics and thermostatistics*, EPL **108**, 40006 (2014) (6 pages).
- [10781] T. Bountis, *Long range interactions strengthen global stability in Hamiltonian 1D lattices*, comm. in Days of Applied Nonlinearity and Complexity (DANOC) (2024).
- [10782] H. Christodoulidi, T. Bountis, C. Tsallis and L. Drossos, *Dynamics and Statistics of the Fermi-Pasta-Ulam β -model with different ranges of particle interactions*, JSTAT, 123206 (2016) (13 pages).
- [10783] T. Bountis, K. Kaloudis and H. Christodoulidi, *Dynamics and statistics of weak chaos in a 4 – D symplectic map*, Chaos, Fractals and Complexity, Springer Proceedings in Complexity (2023), doi: 10.1007/978 – 3 – 031 – 37404 – 3₇
- [10784] H. Christodoulidi, *Energy localisation and dynamics of a mean-field model with non-linear dispersion*, communicated at Sigma-Phi (Chania, 2023).
- [10785] H. Christodoulidi and Ch.G. Antonopoulos, *Energy localisation and dynamics of a mean-field model with non-linear dispersion*, Physica D **471**, 134432 (2025).
- [10786] J. Wang, S.V. Dmitriev and D. Xiong, *Thermal transport in long-range interacting Fermi-Pasta-Ulam chains*, Phys. Rev. Research **2**, 013179 (2020).

- [10787] H. Christodoulidi, A. Bountis and L. Drossos, *The effect of long-range interactions on the dynamics and statistics of 1D Hamiltonian lattices with on-site potential*, European Physical Journal Special Topics **227**, 563-573 (2018).
- [10788] A. Bountis, *The effect of long range interactions on the dynamics and statistics of 1D Hamiltonian lattices*, communication (2019).
- [10789] A. Carati, L. Galgani, F. Gangemi and R. Gangemi, *Relaxation times and ergodicity properties in a realistic ionic-crystal model, and the modern form of the FPU problem*, Physica A **532**, 121911 (2019).
- [10790] A. Carati, L. Galgani, F. Gangemi and R. Gangemi, *Approach to equilibrium via Tsallis distributions in a realistic ionic-crystal model and in the FPU model*, Eur. Phys. J. Special Topics **229**, 743-749 (2020), doi: doi.org/10.1140/ep_jst/e2020-900203-y
- [10791] A. Carati, L. Galgani, F. Gangemi and R. Gangemi, *Tsallis distributions, their relaxations and the relation $\Delta t \Delta E \simeq h$, in the dynamical fluctuations of a classical model of a crystal*, preprint (2020), 2008.00712 [cond-mat.stat-mech].
- [10792] F. Gangemi, R. Gangemi, A. Carati and L. Galgani, *Thermal fluctuations in a realistic ionic-crystal model*, Physica A **586**, 126463 (2022).
- [10793] J.E. Macias-Diaz and A. Bountis, *Supratransmission in β -Fermi-Pasta-Ulam chains with different ranges of interactions*, Communications Nonlinear Science and Numerical Simulation **63**, 307-321 (2018), doi: 10.1016/j.cnsns.2018.04.007
- [10794] J.E. Macias-Diaz and A. Bountis, *Nonlinear supratransmission in quartic Hamiltonian lattices with globally interacting particles and on-site potentials*, Journal of Computational and Nonlinear Dynamics (2020), in press, doi: 10.1115/1.4048714
- [10795] H. Christodoulidi, T. Bountis and L. Drossos, *The effect of long-range interactions on the dynamics and statistics of 1D Hamiltonian lattices with on-site potential*, preprint (2018), 1801.03282 [nlin.CD].
- [10796] D. Bagchi and C. Tsallis, *Fermi-Pasta-Ulam-Tsingou problems: Passage from Boltzmann to q -statistics*, Physica A **491**, 869-873 (2018), doi: 10.1016/j.physa.2017.09.098
- [10797] J. Wang and A.C. Li, *Dynamic crossover towards energy equipartition in the Fermi-Pasta-Ulam-Tsingou β model with long-range interactions*, Phys. Rev. E **106**, 014135 (2022).
- [10798] D. Xiong and J. Wang, *Antipersistent energy-current correlations in strong long-ranged Fermi-Pasta-Ulam-Tsingou-type models*, Phys. Rev. E **109**, 044122 (2024).
- [10799] L. Defaveri, C. Olivares and C. Anteneodo, *Heat conduction in one-dimensional systems of nonlocally coupled harmonic oscillators: mean-field limit*, preprint (2021), 2111.01332 [cond-mat.stat-mech].
- [10800] L.J.L. Cirto, A. Rodriguez, F.D. Nobre and C. Tsallis, *Validity and failure of the Boltzmann weight*, EPL **123**, 30003 (2018).
- [10801] A. Rodriguez and C. Tsallis, *Diffusion crossover between q -statistics and Boltzmann-Gibbs statistics in the classical inertial α -XY ferromagnet*, Phys. Rev. E **111**, 024143 (2025).
- [10802] S. Cerreia-Vioglio, F. Maccheroni, M. Marinacci and A. Rustichini, *Axiomatic tests for the Boltzmann distribution*, J. Stat. Mech. 013406 (2021).
- [10803] P. Fronczak, A. Fronczak, A. Chmiel and J. Sienkiewicz, *Truncated Levy walks and superdiffusion in Boltzmann-Gibbs equilibrium of the Hamiltonian Mean-Field model*, preprint (2019), 1911.10110 [cond-mat.stat-mech].
- [10804] G.A. Casas, F.D. Nobre and E.M.F. Curado, *New type of equilibrium distribution for a system of charges in a spherically-symmetric electric field*, EPL **126**, 10005 (2019).
- [10805] M. Zeama and I. Nasser, *Tsallis entropy calculation for non-Coulombic helium*, Physica A **528**, 121468 (2019).
- [10806] I. Nasser, M. Zeama and A. Abdel-Hady, *Renyi, Fisher, Shannon, and their electron correlation tools for two-electron series*, Phys. Scr. **95**, 095401 (2020) (13pp), doi: 1088/1402-4896/abaa09
- [10807] I. Nasser, M. Zeama and A. Abdel-Hady, *Calculation of information entropies for the $1s^2$ state of helium-like ions*, International Journal of Quantum Chemistry (2020), doi: 10.1002/qua.26499
- [10808] S. Davis, J. Jain and B. Bora, *Computational statistical mechanics of a confined, three-dimensional Coulomb gas*, preprint (2020), 2004.11189 [cond-mat.stat-mech].
- [10809] S. Davis, *A classification of nonequilibrium steady states based on temperature correlations*, preprint (2022), 2206.12932 [cond-mat.stat-mech].
- [10810] S. Davis, *Temperatura y sus fluctuaciones en estados estacionarios fuera del equilibrio*, XXIII Simposio Chileno de Fisica (Chile, 22-24 November 2022).
- [10811] C. Farias and S. Davis, *A sufficient condition for superstatistics in steady state ensembles*, preprint (2023), 2312.04283 [cond-mat.stat-mech].

- [10812] H. Christodoulidi, T. Bountis and L. Drossos, *Numerical integration of variational equations for Hamiltonian systems with long range interactions*, Appl. Numerical Mathematics **104**, 158-165 (2016).
- [10813] C.G. Antonopoulos, T. Bountis and L. Drossos, *Coupled symplectic maps as models for subdiffusive processes in disordered Hamiltonian lattices*, Appl. Numerical Mathematics **104**, 110-119 (2016).
- [10814] T. Bountis and H. Christodoulidi, *Complex aspects in Hamiltonian dynamics and statistics*, Conference paper, www.researchgate.net/publication/282441878, Nonlinear Phenomena in Complex Systems **18** (?3), 288-302 (2015).
- [10815] A. Bountis, *Complex dynamics and statistics in Hamiltonian 1-dimensional lattices*, International J. Mathematics and Physics **9** (2), 21 (2018).
- [10816] D. Bagchi and C. Tsallis, *Universal sensitivity to the initial conditions of a d-dimensional Fermi-Pasta-Ulam model including long-range interactions*, communicated at the International School of Complexity (2015, Erice).
- [10817] D. Bagchi and C. Tsallis, *Sensitivity to initial conditions of d-dimensional long-range-interacting quartic Fermi-Pasta-Ulam model: Universal scaling*, Phys. Rev. E **93**, 062213 (2016) (5 pages).
- [10818] D. Bagchi and C. Tsallis, *Long-ranged Fermi-Pasta-Ulam systems in thermal contact: Crossover from q-statistics to Boltzmann-Gibbs statistics*, Phys. Lett. A **381**, 1123-1128 (2017), doi: 10.1016/j.physleta.2017.01.057
- [10819] D. Bagchi, *Thermal transport in the Fermi-Pasta-Ulam model with long-range interactions*, Phys. Rev. E **95**, 032102 (2017) (7 pages).
- [10820] C. Tsallis, *Introduction to Nonextensive Statistical Mechanics - Approaching a Complex World* (Springer, New York, 2009).
- [10821] C. Tsallis, *Introduction to Nonextensive Statistical Mechanics - Approaching a Complex World*, Second Edition (Springer-Nature, 2023).
- [10822] H. Suyari, *Fundamental Mathematics for Complex Systems - Mathematics for Power Laws and Tsallis Entropy*, (in Japanese) (Makino Publisher, 2010).
- [10823] J. Naudts, *Generalised Thermostatistics* (Springer, London, 2011) [ISBN: 978-0-85729-354-1].
- [10824] J. Naudts, *Thermodynamics from the perspective of information geometry*, comm. at 12th Joint European Thermodynamics Conference (Brescia, July 1-5, 2013).
- [10825] C. Tsallis, *The nonadditive entropy S_q : A door open to the nonuniversality of the mathematical expression of the Clausius thermodynamic entropy in terms of the probabilities of the microscopic configurations*, in *Concepts and Recent Advances in Generalized Information Measures and Statistics*, eds. A.M. Kowalski, R. Rossignoli and E.M.F. Curado, 56-79 (Bentham Science Publishers, 2013), eISBN: 978-1-60805-760-3 (2013), ISBN: 978-1-60805-761-0
- [10826] C. Tsallis, *The nonadditive entropy S_q and its applications in physics and elsewhere: Some remarks*, in Special Issue *Tsallis Entropy*, ed. A. Anastasiadis, Entropy **13**, 1765-1804 (2011).
- [10827] F. Vallianatos and L. Telesca, *Preface*, in Special Issue *Statistical Mechanics in Earth Physics and Natural Hazards*, ed. P. Vallianatos and L. Telesca, Acta Geophysica **60** (3), 409-501 (2012).
- [10828] F. Vallianatos and M. Kouli, *Evidence of non extensive statistical physics behavior in the watershed distribution in active tectonic areas. Examples from Greece*, First International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2013), eds. D.G. Hadjimitsis, K. Themistocleous, S. Michaelides, G. Papadavid, Proc. of SPIE **8795**, 879525 (2013) (9 pages), doi: 10.1117/12.2028316
- [10829] C. Tsallis, *Nonadditive entropy S_q and nonextensive statistical mechanics – Applications in geophysics and elsewhere*, Invited review in the Special Issue *Statistical Mechanics in Earth Physics and Natural Hazards*, ed. P. Vallianatos and L. Telesca, Acta Geophysica **60** (3), 502-525 (2012).
- [10830] A. Tzanis and F. Vallianatos, *Multidimensional earthquake frequency distributions consistent with self-organization of complex systems: The interdependence of magnitude, interevent time and interevent distance*, Geophysical Research Abstracts **14**, EGU2012-11579, EGU General Assembly (2012).
- [10831] A. Tzanis, F. Vallianatos and A. Efstathiou, *Multidimensional earthquake frequency distributions consistent with non-extensive statistical physics: The interdependence of magnitude, interevent time and interevent distance in North California*, Proceedings of the 13th International Congress, Chania, Sept. 2013, Bulletin of the Geological Society of Greece, vol. XLVII (2013) (12 pages).
- [10832] A. Efstathiou, A. Tzanis and F. Vallianatos, *Evidence of non extensivity in the evolution of seismicity along the San Andreas Fault, California, USA: An approach based on Tsallis statistical physics*, Physics and Chemistry of the Earth **85-86**, 56-68 (2015).
- [10833] F. Vallianatos and G. Chatzopoulos, *A complexity view into the physics of the accelerating seismic release hypothesis: Theoretical principles*, Entropy **20**, 754 (2018), doi:10.3390/e20100754

- [10834] A. Efstathiou, A. Tzanis and F. Vallianatos, *On the nature and dynamics of the seismogenetic systems of North California, USA: An analysis based on non-extensive statistical physics*, Physics of the Earth and Planetary Interiors **270**, 46-72 (2017).
- [10835] A. Tzanis and A. Efstathiou, *Earthquake recurrence intervals in complex seismogenetic systems*, preprint (2020).
- [10836] C.G. Antonopoulos, G. Michas, F. Vallianatos and T. Bountis, *Evidence of q-exponential statistics in Greek seismicity*, Physica A **409**, 71-77 (2014), doi: <http://dx.doi.org/10.1016/j.physa.2014.04.042>, 1405.4414 [nlin.CD].
- [10837] F. Vallianatos, G. Michas and G. Papadakis, *Non-extensive and natural time analysis of seismicity before the Mw6.4, October 12, 2013 earthquake in the South West segment of the Hellenic Arc*, Physica A **414**, 163-173 (2014), doi: <http://dx.doi.org/10.1016/j.physa.2014.07.038>
- [10838] F. Vallianatos, P. Benson, P. Meredith and P. Sammonds, *Experimental evidence of a non-extensive statistical physics behaviour of fracture in triaxially deformed Etna basalt using acoustic emissions*, EPL **97**, 58002 (2012) (6 pages).
- [10839] F. Vallianatos, *On the statistical physics of rockfalls: A non-extensive view*, EPL **101**, 10007 (2013) (4 pages).
- [10840] F. Vallianatos, *On the non-extensivity in Mars geological faults*, EPL **102**, 28006 (2013) (6 pages).
- [10841] S.L.E.F. da Silva and G. Corso, *Nonextensive Gutenberg-Richter law and the connection between earthquakes and marsquakes*, Eur. Phys. J. B (2021) (5 pages), doi: 10.1140/ep_jb/s10051-020-00015-5
- [10842] C. Stergiopoulos, I. Stavrakas, G. Hloupis, D. Triantis and F. Vallianatos, *Electrical and acoustic emissions in cement mortar beams subjected to mechanical loading up to fracture*, Engineering Failure Analysis (2013), in press, doi: <http://dx.doi.org/10.1016/j.engfailanal.2013.04.015>
- [10843] I. Stavrakas and A. Kyriazopoulos, *Tsallis entropy modeling of Pressure Stimulated Currents when cement-based materials are subjected to abrupt repetitive bending loadings*, in *Books of Abstracts*, Eds. S.K. Kourkoulis and D.A Triantis, 93-94 (2018); Procedia Structural Integrity **10**, 97-103 (2018).
- [10844] A. Loukidis, I. Stavrakas and D. Triantis, *The relaxation processes of pressure stimulated currents under the concept of non-extensive statistical physics*, The 1st Mediterranean Conference on Fracture and Structural Integrity, MedFract1, Procedia Structural Integrity **26**, 277-284 (2020).
- [10845] A. Loukidis, D. Triantis and I. Stavrakas, *Non-extensive statistical analysis of acoustic emissions recorded in marble and cement mortar specimens under mechanical load until fracture*, Entropy **22**, 1115 (2020), doi: 10.3390/e22101115
- [10846] A. Loukidis, D. Triantis and I. Stavrakas, *Non-extensive statistical analysis of acoustic emissions: The variability of entropic index q during loading of brittle materials until fracture*, Entropy **23**, 276 (2021), doi: 10.3390/e23030276
- [10847] A.N. Loukidis, *Determination of criticality in brittle materials by statistical physics methods, utilizing acoustic emission data*, Doctor Thesis (in Greek) (University of West Attica, School of Engineering, Department of Electrical and Electronics Engineering, 2022).
- [10848] A. Loukidis, I. Stavrakas and D. Triantis, *Non-extensive statistical mechanics in acoustic emissions: Detection of upcoming fracture in rock materials*, Appl. Sci. **13**, 3249 (2023).
- [10849] A. Kyriazopoulos, C. Anastasiadis, D. Triantis and F. Vallianatos, *Monitoring of acoustic emissions on three-point bending experiments in cement mortar beams in the light of non-extensive statistical physics*, in *Book of Abstracts*, Eds. S.K. Kourkoulis and D.A Triantis, 77-78 (2018).
- [10850] I. Stavrakas, D. Triantis, S.K. Kourkoulis, E.D. Pasiou and I. Dakanali, *Acoustic emission analysis of cement mortar specimens during three point bending tests*, Latin American Journal of Solids and Structures **13**, 2283-2297 (2016).
- [10851] S.K. Kourkoulis, A. Loukidis, E.D. Pasiou, I. Stavrakas and D. Triantis, *Response of fiber reinforced concrete while entering into the critical stage: An attempt to detect pre-failure indicators in terms of Non-Extensive Statistical Mechanics*, Theoretical and Applied Fracture Mechanics **123**, 103690 (2023).
- [10852] A. Greco, C. Tsallis, A. Rapisarda, A. Pluchino, G. Fichera and L. Contrafatto, *Acoustic emissions in compression of building materials: q-statistics enables the anticipation of the breakdown point*, European Physical Journal Special Topics **229** (5), 841-849 (2020).
- [10853] S.C. Vinciguerra, A. Greco, A. Pluchino, A. Rapisarda and C. Tsallis, *Acoustic emissions in rock deformation and failure: New Insights from q-statistical analysis*, Entropy **25**, 701 (2023).
- [10854] D. Wang, X. He, E. Wang, C. Li, D. Li and Z. Mao, *Joint response characteristics of AE and PSC in coal rheological-impact process*, Front. Earth Sci. **13**, 1586883 (2025).

- [10855] P.F.V. Garcia, J.C.R. Justen, M.J. Morschbacher, F.H. Ferreira, R. Surmas, D.F. Rossi and J.N. Lonardelli, *Multifractal Doyle-Eriksen-Seth-Hill deformation measurements applied to acoustic velocities on halite samples under compression*, American Rock Mechanics Association 25-0413 (2025).
- [10856] G. Niccolini, S.M. Potirakis, G. Lacidogna and O. Borla, *Criticality hidden in acoustic emissions and in changing electrical resistance during fracture of rocks and cement-based materials*, Materials **13**, 5608 (2020), doi: 10.3390/ma13245608
- [10857] Z. Xiao, F. Mei and C. Hu, *Causal analysis of roof caving on underground mine: A new theory and optimized DEMATEL approach*, Minerals **14**, 992 (2024).
- [10858] K. Naukhez, R.V. Sagar and J.M.C. Kishen, *q-statistical analysis of acoustic emissions recorded during unconfined uniaxial compression of ultra high-performance concrete*, communicated at the 11th International Conference on Fracture Mechanics of Concrete and Concrete Structures-FraMCoS-11 (2024).
- [10859] T. Shan, Z. Li, X. Wang, X. Zhang, E. Wang, S. Liu, H. Jia, Y. Niu, W. Sun, D. Chen and Q. Zhang, *Electric potential of thermally damaged granite under compression shear loading: Response mechanism and precursor*, Engineering Geology **340**, 107682 (2024).
- [10860] T. Shan, Z. Li, H. Jia, E. Wang, X. Wang, Y. Niu, X. Zhang, D. Chen, S. Yin and Q. Zhang, *Failure evolution and disaster prediction of rock under uniaxial compression based on non-extensive statistical analysis of electric potential*, International Journal of Mining Science and Technology **34**, 975-993 (2024).
- [10861] T. Chelidze, T. Matcharashvili, E. Mepharidze and N. Dovgal, *Complexity in geophysical time series of strain/fracture at laboratory and large dam scales: Review*, Entropy **25**, 467 (2023).
- [10862] T. Chelidze, T. Matcharashvili, A. Sborshchikovi, E. Mepharidze, D. Tepnadze and L. Laliashvili, *Analysis of the relationship between Enguri large dam monitoring entropic features*, Entropy **27**, 413 (2025).
- [10863] V. Sychev, L. Bogomolov and D. Kulkov, *Analysis of energy characteristics of acoustic emission signals during uniaxial compression of geomaterial samples*, STRPEP 2020, E3S Web of Conferences **196**, 02004 (2020), doi: 10.1051/e3sconf/202019602004
- [10864] N.B. Burud and J.M.C. Kishen, *Non-extensive statistical mechanics for acoustic emission in disordered media: entropy, size effect, and self-organization*, International Journal of Mechanical Sciences (2021), in press.
- [10865] D.D. Li, *Rail crack monitoring using acoustic emission technique*, Springer Theses (2018).
- [10866] C. Stergiopoulos, I. Stavrakas, D. Triantis, F. Vallianatos and J. Stonham, *Predicting fracture of mortar beams under three-point bending using non-extensive statistical modeling of electric emissions*, Physica A **419**, 603-611 (2015).
- [10867] E. de la Barra, P. Vega-Jorquera, S.L.E.F. da Silva and H. Torres, *Hydraulic fracturing assessment on seismic hazard by Tsallis statistics*, Eur. Phys. J. B **95**, 92 (2022).
- [10868] A. Alexandridis, I. Stavrakas, C. Stergiopoulos, G. Hloupis, K. Ninos and D. Triantis, *Non-destructive assessment of the three-point-bending strength of mortar beams using radial basis function neural networks*, Computers and Concrete **16** (6), 919-932 (2015).
- [10869] C. Stergiopoulos, I. Stavrakas, D. Triantis, G. Hloupis and F. Vallianatos, *The use of PSC technique to estimate the damage extension during three point bending test*, in *Mechanical and Materials Engineering of Modern Structure and Component Design*, Advanced Structured Materials **70**, 363-372 (2015).
- [10870] F. Vallianatos, *To be or not to be? A nonextensive view of b-value in the Gutenberg-Richter law*, Geophysical Research Abstracts **16**, EGU2014-13213 (2014).
- [10871] D.B. de Freitas, G.S. Franca, T.M. Scheerer, C.S. Vilar and R. Silva, *On a possible fractal relationship between the Hurst exponent and the nonextensive Gutenberg-Richter index*, preprint (2017), 1707.09018 [physics.geo-ph].
- [10872] D.B. de Freitas, G.S. Franca, T.M. Scheerer, C.S. Vilar and R. Silva, *Investigating the signatures of long-range persistence in seismic sequences along Circum-Pacific subduction zones*, Brazilian Journal Geophysics **37** (4), 409-418 (2019).
- [10873] F. Vallianatos, I.P. Baziotis, A. Udry and L.A. Taylor, *Application of non-extensive statistical physics on Martian nakhlites: A first-order approach on the crystal size distribution of pyroxene using Tsallis entropy*, EPL **108**, 58002 (2014) (5 pages), doi: 10.1209/0295-5075/108/58002
- [10874] D.B. de Freitas, G.S. Franca, T.M. Scherrer, C.S. Vilar and R. Silva, *Nonextensive triplet in geological faults system*, EPL **102**, 39001 (2013) (5 pages).
- [10875] T.M. Scherrer, G.S. Franca, R. Silva, D.B. de Freitas and C.S. Vilar, *Nonextensivity at the Circum-Pacific subduction zones - Preliminary studies*, Physica A **426**, 63-71 (2015).

- [10876] T.M. Scherrer, G.S. Franca, R. Silva, D.B. de Freitas and C.S. Vilar, *The influence of magnitudes types in the nonextensivity applied at the Circum-Pacific subduction zones*, *Revista Brasileira de Geofísica* **36** (4), 1-9 (2018).
- [10877] A. Tzanis and E. Tripoliti, *On the statistical nature and dynamics of seismogenesis in the NW Circum-Pacific belt: A study based on non-extensive statistical mechanics*, preprint (2019), arxiv 1901.09628
- [10878] T.M. Scherrer, G.S. Franca, R. Silva, D.B. de Freitas and C.S. Vilar, *Analysis of four Brazilian seismic areas using a nonextensive approach*, *EPL* **109**, 49001 (2015) (4 pages), doi: 10.1209/0295-5075/109/49001
- [10879] A. Isar, Review of “Introduction to Nonextensive Statistical Mechanics” (Springer, 2009), *Mathematical Reviews*, American Mathematical Society, MR2724662 (2012b:82004) (2012).
- [10880] I. Bonamassa, *Meccanica statistica nonestensiva e sistemi dinamici*, Tesi di Laurea di Fisica (Universita del Salento, Lecce, 2010).
- [10881] A. Anastasiadis, *Special issue: Tsallis entropy (Editorial)*, *Entropy* **14**, 174-176 (2012).
- [10882] W.C. McHarris, *Chaos and the quantum: how nonlinear effects can explain certain quantum paradoxes*, *J. Phys: Conference Series* **306**, 012050 (2011) (9 pages).
- [10883] C. Tsallis, *From nonlinear statistical mechanics to nonlinear quantum mechanics - Concepts and applications*, Invited paper for the Proceedings of the International Symposium on *Subnuclear Physics: Past, Present and Future*, held at the Pontifical Academy of Sciences (Vatican, 30 October to 2 November 2011), Eds. M. Sanchez Sorondo and A. Zichichi, *Pontificiae Academiae Scientiarum Scripta Varia* **119**, 129-137 (2014).
- [10884] C. Tsallis and A.R. Plastino, *Complejidad y la entropia no aditiva S_q* , Special Issue of *Revista Española de Física* **26** (3), 70-75 (Real Sociedad Española de Física, 2012).
- [10885] C. Tsallis, *Entropy: A unifying path for understanding complexity in natural, artificial and social systems*, *Knowledge Systems Management* **10**, 291-311 (IOS Press, 2011) Chapter 16, DOI 10.3233/IKS-2012-0198
- [10886] E.P. Borges, *O conceito de entropia e sua generalizacao*, preprint (2012).
- [10887] B.M. Boghosian, *Thermodynamics and statistical mechanics - From Boltzmann and Gibbs to Tsallis*, oral communication, College of Science and Engineering, American University of Armenia (20 November 2012, Yerevan).
- [10888] C. Tsallis, *News and views: About complexity and why to care*, invited paper, *Braz. J. Phys.* **44**, 283-285 (2014), doi: 10.1007/s13538-013-0154-x
- [10889] P. Charitos, *The Tsallis Distribution*, [Interview with J. Cleymans], *Alice Matters* (15 April 2013), <http://alicematters.web.cern.ch/?q=archive/201304>
- [10890] P. Charitos, *Meeting Constantino Tsallis*, [Interview with C. Tsallis], *Alice Matters* (15 April 2013), <http://alicematters.web.cern.ch/?q=archive/201304>
- [10891] M. Bersanelli, M. Gargantini, P.R. Iotti and M. C. Speciani, *Lecture di Geografia Generale*, Societa Editrice Internazionale (Torino, 2009).
- [10892] A.M. Kowalski, R.D. Rossignoli and E.M.F. Curado, *Concepts and Recent Advances in Generalized Information Measures and Statistics*, (Bentham Science Publishers, 2013), ISBN: 978-1-60805-761-0
- [10893] C. Tsallis, *An introduction to nonadditive entropies and a thermostistical approach of inanimate and living matter*, *Contemporary Physics* **55** (3), 179-197 (2014), doi: 10.1080/00107514.2014.900977
- [10894] L.J. Camacho-Vidales and A. Robledo, *A nonlinear dynamical view of Kleiber’s law on the metabolism of plants and animals*, *Entropy* **26**, 32 (2024).
- [10895] R.S. MacKay, A. Stefanovska and C. Tsallis, *Physics of biological oscillators: outlook*, in *The Physics of Biological Oscillators - New Insights into Non-Equilibrium & Non-Autonomous Systems*, A. Stefanovska and P.V.E. McClintock, Eds., 423-424 (2021), ISSN 1860-0832, doi: 10.1007/978 – 3 – 030 – 59805 – 1_27
- [10896] C. Tsallis and L.J.L. Cirto, *Thermodynamics is more powerful than the role to it reserved by Boltzmann-Gibbs statistical mechanics*, *Eur. Phys. J. Special Topics* **223**, 2161-2175 (2014).
- [10897] C. Tsallis, *Thermodynamics and statistical mechanics for complex systems - Foundations and applications*, Invited review presented at the XXVIIIth Marian Smoluchowski Symposium on Statistical Physics, held in Zakopane, Poland, in 22-26 September 2014; *Acta Physica Polonica B* **46** (6), 1089-1101 (2015).
- [10898] A. Deppman and A. Soletto, *O ovo de Colombo da termodinamica quantica*, *Scientific American-Brasil* **145**, 68-73 (Junho 2014).
- [10899] E.P. Borges, *O conceito de entropia e sua generalizacao*, em *Ciencia na Transicao dos Seculos - Conceitos, Praticas e Historicidade*, Eds. O. Freire Junior, I.M. Greca e C. Nino El-Hani (Editora da Universidade Federal da Bahia, 2014).
- [10900] J. Cartwright, *Roll over, Boltzmann*, *Physics World* (Feature Article) **27** (5), 31-35 (May 2014).
- [10901] C. Tsallis, ed., *Virtual Special Issue on Soccer in Physics*, *Physica A* (June 2014).

- [10902] F. Osterreicher and J.A.P. Casquilho, *On the Gini-Simpson index and its generalization - A historic note*, South African Statistical Journal **52** (2) 129-137 (2018).
- [10903] G. Benedek and G. Watt, eds., *EPL Highlights 2015* (2016) (52 pages).
- [10904] D. Gualtieri, *Tsallis Entropy*, Tikalon blog by Dev Gualtieri (October 29, 2014); [http : //tikalon.com/blog/blog.php?article = 2014/Tsallis_entropy](http://tikalon.com/blog/blog.php?article=2014/Tsallis_entropy)
- [10905] C. Tsallis, *Approach of complexity in nature: Entropic nonuniqueness*, Axioms **5**, 20 (2016) (14 pages), doi:10.3390/axioms5030020
- [10906] C. Tsallis, *On the foundations of statistical mechanics*, European Phys. J. Special Topics **226**, 1433-1443 (2017).
- [10907] S. Araujo Soria, *Las propiedades emergentes de la sociedad como un sistema complejo*, RECIMAUC **2** (2), 391-401 (2018).
- [10908] C. Tsallis, *Like beauty, complexity is hard to define*, in *43 Visions for Complexity*, Series on Exploring Complexity, ed. S. Thurner (February 2017, World Scientific, Singapore).
- [10909] K.S. Cannata, *La puissance motrice de la chaleur. Il cammino della termodinamica da Sadi Carnot alle sfide della complessità*, Thesis in Philosophical Sciences (Università degli Studi di Catania, Dipartimento di Scienze Umanistiche, 2018).
- [10910] C. Tsallis, *News on non-Boltzmannian thermostistical systems*, Communication at the 14th Joint European Thermodynamics Conference (Budapest, May 21-25, 2017).
- [10911] C. Tsallis, *Foreword*, in *Complexity of Seismic Time Series: Measurement and Application*, Eds. F. Vallianatos, L. Telesca and T. Chelidze (Elsevier, 2019), ISBN: 978-0-12-813138-1
- [10912] S. Thurner, R. Hanel and P. Klimek, *Introduction to the Theory of Complex Systems*, (Oxford University Press, 2018).
- [10913] A. Rapisarda, S. Thurner and C. Tsallis, *Nonadditive Entropies and Complex Systems*, Entropy **21**, 538 (2019), doi: 10.3390/e21050538
- [10914] G. Benedek, Recensioni, referring to M. Consoli and A. Pluchino, *Michelson-Morley Experiments - An Enigma for Physics and the History of Science*, (World Scientific, Singapore, 2018).
- [10915] C. Tsallis, *Beyond Boltzmann-Gibbs-Shannon in physics and elsewhere*, Entropy **21**, 696 (2019), doi: 10.3390/e21070696
- [10916] M. Ribeiro, T. Henriques, L. Castro, A. Souto, L. Antunes, C. Costa-Santos and A. Teixeira, *The entropy universe*, Entropy **23**, 222 (2021), doi: 10.3390/e23020222
- [10917] N. Studart, *Complexidade na física e seu ensino: Apresentação da edição especial*, Revista Brasileira de Ensino de Física, **43**(1), e20210031 (2021).
- [10918] C. Tsallis, *Mecânica estatística de sistemas complexos*, Revista Brasileira de Ensino de Física **43** (1), e20200384 (2021), doi: 10.1590/1806-9126-RBEF-2020-0384
- [10919] S. Umarov and C. Tsallis, *Mathematical Foundations of Nonextensive Statistical Mechanics*, (World Scientific Publishers, Singapore, 2022).
- [10920] H. Haubold, *A perplexing solar investigation - Experimenting with neutrinos*, Research Features, Physical Sciences (August 25, 2021), covered by United Nations.
- [10921] C. Tsallis, *Entropy*, Encyclopedia **2**, 264-300 (MDPI Publishers, 2022), doi: 10.3390/encyclopedia2010018
- [10922] M. Bahrami, *Tsallis Statistics, a quick computational overview*, Wolfram Research (2022).
- [10923] C. Tsallis, *Enthusiasm and skepticism: Two pillars of science - A nonextensive statistics case*, Physics **4**, 609-632 (2022).
- [10924] T.S. Biro, *Jean Cleymans, stringy thermal model, Tsallis quantum statistics*, Physics **4**, 873-879 (2022).
- [10925] J.T. Arantes, *Study proposes mathematical tool to help understand fractal structure of quark-gluon plasma*, Phys. Org. Interview with A. Deppman / University of Sao Paulo (2022) <https://phys.org/news/2022-06-mathematical-tool-fractal-quark-gluon-plasma.html>
- [10926] C. Tsallis, *Les sinueux chemins de l'entropie*, Entropie: thermodynamique - énergie - environnement - économie, ISTE Open Science (2023).
- [10927] C. Tsallis, *Nonadditive entropies and statistical mechanics at the edge of chaos - A bridge between natural and social sciences*, Philosophical Transactions A **381**, 20220293 (2023).
- [10928] H.J. Haubold and C. Tsallis, *Nonadditive entropies - Generalising Boltzmann's approach to thermodynamics*, Physical Sciences (2022).
- [10929] C. Tsallis, *Open mathematical issues in nonextensive statistical mechanics*, Matematica Contemporanea **58**, 316-337 (2023).
- [10930] C. Tsallis, *Nonadditive entropies and statistical mechanics - Some open mathematical problems*, Uzbek Mathematical Journal Uzbek Mathematical Journal **69** (2), 287-299 (2025).

- [10931] L.M. Surhone, M.T. Timpledon and S.F. Marseken, *Tsallis Entropy* (Betascript Publishing, 2010).
- [10932] F. Paillusson, *Statistical Mechanics for Physicists and Mathematicians*, (Cambridge University Press, 2024), in press.
- [10933] C. Tsallis, *Reminiscences of a half-a-century life in the world of theoretical physics*, Entropy **26**, 158 (2024).
- [10934] D. Eroglu, B.M. Boghosian, E.P. Borges and U. Tirnakli, *The statistics of q-statistics*, Entropy **26**, 554 (2024).
- [10935] C. Beck, *Superstatistics, non-additive entropies, and anomalous velocity distributions in quantum-tunneling chemical reactions*, Communication at *Complexity in High Energy and Statistical Physics* (Erice, 1 to 7 December 2024).
- [10936] U. Tirnakli, *Crossover from Boltzmann-Gibbs to Tsallis: Tendency of probability distributions in dynamical systems*, Communication at *Complexity in High Energy and Statistical Physics* (Erice, 1 to 7 December 2024).
- [10937] C. Tsallis, *Quantum chemical reactions, high-energy particle collisions, conservative and dissipative nonlinear dynamics, Fourier law, complex networks, COVID computer tomography, black holes, cosmology: What do they have in common?*, Communication at *Complexity in High Energy and Statistical Physics* (Erice, 1 to 7 December 2024).
- [10938] U. Tirnakli, *Nonadditive entropies and nonextensive statistical mechanics*, Editorial, Entropy **27**, 93 (2025).