Haroldo V Ribeiro

List of Publications by Year
in descending order

94 papers	2,392 citations	201674 27 h-index	254184 43 g-index
98 all docs	98 docs citations	98 times ranked	1860 citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of changing population or density on urban carbon dioxide emissions. Nature Communications, 2019, 10, 3204.	12.8	157
2	The Role of Fractional Time-Derivative Operators on Anomalous Diffusion. Frontiers in Physics, 2017, 5, .	2.1	126
3	Crime prediction through urban metrics and statistical learning. Physica A: Statistical Mechanics and Its Applications, 2018, 505, 435-443.	2.6	108
4	Differences in Collaboration Patterns across Discipline, Career Stage, and Gender. PLoS Biology, 2016, 14, e1002573.	5.6	100
5	City size and the spreading of COVID-19 in Brazil. PLoS ONE, 2020, 15, e0239699.	2.5	83
6	Complexity–entropy causality plane: A useful approach for distinguishing songs. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 2421-2428.	2.6	78
7	History of art paintings through the lens of entropy and complexity. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8585-E8594.	7.1	76
8	The dynamical structure of political corruption networks. Journal of Complex Networks, 2018, 6, 989-1003.	1.8	72
9	Distance to the Scaling Law: A Useful Approach for Unveiling Relationships between Crime and Urban Metrics. PLoS ONE, 2013, 8, e69580.	2.5	71
10	Complexity-Entropy Causality Plane as a Complexity Measure for Two-Dimensional Patterns. PLoS ONE, 2012, 7, e40689.	2.5	64
11	Clustering patterns in efficiency and the coming-of-age of the cryptocurrency market. Scientific Reports, 2019, 9, 1440.	3.3	62
12	Characterizing time series via complexity-entropy curves. Physical Review E, 2017, 95, 062106.	2.1	57
13	Discriminating image textures with the multiscale two-dimensional complexity-entropy causality plane. Chaos, Solitons and Fractals, 2016, 91, 679-688.	5.1	54
14	Analogies Between the Cracking Noise of Ethanol-Dampened Charcoal and Earthquakes. Physical Review Letters, 2015, 115, 025503.	7.8	52
15	Learning physical properties of liquid crystals with deep convolutional neural networks. Scientific Reports, 2020, 10, 7664.	3.3	44
16	Anomalous-diffusion approach applied to the electrical response of water. Physical Review E, 2011, 84, 041128.	2.1	43
17	Scale-Adjusted Metrics for Predicting the Evolution of Urban Indicators and Quantifying the Performance of Cities. PLoS ONE, 2015, 10, e0134862.	2.5	41
18	Scaling laws in the dynamics of crime growth rate. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 2672-2679.	2.6	40

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19	Characterization of river flow fluctuations via horizontal visibility graphs. Physica A: Statistical Mechanics and Its Applications, 2016, 444, 1003-1011.	2.6	38
20	Estimating physical properties from liquid crystal textures via machine learning and complexity-entropy methods. Physical Review E, 2019, 99, 013311.	2.1	36
21	The Advantage of Playing Home in NBA: Microscopic, Team-Specific and Evolving Features. PLoS ONE, 2016, 11, e0152440.	2.5	34
22	Different diffusive regimes, generalized Langevin and diffusion equations. Physical Review E, 2012, 85, 011147.	2.1	33
23	Characterizing stochastic time series with ordinal networks. Physical Review E, 2019, 100, 042304.	2.1	32
24	Scaling laws and universality in the choice of election candidates. Europhysics Letters, 2011, 96, 48001.	2.0	30
25	Anomalous diffusion and long-range correlations in the score evolution of the game of cricket. Physical Review E, 2012, 86, 022102.	2.1	29
26	Time dependent solutions for a fractional Schrödinger equation with delta potentials. Journal of Mathematical Physics, 2013, 54, 082107.	1.1	29
27	Unusual diffusing regimes caused by different adsorbing surfaces. Soft Matter, 2015, 11, 1658-1666.	2.7	29
28	Investigating the interplay between mechanisms of anomalous diffusion via fractional Brownian walks on a comb-like structure. New Journal of Physics, 2014, 16, 093050.	2.9	28
29	ordpy: A Python package for data analysis with permutation entropy and ordinal network methods. Chaos, 2021, 31, 063110.	2.5	27
30	Rural to Urban Population Density Scaling of Crime and Property Transactions in English and Welsh Parliamentary Constituencies. PLoS ONE, 2016, 11, e0149546.	2.5	27
31	Empirical analysis on the connection between power-law distributions and allometries for urban indicators. Physica A: Statistical Mechanics and Its Applications, 2014, 409, 175-182.	2.6	25
32	Collective dynamics of stock market efficiency. Scientific Reports, 2020, 10, 21992.	3.3	24
33	Universal bursty behaviour in human violent conflicts. Scientific Reports, 2015, 4, 4773.	3.3	23
34	Non-Markovian diffusion equation and diffusion in a porous catalyst. Chemical Engineering Journal, 2011, 172, 1083-1087.	12.7	22
35	Asymptotic behaviors of the Poisson-Nernst-Planck model, generalizations and best adjust of experimental data. Electrochimica Acta, 2017, 226, 40-45.	5.2	22
36	Dynamics of tournaments: the soccer case. European Physical Journal B, 2010, 75, 327-334.	1.5	19

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37	Transient Superdiffusion and Long-Range Correlations in the Motility Patterns of Trypanosomatid Flagellate Protozoa. PLoS ONE, 2016, 11, e0152092.	2.5	19
38	Characterization of time series via Rényi complexity–entropy curves. Physica A: Statistical Mechanics and Its Applications, 2018, 498, 74-85.	2.6	19
39	Determining liquid crystal properties with ordinal networks and machine learning. Chaos, Solitons and Fractals, 2022, 154, 111607.	5.1	19
40	Engagement in the electoral processes: Scaling laws and the role of political positions. Physical Review E, 2013, 88, 024802.	2.1	18
41	Spatial correlations, clustering and percolation-like transitions in homicide crimes. Europhysics Letters, 2015, 111, 18002.	2.0	18
42	Quenched and annealed disorder mechanisms in comb models with fractional operators. Physical Review E, 2020, 101, 022135.	2.1	18
43	Fractional Schrödinger equation with noninteger dimensions. Applied Mathematics and Computation, 2012, 219, 2313-2319.	2.2	17
44	Ion Motion in Electrolytic Cells: Anomalous Diffusion Evidences. Journal of Physical Chemistry B, 2017, 121, 2882-2886.	2.6	17
45	Continuous-time random walk as a guide to fractional Schrödinger equation. Journal of Mathematical Physics, 2010, 51, 092102.	1.1	16
46	Diffusive process on a backbone structure with drift terms. Physical Review E, 2013, 87, 012121.	2.1	16
47	Solutions for a non-Markovian diffusion equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 4193-4198.	2.1	15
48	Association between productivity and journal impact across disciplines and career age. Physical Review Research, 2021, 3, .	3.6	15
49	Association between population distribution and urban GDP scaling. PLoS ONE, 2021, 16, e0245771.	2.5	15
50	Earthquake-like patterns of acoustic emission in crumpled plastic sheets. Europhysics Letters, 2010, 92, 29001.	2.0	14
51	Fractional diffusion equations coupled by reaction terms. Physica A: Statistical Mechanics and Its Applications, 2016, 458, 9-16.	2.6	14
52	Extensions and solutions for nonlinear diffusion equations and random walks. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190432.	2.1	14
53	Permutation Jensen-Shannon distance: A versatile and fast symbolic tool for complex time-series analysis. Physical Review E, 2022, 105, 045310.	2.1	14
54	Solutions for a fractional diffusion equation with noninteger dimensions. Nonlinear Analysis: Real World Applications, 2012, 13, 1955-1960.	1.7	13

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55	Reaction on a solid surface supplied by an anomalous mass transfer source. Physica A: Statistical Mechanics and Its Applications, 2014, 410, 399-406.	2.6	13
56	Move-by-Move Dynamics of the Advantage in Chess Matches Reveals Population-Level Learning of the Game. PLoS ONE, 2013, 8, e54165.	2.5	12
57	A nonlinear Fokker–Planck equation approach for interacting systems: Anomalous diffusion and Tsallis statistics. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 1903-1907.	2.1	12
58	Mapping images into ordinal networks. Physical Review E, 2020, 102, 052312.	2.1	12
59	Universal patterns in sound amplitudes of songs and music genres. Physical Review E, 2011, 83, 017101.	2.1	11
60	Solutions for a sorption process governed by a fractional diffusion equation. Physica A: Statistical Mechanics and Its Applications, 2016, 443, 32-41.	2.6	11
61	Intermittent Motion, Nonlinear Diffusion Equation and Tsallis Formalism. Entropy, 2017, 19, 42.	2.2	11
62	Spreading Patterns of the Influenza A (H1N1) Pandemic. PLoS ONE, 2011, 6, e17823.	2.5	10
63	Solutions for a <mml:math altimg="si93.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.co...	2.6	10
64	Extensive characterization of seismic laws in acoustic emissions of crumpled plastic sheets. Europhysics Letters, 2016, 114, 59002.	2.0	10
65	Anomalous diffusion and transport in heterogeneous systems separated by a membrane. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20160502.	2.1	10
66	Unveiling relationships between crime and property in England and Wales via density scale-adjusted metrics and network tools. PLoS ONE, 2018, 13, e0192931.	2.5	10
67	Commuting network effect on urban wealth scaling. Scientific Reports, 2021, 11, 22918.	3.3	10
68	Solutions for a diffusion equation with a backbone term. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P02022.	2.3	9
69	Transient anomalous diffusion in heterogeneous media with stochastic resetting. Physica A: Statistical Mechanics and Its Applications, 2022, 588, 126560.	2.6	9
70	Population density and spreading of COVID-19 in England and Wales. PLoS ONE, 2022, 17, e0261725.	2.5	8
71	Anomalous diffusion and random search in *xyz*-comb: exact results. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 053203.	2.3	7
72	Rural–urban scaling of age, mortality, crime and property reveals a loss of expected self-similar behaviour. Scientific Reports, 2020, 10, 16863.	3.3	6

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73	First passage time for a diffusive process under a geometric constraint. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P09017.	2.3	6
74	Symbolic sequences and Tsallis entropy. Brazilian Journal of Physics, 2009, 39, 444-447.	1.4	5
75	The soundscape dynamics of human agglomeration. New Journal of Physics, 2011, 13, 023028.	2.9	5
76	Exact propagator for a Fokker-Planck equation, first passage time distribution, and anomalous diffusion. Journal of Mathematical Physics, 2011, 52, 083301.	1.1	5
77	Fractional Calculus in Electrical Impedance Spectroscopy: Poisson â€" Nernst â€" Planck model and Extensions. International Journal of Electrochemical Science, 2017, , 11677-11691.	1.3	5
78	The hidden traits of endemic illiteracy in cities. Physica A: Statistical Mechanics and Its Applications, 2019, 515, 566-574.	2.6	5
79	Fractional Diffusion with Geometric Constraints: Application to Signal Decay in Magnetic Resonance Imaging (MRI). Mathematics, 2022, 10, 389.	2.2	5
80	Continuous Time Random Walk and different diffusive regimes. Acta Scientiarum - Technology, 2012, 34, .	0.4	4
81	Fractional diffusion equation, boundary conditions and surface effects. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P08019.	2.3	4
82	Electrolytic cell containing different groups of ions with anomalous diffusion approach. Journal of Electroanalytical Chemistry, 2015, 746, 25-30.	3.8	4
83	Nonlinear diffusion equation with reaction terms: Analytical and numerical results. Applied Mathematics and Computation, 2018, 330, 254-265.	2.2	4
84	Long-range spatial correlations and fluctuation statistics of lightning activity rates in Brazil. Europhysics Letters, 2013, 104, 69001.	2.0	3
85	Antipersistent behavior of defects in a lyotropic liquid crystal during annihilation. Physical Review E, 2013, 87, 054501.	2.1	3
86	We need more empirical investigations and model validation for a better understanding of crime. Physics of Life Reviews, 2015, 12, 36-37.	2.8	3
87	Gender difference in candidature processes for Brazilian elections. Physica A: Statistical Mechanics and Its Applications, 2020, 537, 122525.	2.6	3
88	On the dynamics of bubbles in boiling water. Chaos, Solitons and Fractals, 2011, 44, 178-183.	5.1	2
89	Anomalous diffusion in a symbolic model. Physica Scripta, 2011, 83, 045007.	2.5	2
90	Anomalous diffusion and sorption-desorption process in complex fluid systems. Communications in Nonlinear Science and Numerical Simulation, 2020, 90, 105411.	3.3	2

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91	Exact solution for a diffusive process on a backbone structure: Green function approach and external force. , 2014, , 196-207.		0
92	Results for an Electrolytic Cell Containing Two Groups of Ions: PNP - Model and Fractional Approach. , 2015, , 161-173.		0
93	Sobre a Detecção de Autocorrelações em Séries Temporais: Uma Comparação Objetiva entre Análise de Flutuações, Transformações Wavelet e Análise Entrópica. , 0, , .		0
94	Sorption–desorption, surface diffusion, and memory effects in a 3D system. Journal of Statistical Mechanics: Theory and Experiment, 2021, 2021, 113202.	2.3	0