ZoltÃ¡n NÃ©da

List of Publications by Year
in descending order

100 papers	4,904 citations	304743 22 h-index	91884 69 g-index
100 all docs	100 docs citations	100 times ranked	4662 citing authors

#	Article	IF	Citations
1	Wealth Distribution in Villages. Transition From Socialism to Capitalism in View of Exhaustive Wealth Data and a Master Equation Approach. Frontiers in Physics, 2022, 10, .	2.1	3
2	f-Gintropy: An Entropic Distance Ranking Based on the Gini Index. Entropy, 2022, 24, 407.	2.2	3
3	Synchronization patterns in rings of time-delayed Kuramoto oscillators. Communications in Nonlinear Science and Numerical Simulation, 2021, 93, 105505.	3.3	4
4	Transient Dynamics in the Random Growth and Reset Model. Entropy, 2021, 23, 306.	2.2	7
5	Wealth distribution in modern societies: Collected data and a master equation approach. Physica A: Statistical Mechanics and Its Applications, 2021, 581, 126194.	2.6	7
6	Oscillations and collective behavior in convective flows. Physics of Fluids, 2021, 33, .	4.0	6
7	Gintropy: Gini Index Based Generalization of Entropy. Entropy, 2020, 22, 879.	2.2	17
8	Flickering candle flames and their collective behavior. Scientific Reports, 2020, 10, 21305.	3.3	11
9	Scaling in income inequalities and its dynamical origin. Physica A: Statistical Mechanics and Its Applications, 2020, 549, 124491.	2.6	11
10	Cross-Correlations in the Brownian Motion of Colloidal Nanoparticles. Studia Universitatis BabeÈ™-Bolyai Physica, 2020, 65, 27-34.	0.0	0
11	Scaling in the space-time of the Internet. Scientific Reports, 2019, 9, 9734.	3.3	2
12	Pattern selection in a ring of Kuramoto oscillators. Communications in Nonlinear Science and Numerical Simulation, 2019, 78, 104868.	3.3	10
13	Entropic Divergence and Entropy Related to Nonlinear Master Equations. Entropy, 2019, 21, 993.	2.2	11
14	The Space-time of Physics: a Kinetic Space. Hungarian Studies Yearbook, 2019, 1, 10-24.	0.2	0
15	Unidirectional random growth with resetting. Physica A: Statistical Mechanics and Its Applications, 2018, 499, 335-361.	2.6	26
16	Universality in the coarse-grained fluctuations for a class of linear dynamical systems. Physica A: Statistical Mechanics and Its Applications, 2018, 503, 215-220.	2.6	0
17	Commuting patterns: the flow and jump model and supporting data. EPJ Data Science, 2018, 7, .	2.8	10
18	Entropic Distance for Nonlinear Master Equation. Universe, 2018, 4, 10.	2.5	5

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19	Gamblerâ€™s ruin problem on ErdÅ‘sâ€“RÃ©nyi graphs. Physica A: Statistical Mechanics and Its Applications, 2017, 468, 147-157.	2.6	3
20	Equilibrium distributions in entropy driven balanced processes. Physica A: Statistical Mechanics and Its Applications, 2017, 474, 355-362.	2.6	3
21	Cell-size distribution and scaling in a one-dimensional Kolmogorov-Johnson-Mehl-Avrami lattice model with continuous nucleation. Physical Review E, 2017, 96, 042145.	2.1	3
22	Dynamical stationarity as a result of sustained random growth. Physical Review E, 2017, 95, 032130.	2.1	9
23	Science and Facebook: The same popularity law!. PLoS ONE, 2017, 12, e0179656.	2.5	25
24	Time-scale effects on the gain-loss asymmetry in stock indices. Physical Review E, 2016, 94, 022311.	2.1	4
25	The advantage of inhomogeneity â€" Lessons from a noise driven linearized dynamical system. Physica A: Statistical Mechanics and Its Applications, 2016, 445, 310-317.	2.6	2
26	Further We Travel the Faster We Go. PLoS ONE, 2016, 11, e0148913.	2.5	8
27	An improved radiation model and its applicability for understanding commuting patterns in Hungary. Regional Statistics, 2016, 6, 27-38.	0.8	13
28	A springâ€"block analogy for the dynamics of stock indexes. Physica A: Statistical Mechanics and Its Applications, 2015, 427, 122-131.	2.6	8
29	Sync or anti-sync â€" dynamical pattern selection in coupled self-sustained oscillator systems. Journal of Physics: Conference Series, 2014, 510, 012009.	0.4	1
30	Kinetic roughening of a soft dewetting line under quenched disorder: A numerical study. Physical Review E, 2014, 90, 052404.	2.1	2
31	Order and disorder in coupled metronome systems. European Physical Journal: Special Topics, 2014, 223, 649-663.	2.6	1
32	The rhythm of coupled metronomes. European Physical Journal B, 2013, 86, 1.	1.5	12
33	Walkie-talkie measurements for the speed of radio waves in air. Physics Education, 2013, 48, 80-86.	0.5	1
34	Chaos on the conveyor belt. Physical Review E, 2013, 87, 042920.	2.1	9
35	The complex parameter space of a two-mode oscillator model. Physica D: Nonlinear Phenomena, 2013, 256-257, 43-50.	2.8	4
36	A kinetic Monte Carlo study for stripe-like magnetic domains in ferrimagnetic thin films. Open Physics, 2013, 11, .	1.7	1

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37	Viscous potential flow analysis of peripheral heavy ion collisions. Physical Review C, 2013, 87, .	2.9	25
38	Kuramoto-type phase transition with metronomes. European Journal of Physics, 2013, 34, 1451-1463.	0.6	9
39	Fragmentation of drying paint layers. , 2013, , .		1
40	Human Mobility in a Continuum Approach. PLoS ONE, 2013, 8, e60069.	2.5	67
41	Hierarchical Settlement Networks. Regional Statistics, 2013, 3, 30-40.	0.8	1
42	Fluctuations in hadronizing quark gluon plasma. Physical Review C, 2012, 85, .	2.9	11
43	OPTIMIZATION INDUCED COLLECTIVE BEHAVIOR IN A SYSTEM OF FLASHING OSCILLATORS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1230002.	1.7	0
44	WINNING STRATEGIES IN CONGESTED TRAFFIC. International Journal of Modern Physics C, 2012, 23, 1250063.	1.7	1
45	The Boltzmann constant from a snifter. European Journal of Physics, 2012, 33, 455-465.	0.6	3
46	A seed-diffusion model for tropical tree diversity patterns. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 4798-4806.	2.6	3
47	Income distribution patterns from a complete social security database. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 5611-5619.	2.6	19
48	Earthquake model describes traffic jams caused by imperfect driving styles. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 5727-5738.	2.6	7
49	Kinetic Monte Carlo approach for triangularâ€shaped Pt islands on Pt(111) surfaces. Physica Status Solidi (B): Basic Research, 2012, 249, 1709-1716.	1.5	8
50	Spring-block approach for crack patterns in glass. Open Physics, 2012, 10, .	1.7	2
51	Synchronization of flashing electronic oscillators. , 2011, , .		0
52	Spring-Block Model Reveals Region-Like Structures. PLoS ONE, 2011, 6, e16518.	2.5	6
53	A Kinetic Monte Carlo Approach for Self-Diffusion of Pt Atom Clusters on a Pt(111) Surface. Communications in Computational Physics, 2011, 10, 920-939.	1.7	4
54	Spring-block approach for nanobristle patterns. Chemical Physics Letters, 2011, 511, 378-383.	2.6	7

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55	Spring-block model for a single-lane highway traffic. Open Physics, 2011, 9, 1002-1009.	1.7	6
56	Topology of the Erasmus student mobility network. Physica A: Statistical Mechanics and Its Applications, 2011, 390, 2601-2610.	2.6	24
57	A spatially explicit model for tropical tree diversity patterns. Journal of Theoretical Biology, 2010, 265, 517-523.	1.7	15
58	Criticality and pattern formation in fracture by residual stresses. Physical Review E, 2010, 82, 046118.	2.1	9
59	Persistent collective trend in stock markets. Physical Review E, 2010, 82, 066113.	2.1	25
60	Periodicity enhancement of two-mode stochastic oscillators in a CNN type architecture. , 2010, , .		0
61	Nontrivial spontaneous synchronization. Physical Review E, 2009, 79, 056205.	2.1	4
62	Correlation clustering on networks. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 345003.	2.1	6
63	Stochastic optimization of spin-glasses on cellular neural/nonlinear network based processors. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 1024-1030.	2.6	2
64	Unexpected synchronization. Journal of Physics: Conference Series, 2009, 182, 012026.	0.4	2
65	Cellular Neural Networks for NP-Hard Optimization. Eurasip Journal on Advances in Signal Processing, 2009, 2009, .	1.7	5
66	Statistical physics on cellular neural network computers. Physica D: Nonlinear Phenomena, 2008, 237, 1226-1234.	2.8	7
67	Collective behavior of electronic fireflies. European Physical Journal B, 2008, 65, 271-277.	1.5	6
68	MOLECULAR DYNAMICS APPROACH TO CORRELATION CLUSTERING. International Journal of Modern Physics C, 2008, 19, 1349-1358.	1.7	2
69	Cellular neural networks for NP-hard optimization. , 2008, , .		4
70	Collective behavior of electronic fireflies. , 2008, 65, 271.		1
71	<title>Controlled deposition of photonic polystyrene-nanosphere films</title>. , 2007, , .		3
72	Wealth distribution and Pareto's law in the Hungarian medieval society. Physica A: Statistical Mechanics and Its Applications, 2007, 380, 271-277.	2.6	25

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73	On the size distribution of Poisson Voronoi cells. Physica A: Statistical Mechanics and Its Applications, 2007, 385, 518-526.	2.6	454
74	Disorder-driven phase transition in a spring-block type magnetization model. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 361, 18-23.	2.1	5
75	Shake-induced order in nanosphere systems. European Physical Journal E, 2007, 23, 153-159.	1.6	11
76	Wealth distribution in modern and medieval societies. European Physical Journal: Special Topics, 2007, 143, 81-85.	2.6	3
77	Random Number Generator and Monte Carlo type Simulations on the CNN-UM. , 2006, , .		3
78	Phase transition in an optimal clusterization model. Physica A: Statistical Mechanics and Its Applications, 2006, 362, 357-368.	2.6	11
79	Stochastic simulations on the cellular wave computers. European Physical Journal B, 2006, 51, 407-411.	1.5	10
80	PERSPECTIVES FOR MONTE CARLO SIMULATIONS ON THE CNN UNIVERSAL MACHINE. International Journal of Modern Physics C, 2006, 17, 909-922.	1.7	8
81	A family-network model for wealth distribution in societies. Physica A: Statistical Mechanics and Its Applications, 2005, 353, 515-528.	2.6	47
82	Understanding self-assembled nanosphere patterns. Chemical Physics Letters, 2005, 408, 241-246.	2.6	38
83	Rheology of Concentrated Suspensions: A Lattice Model. , 2005, , 639-645.		0
84	A spring-block model for Barkhausen noise. Modelling and Simulation in Materials Science and Engineering, 2005, 13, 1341-1352.	2.0	10
85	Synchronization of two-mode stochastic oscillators: a new model for rhythmic applause and much more. Physica A: Statistical Mechanics and Its Applications, 2003, 321, 238-247.	2.6	22
86	Measuring preferential attachment in evolving networks. Europhysics Letters, 2003, 61, 567-572.	2.0	403
87	Flatness of the setting Sun. American Journal of Physics, 2003, 71, 379-385.	0.7	5
88	Spiral Cracks in Drying Precipitates. Physical Review Letters, 2002, 88, 095502.	7.8	78
89	Networks in life: scaling properties and eigenvalue spectra. Physica A: Statistical Mechanics and Its Applications, 2002, 314, 25-34.	2.6	79
90	Evolution of the social network of scientific collaborations. Physica A: Statistical Mechanics and Its Applications, 2002, 311, 590-614.	2.6	1,999

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91	Spiral cracks without twisting. Nature, 2001, 410, 166-166.	27.8	49
92	Collective Dynamics of Two-Mode Stochastic Oscillators. Physical Review Letters, 2001, 87, .	7.8	26
93	The sound of many hands clapping. Nature, 2000, 403, 849-850.	27.8	596
94	Computer simulation of the microstructure and rheology of semi-solid alloys under shear. Acta Materialia, 2000, 48, 3773-3782.	7.9	38
95	Physics of the rhythmic applause. Physical Review E, 2000, 61, 6987-6992.	2.1	196
96	Pattern Formation and Selection in Quasistatic Fracture. Physical Review Letters, 2000, 85, 662-665.	7.8	70
97	Reconsideration of continuum percolation of isotropically oriented sticks in three dimensions. Physical Review E, 1999, 59, 3717-3719.	2.1	89
98	On the circular hydraulic jump. American Journal of Physics, 1999, 67, 723-731.	0.7	42
99	The dripping faucet revisited. Chaos, 1996, 6, 59-62.	2.5	10
100	Stochastic resonance in Ising systems. Physical Review E, 1995, 51, 5315-5317.	2.1	40