Anirban Chakraborti

List of Publications by Year
in descending order

103 papers	3,534 citations	279701 23 h-index	161767 54 g-index
117 all docs	117 docs citations	117 times ranked	1604 citing authors

#	ARTICLE	IF	CITATIONS
1	Network-centric Indicators for Fragility in Global Financial Indices. Frontiers in Physics, 2021, 8, .	1.0	6
2	Network geometry and market instability. Royal Society Open Science, 2021, 8, 201734.	1.1	18
3	Enhanced photocatalytic activity of plasmonic Au nanoparticles incorporated MoS2 nanosheets for degradation of organic dyes. Journal of Materials Science: Materials in Electronics, 2021, 32, 6168-6184.	1.1	10
4	Distress propagation on production networks: Coarse-graining and modularity of linkages. Physica A: Statistical Mechanics and Its Applications, 2021, 568, 125714.	1.2	3
5	Phase separation and scaling in correlation structures of financial markets. Journal of Physics Complexity, 2021, 2, 015002.	0.9	9
6	Visible light–driven photocatalytic degradation of methyl orange by Fe_2O_3–$BiOCl_{0.5}Br_{0.5}$ composite photocatalyst. Asia-Pacific Journal of Chemical Engineering, 2021, 16, e2715.	0.8	0
7	Visible light driven photocatalysis of organic dyes using SnO2 decorated MoS2 nanocomposites. Chemical Physics Letters, 2020, 738, 136874.	1.2	58
8	Identifying the global terror hubs and vulnerable motifs using complex network dynamics. Physica A: Statistical Mechanics and Its Applications, 2020, 540, 123113.	1.2	5
9	A novel approach for classification of mental tasks using multiview ensemble learning (MEL). Neurocomputing, 2020, 417, 558-584.	3.5	27
10	Interaction of fluorescent gold nanoclusters with transition metal dichalcogenides nanosheets: A spectroscopic study. Journal of Luminescence, 2020, 227, 117589.	1.5	5
11	Emerging spectra characterization of catastrophic instabilities in complex systems. New Journal of Physics, 2020, 22, 063043.	1.2	10
12	Hamiltonian energy as an efficient approach to identify the significant key regulators in biological networks. PLoS ONE, 2019, 14, e0221463.	1.1	2
13	Complex Market Dynamics in the Light of Random Matrix Theory. New Economic Windows, 2019, , 13-34.	1.0	13
14	Hurst Exponent as a New Ingredient to Parametric Feature Set for Mental Task Classification. Advances in Intelligent Systems and Computing, 2018, , 129-137.	0.5	1
15	Quantifying invariant features of within-group inequality in consumption across groups. Journal of Economic Interaction and Coordination, 2018, 13, 469-490.	0.4	3
16	Cognitive Task Classification Using Fuzzy Based Empirical Wavelet Transform. , 2018, , .		1
17	Global Income Inequality and Savings: A Data Science Perspective. , 2018, , .		0
18	Identifying long-term precursors of financial market crashes using correlation patterns. New Journal of Physics, 2018, 20, 103041.	1.2	35

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19	Gold nanoflowers as efficient hosts for SERS based sensing and bio-imaging. Nano Structures Nano Objects, 2018, 16, 329-336.	1.9	31
20	Spatio-Temporal Networks of Social Conflicts: Analysis and Modeling. , 2018, , .		2
21	Role of a polymeric component in the phase separation of ternary fluid mixtures: a dissipative particle dynamics study. Soft Matter, 2018, 14, 4317-4326.	1.2	12
22	The Microscopic Origin of the Pareto Law and Other Power-Law Distributions. New Economic Windows, 2017, , 159-176.	1.0	1
23	Kinetic Exchange Models as D Dimensional Systems: A Comparison of Different Approaches. New Economic Windows, 2017, , 147-158.	1.0	2
24	Patterns of Linguistic Diffusion in Space and Time: The Case of Mazatec. New Economic Windows, 2017, , 227-251.	1.0	1
25	A model-free characterization of recurrences in stationary time series. Physica A: Statistical Mechanics and Its Applications, 2017, 474, 312-318.	1.2	6
26	Investigating resonance energy transfer from protein molecules to van der Waals nanosheets. RSC Advances, 2017, 7, 26250-26255.	1.7	11
27	Effect of bond-disorder on the phase-separation kinetics of binary mixtures: A Monte Carlo simulation study. Journal of Chemical Physics, 2017, 147, 124902.	1.2	5
28	Financial fluctuations anchored to economic fundamentals: A mesoscopic network approach. Scientific Reports, 2017, 7, 8055.	1.6	11
29	A complex network analysis of ethnic conflicts and human rights violations. Scientific Reports, 2017, 7, 8283.	1.6	11
30	Sectoral Co-movements in the Indian Stock Market: A Mesoscopic Network Analysis. Evolutionary Economics and Social Complexity Science, 2017, , 211-238.	0.4	5
31	Resonance Raman scattering and ab initio calculation of electron energy loss spectra of MoS 2 nanosheets. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 4057-4061.	0.9	3
32	Can an interdisciplinary field contribute to one of the parent disciplines from which it emerged?. European Physical Journal: Special Topics, 2016, 225, 3127-3135.	1.2	4
33	Power-Laws as Statistical Mixtures. Springer Proceedings in Complexity, 2016, , 271-282.	0.2	1
34	Invariant features of spatial inequality in consumption: The case of India. Physica A: Statistical Mechanics and Its Applications, 2016, 442, 169-181.	1.2	12
35	Group-Based Pricing to Shape Demand in Real-Time Electricity Markets. Lecture Notes in Computer Science, 2016, , 121-128.	1.0	0
36	STATPHYS-KOLKATA VIII. Journal of Physics: Conference Series, 2015, 638, 011001.	0.3	1

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37	Spatiotemporal pattern formation in a prey-predator model under environmental driving forces. Journal of Physics: Conference Series, 2015, 638, 012004.	0.3	2
38	Statistical mechanics of competitive resource allocation using agent-based models. Physics Reports, 2015, 552, 1-25.	10.3	79
39	Physicistsâ€™ Approaches to a Few Economic Problems. New Economic Windows, 2015, , 237-286.	1.0	1
40	Kinetic Exchange Models in Economics and Sociology. Springer Proceedings in Mathematics and Statistics, 2015, , 69-88.	0.1	2
41	Copulas and time series with long-ranged dependencies. Physical Review E, 2014, 89, 042117.	0.8	14
42	Ab initio calculation of magnetic properties of p-block element doped ZnO. RSC Advances, 2014, 4, 45598-45602.	1.7	22
43	Themes and Applications of Kinetic Exchange Models: Redux. New Economic Windows, 2014, , 99-129.	1.0	3
44	Kinetic exchange models: From molecular physics to social science. American Journal of Physics, 2013, 81, 618-623.	0.3	30
45	New classes of spin chains from $(Swidehat{O}_{(q)}(N)$(SOÌ,(q)(N), $Swidehat{p}$ Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 42 entanglement entropies. Journal of Mathematical Physics, 2013, 54, .	0.5	1
46	Statistical inference of co-movements of stocks during a financial crisis. Journal of Physics: Conference Series, 2013, 473, 012008.	0.3	4
47	Study of Statistical Correlations in Intraday and Daily Financial Return Time Series. New Economic Windows, 2013, , 77-104.	1.0	4
48	Entangled three-particle states in magnetic field: periodic correlations and density matrices. Indian Journal of Physics, 2012, 86, 791-800.	0.9	6
49	The near-extreme density of intraday log-returns. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 147-155.	1.2	5
50	Econophysics review: II. Agent-based models. Quantitative Finance, 2011, 11, 1013-1041.	0.9	205
51	Opinion Formation in the Kinetic Exchange Models. New Economic Windows, 2011, , 289-304.	1.0	1
52	Threshold-induced phase transition in kinetic exchange models. Physical Review E, 2011, 83, 061130.	0.8	11
53	Econophysics review: I. Empirical facts. Quantitative Finance, 2011, 11, 991-1012.	0.9	265
54	Quantum entanglement: the unitary 8-vertex braid matrix with imaginary rapidity. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 482001.	0.7	2

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55	Basic kinetic wealth-exchange models: common features and open problems. European Physical Journal B, 2010, 73, 145-153.	0.6	75
56	Opinion formation in kinetic exchange models: Spontaneous symmetry-breaking transition. Physical Review E, 2010, 82, 056112.	0.8	78
57	Agent-based models of economic interactions. , 2010, , 3-29.		0
58	First principles calculations of the optical properties of CxNysingle walled nanotubes. Nanotechnology, 2009, 20, 175701.	1.3	41
59	Variational Principle for the Pareto Power Law. Physical Review Letters, 2009, 103, 228701.	2.9	31
60	Gamma-distribution and wealth inequality. Pramana - Journal of Physics, 2008, 71, 233-243.	0.9	32
61	Relaxation in statistical many-agent economy models. European Physical Journal B, 2007, 57, 219-224.	0.6	28
62	Financial Time-series Analysis: a Brief Overview. , 2007, , 51-67.		5
63	Influence of saving propensity on the power-law tail of the wealth distribution. Physica A: Statistical Mechanics and Its Applications, 2006, 369, 723-736.	1.2	47
64	An Outlook on Correlations in Stock Prices. , 2006, , 13-23.		2
65	FINANCIAL AND OTHER SPATIO-TEMPORAL TIME SERIES: LONG-RANGE CORRELATIONS AND SPECTRAL PROPERTIES. International Journal of Modern Physics C, 2005, 16, 1733-1743.	0.8	5
66	Statistical model with a standardÎ"distribution. Physical Review E, 2004, 70, 016104.	0.8	130
67	Searching for good strategies in adaptive minority games. Physical Review E, 2004, 69, 036125.	0.8	18
68	Gibbs versus non-Gibbs distributions in money dynamics. Physica A: Statistical Mechanics and Its Applications, 2004, 340, 334-339.	1.2	49
69	Intelligent minority game with genetic crossover strategies. European Physical Journal B, 2003, 34, 373-377.	0.6	13
70	Adaptation using hybridized genetic crossover strategies. Physica A: Statistical Mechanics and Its Applications, 2003, 322, 701-709.	1.2	13
71	Dynamic asset trees and Black Monday. Physica A: Statistical Mechanics and Its Applications, 2003, 324, 247-252.	1.2	250
72	Dynamics of market correlations: Taxonomy and portfolio analysis. Physical Review E, 2003, 68, 056110.	0.8	546

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73	Asset Trees and Asset Graphs in Financial Markets. Physica Scripta, 2003, T106, 48.	1.2	145
74	Biology Helps You to Win a Game. Physica Scripta, 2003, T106, 32-35.	1.2	7
75	MARKET APPLICATION OF THE PERCOLATION MODEL: RELATIVE PRICE DISTRIBUTION. International Journal of Modern Physics C, 2002, 13, 25-29.	0.8	6
76	DISTRIBUTIONS OF MONEY IN MODEL MARKETS OF ECONOMY. International Journal of Modern Physics C, 2002, 13, 1315-1321.	0.8	110
77	Dynamic asset trees and portfolio analysis. European Physical Journal B, 2002, 30, 285-288.	0.6	150
78	A self-organising model of market with single commodity. Physica A: Statistical Mechanics and Its Applications, 2001, 297, 253-259.	1.2	16
79	THE EUCLIDEAN TRAVELLING SALESMAN PROBLEM: FREQUENCY DISTRIBUTION OF NEIGHBORS FOR SMALL-SIZE SYSTEMS. International Journal of Modern Physics C, 2001, 12, 857-863.	0.8	3
80	The travelling salesman problem on randomly diluted lattices: Results for small-size systems. European Physical Journal B, 2000, 16, 677-680.	0.6	5
81	Anomalous transmission in a hierarchical lattice. Physical Review B, 2000, 61, 7395-7401.	1.1	5
82	Statistical mechanics of money: how saving propensity affects its distribution. European Physical Journal B, 2000, 17, 167-170.	0.6	349
83	Opinion Dynamics, Minority Spreading and Heterogeneous Beliefs. , 0, , 367-391.		4
84	Global Terrorism versus Social Permeability to Underground Activities. , 0, , 393-416.		2
85	Quantifying Invariant Features of Within-Group Inequality in Consumption Across Groups. SSRN Electronic Journal, 0, , .	0.4	0
86	A Thermodynamic Formulation of Economics. , 0, , 1-33.		7
87	A Thermodynamic Formulation of Social Science. , 0, , 279-309.		13
88	Computer Simulation of Language Competition by Physicists. , 0, , 311-337.		4
89	Social Opinion Dynamics. , 0, , 339-366.		9
90	How a"Hit"is Born: The Emergence of Popularity from the Dynamics of Collective Choice. , 0, , 417-447.		15

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91	Crowd Dynamics. , 0, , 449-472.		5
92	Complexities of Social Networks: A Physicist's Perspective. , 0, , 473-506.		5
93	Self-organization Principles in Supply Networks and Production Systems. , 0, , 535-559.		14
94	Zero-intelligence Models of Limit-order Markets. , 0, , 35-63.		2
95	Growth of Firms and Networks. , 0, , 99-129.		2
96	A Review of Empirical Studies and Models of Income Distributions in Society. , 0, , 131-159.		40
97	Models of Wealth Distributionsâ€" A Perspective. , 0, , 161-190.		6
98	The Contribution of Money-transfer Models to Economics. , 0, , 191-217.		2
99	Econophysics of Stock and Foreign Currency Exchange Markets. , 0, , 249-278.		5
100	Emergence of Memory in Networks of Nonlinear Units: From Neurons to Plant Cells. , 0, , 507-533.		0
101	Can we Recognize an Innovation?: Perspective from an Evolving Network Model. , 0, , 561-591.		0
102	Understanding and Managing the Future Evolution of a Competitive Multi-agent Population. , 0, , 65-98.		1
103	Fluctuations in Foreign Exchange markets. , 0, , 219-247.		1