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	Dynamics of market correlations: Taxonomy and portfolio analysis. Physical Review E, 2003, 68, 056110.	0.8	546
2	Statistical mechanics of money: how saving propensity affects its distribution. European Physical Journal B, 2000, 17, 167-170.	0.6	349
3	Econophysics review: I. Empirical facts. Quantitative Finance, 2011, 11, 991-1012.	0.9	265
4	Dynamic asset trees and Black Monday. Physica A: Statistical Mechanics and Its Applications, 2003, 324, 247-252.	1.2	250
5	Econophysics review: II. Agent-based models. Quantitative Finance, 2011, 11, 1013-1041.	0.9	205
6	Dynamic asset trees and portfolio analysis. European Physical Journal B, 2002, 30, 285-288.	0.6	150
7	Asset Trees and Asset Graphs in Financial Markets. Physica Scripta, 2003, T106, 48.	1.2	145
8	Statistical model with a standard Î"distribution. Physical Review E, 2004, 70, 016104.	0.8	130
9	DISTRIBUTIONS OF MONEY IN MODEL MARKETS OF ECONOMY. International Journal of Modern Physics C, 2002, 13, 1315-1321.	0.8	110
10	Statistical mechanics of competitive resource allocation using agent-based models. Physics Reports, 2015, 552, 1-25.	10.3	79
11	Opinion formation in kinetic exchange models: Spontaneous symmetry-breaking transition. Physical Review E, 2010, 82, 056112.	0.8	78
12	Basic kinetic wealth-exchange models: common features and open problems. European Physical Journal B, 2010, 73, 145-153.	0.6	75
13	Visible light driven photocatalysis of organic dyes using SnO_2 decorated MoS_2 nanocomposites. Chemical Physics Letters, 2020, 738, 136874.	1.2	58
14	Gibbs versus non-Gibbs distributions in money dynamics. Physica A: Statistical Mechanics and Its Applications, 2004, 340, 334-339.	1.2	49
15	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
16	First principles calculations of the optical properties of C_xN_y single walled nanotubes. Nanotechnology, 2009, 20, 175701.	1.3	41
17	A Review of Empirical Studies and Models of Income Distributions in Society. , 0, , 131-159.		40
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	Gamma-distribution and wealth inequality. Pramana - Journal of Physics, 2008, 71, 233-243.	0.9	32
20	Variational Principle for the Pareto Power Law. Physical Review Letters, 2009, 103, 228701.	2.9	31
21	Gold nanoflowers as efficient hosts for SERS based sensing and bio-imaging. Nano Structures Nano Objects, 2018, 16, 329-336.	1.9	31
22	Kinetic exchange models: From molecular physics to social science. American Journal of Physics, 2013, 81, 618-623.	0.3	30
23	Relaxation in statistical many-agent economy models. European Physical Journal B, 2007, 57, 219-224.	0.6	28
24	A novel approach for classification of mental tasks using multiview ensemble learning (MEL). Neurocomputing, 2020, 417, 558-584.	3.5	27
25	Ab initio calculation of magnetic properties of p-block element doped ZnO. RSC Advances, 2014, 4, 45598-45602.	1.7	22
26	Searching for good strategies in adaptive minority games. Physical Review E, 2004, 69, 036125.	0.8	18
27	Network geometry and market instability. Royal Society Open Science, 2021, 8, 201734.	1.1	18
28	A self-organising model of market with single commodity. Physica A: Statistical Mechanics and Its Applications, 2001, 297, 253-259.	1.2	16
29	How aâ€œHitâ€•is Born: The Emergence of Popularity from the Dynamics of Collective Choice. , 0, , 417-447.		15
30	Copulas and time series with long-ranged dependencies. Physical Review E, 2014, 89, 042117.	0.8	14
31	Self-organization Principles in Supply Networks and Production Systems. , 0, , 535-559.		14
32	Intelligent minority game with genetic crossover strategies. European Physical Journal B, 2003, 34, 373-377.	0.6	13
33	Adaptation using hybridized genetic crossover strategies. Physica A: Statistical Mechanics and Its Applications, 2003, 322, 701-709.	1.2	13
34	Complex Market Dynamics in the Light of Random Matrix Theory. New Economic Windows, 2019, , 13-34.	1.0	13
35	A Thermodynamic Formulation of Social Science. , 0, , 279-309.		13
36	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

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37	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
38	Threshold-induced phase transition in kinetic exchange models. Physical Review E, 2011, 83, 061130.	0.8	11
39	Investigating resonance energy transfer from protein molecules to van der Waals nanosheets. RSC Advances, 2017, 7, 26250-26255.	1.7	11
40	Financial fluctuations anchored to economic fundamentals: A mesoscopic network approach. Scientific Reports, 2017, 7, 8055.	1.6	11
41	A complex network analysis of ethnic conflicts and human rights violations. Scientific Reports, 2017, 7, 8283.	1.6	11
42	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
43	Emerging spectra characterization of catastrophic instabilities in complex systems. New Journal of Physics, 2020, 22, 063043.	1.2	10
44	Social Opinion Dynamics. , 0, , 339-366.		9
45	Phase separation and scaling in correlation structures of financial markets. Journal of Physics Complexity, 2021, 2, 015002.	0.9	9
46	A Thermodynamic Formulation of Economics. , 0, , 1-33.		7
47	Biology Helps You to Win a Game. Physica Scripta, 2003, T106, 32-35.	1.2	7
48	MARKET APPLICATION OF THE PERCOLATION MODEL: RELATIVE PRICE DISTRIBUTION. International Journal of Modern Physics C, 2002, 13, 25-29.	0.8	6
49	Entangled three-particle states in magnetic field: periodic correlations and density matrices. Indian Journal of Physics, 2012, 86, 791-800.	0.9	6
50	A model-free characterization of recurrences in stationary time series. Physica A: Statistical Mechanics and Its Applications, 2017, 474, 312-318.	1.2	6
51	Network-centric Indicators for Fragility in Global Financial Indices. Frontiers in Physics, 2021, 8, .	1.0	6
52	Models of Wealth Distributionsâ€" A Perspective. , 0, , 161-190.		6
53	The travelling salesman problem on randomly diluted lattices: Results for small-size systems. European Physical Journal B, 2000, 16, 677-680.	0.6	5
54	Anomalous transmission in a hierarchical lattice. Physical Review B, 2000, 61, 7395-7401.	1.1	5

#	ARTICLE	IF	CITATIONS
55	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
56	The near-extreme density of intraday log-returns. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 147-155.	1.2	5
57	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
58	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
59	Interaction of fluorescent gold nanoclusters with transition metal dichalcogenides nanosheets: A spectroscopic study. Journal of Luminescence, 2020, 227, 117589.	1.5	5
60	Crowd Dynamics. , 0, , 449-472.		5
61	Complexities of Social Networks: A Physicist's Perspective. , 0, , 473-506.		5
62	Econophysics of Stock and Foreign Currency Exchange Markets. , 0, , 249-278.		5
63	Financial Time-series Analysis: a Brief Overview. , 2007, , 51-67.		5
64	Sectoral Co-movements in the Indian Stock Market: A Mesoscopic Network Analysis. Evolutionary Economics and Social Complexity Science, 2017, , 211-238.	0.4	5
65	Opinion Dynamics, Minority Spreading and Heterogeneous Beliefs. , 0, , 367-391.		4
66	Statistical inference of co-movements of stocks during a financial crisis. Journal of Physics: Conference Series, 2013, 473, 012008.	0.3	4
67	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
68	Computer Simulation of Language Competition by Physicists. , 0, , 311-337.		4
69	Study of Statistical Correlations in Intraday and Daily Financial Return Time Series. New Economic Windows, 2013, , 77-104.	1.0	4
70	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
71	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
72	Quantifying invariant features of within-group inequality in consumption across groups. Journal of Economic Interaction and Coordination, 2018, 13, 469-490.	0.4	3

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73	Distress propagation on production networks: Coarse-graining and modularity of linkages. Physica A: Statistical Mechanics and Its Applications, 2021, 568, 125714.	1.2	3
74	Themes and Applications of Kinetic Exchange Models: Redux. New Economic Windows, 2014, , 99-129.	1.0	3
75	Global Terrorism versus Social Permeability to Underground Activities. , 0, , 393-416.		2
76	Quantum entanglement: the unitary 8-vertex braid matrix with imaginary rapidity. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 482001.	0.7	2
77	Spatiotemporal pattern formation in a prey-predator model under environmental driving forces. Journal of Physics: Conference Series, 2015, 638, 012004.	0.3	2
78	Kinetic Exchange Models as D Dimensional Systems: A Comparison of Different Approaches. New Economic Windows, 2017, , 147-158.	1.0	2
79	Spatio-Temporal Networks of Social Conflicts: Analysis and Modeling. , 2018, , .		2
80	Hamiltonian energy as an efficient approach to identify the significant key regulators in biological networks. PLoS ONE, 2019, 14, e0221463.	1.1	2
81	Zero-intelligence Models of Limit-order Markets. , 0, , 35-63.		2
82	Growth of Firms and Networks. , 0, , 99-129.		2
83	The Contribution of Money-transfer Models to Economics. , 0, , 191-217.		2
84	Kinetic Exchange Models in Economics and Sociology. Springer Proceedings in Mathematics and Statistics, 2015, , 69-88.	0.1	2
85	An Outlook on Correlations in Stock Prices. , 2006, , 13-23.		2
86	Opinion Formation in the Kinetic Exchange Models. New Economic Windows, 2011, , 289-304.	1.0	1
87	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 1&7 entanglement entropies. Journal of Mathematical Physics, 2013, 54, .	0.5	1
88	STATPHYS-KOLKATA VIII. Journal of Physics: Conference Series, 2015, 638, 011001.	0.3	1
89	Power-Laws as Statistical Mixtures. Springer Proceedings in Complexity, 2016, , 271-282.	0.2	1
90	The Microscopic Origin of the Pareto Law and Other Power-Law Distributions. New Economic Windows, 2017, , 159-176.	1.0	1

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91	Patterns of Linguistic Diffusion in Space and Time: The Case of Mazatec. New Economic Windows, 2017, , 227-251.	1.0	1
92	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
93	Cognitive Task Classification Using Fuzzy Based Empirical Wavelet Transform. , 2018, , .		1
94	Physicists' Approaches to a Few Economic Problems. New Economic Windows, 2015, , 237-286.	1.0	1
95	Understanding and Managing the Future Evolution of a Competitive Multi-agent Population. , 0, , 65-98.		1
96	Fluctuations in Foreign Exchange markets. , 0, , 219-247.		1
97	Quantifying Invariant Features of Within-Group Inequality in Consumption Across Groups. SSRN Electronic Journal, 0, , .	0.4	0
98	Global Income Inequality and Savings: A Data Science Perspective. , 2018, , .		0
99	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
100	Agent-based models of economic interactions. , 2010, , 3-29.		0
101	Group-Based Pricing to Shape Demand in Real-Time Electricity Markets. Lecture Notes in Computer Science, 2016, , 121-128.	1.0	0
102	Emergence of Memory in Networks of Nonlinear Units: From Neurons to Plant Cells. , 0, , 507-533.		0
103	Can we Recognize an Innovation?: Perspective from an Evolving Network Model. , 0, , 561-591.		0