Gabor Vattay

List of Publications by Year
in descending order

94 papers	1,747 citations	304743 22 h-index	330143 37 g-index
95 all docs	95 docs citations	95 times ranked	1426 citing authors

#	ARTICLE	IF	CITATIONS
1	Relaxation of the Ising spin system coupled to a bosonic bath and the time dependent mean field equation. PLoS ONE, 2022, 17, e0264412.	2.5	1
2	The Rich Still Get Richer: Empirical Comparison of Preferential Attachment via Linking Statistics in Bitcoin and Ethereum. Frontiers in Blockchain, 2021, 4, .	2.6	3
3	Theory of chemical evolution of molecule compositions in the universe, in the Miller–Urey experiment and the mass distribution of interstellar and intergalactic molecules. Journal of Theoretical Biology, 2020, 486, 110097.	1.7	12
4	Influence of Twitter activity on the stock price of soccer clubs. Social Network Analysis and Mining, 2020, 10, 1.	2.8	4
5	Forecasting the outcome and estimating the epidemic model parameters from the fatality time series in COVID-19 outbreaks. Physical Biology, 2020, 17, 065002.	1.8	15
6	A Landauer Formula for Bioelectronic Applications. Biomolecules, 2019, 9, 599.	4.0	15
7	Scaling in words on Twitter. Royal Society Open Science, 2019, 6, 190027.	2.4	3
8	Urban scaling of football followership on Twitter. , 2018, , .		1
9	A Bayesian approach to identify Bitcoin users. PLoS ONE, 2018, 13, e0207000.	2.5	27
10	Universal scaling laws in metro area election results. PLoS ONE, 2018, 13, e0192913.	2.5	11
11	Urban Scaling of Football Followership on Twitter. Acta Polytechnica Hungarica, 2018, 15, .	2.9	1
12	Audio-based performance evaluation of squash players. PLoS ONE, 2018, 13, e0194394.	2.5	1
13	Observation of giant conductance fluctuations in a protein. Nano Futures, 2017, 1, 035002.	2.2	27
14	Prediction of employment and unemployment rates from Twitter daily rhythms in the US. EPJ Data Science, 2017, 6, .	2.8	14
15	Video Pandemics: Worldwide Viral Spreading of Psy's Gangnam Style Video. Communications in Computer and Information Science, 2017, , 3-12.	0.5	3
16	Monitoring Patient Activity during Chemotherapy with Wearable Fitness Devices. , 2016, , .		0
17	Race, religion and the city: twitter word frequency patterns reveal dominant demographic dimensions in the United States. Palgrave Communications, 2016, 2, .	4.7	22
18	Spatial Fingerprints of Community Structure in Human Interaction Network for an Extensive Set of Large-Scale Regions. PLoS ONE, 2015, 10, e0126713.	2.5	20

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19	Quantum criticality at the origin of life. Journal of Physics: Conference Series, 2015, 626, 012023.	0.4	37
20	Quantum Biology on the Edge of Quantum Chaos. PLoS ONE, 2014, 9, e89017.	2.5	34
21	Lost in the City: Revisiting Milgram's Experiment in the Age of Social Networks. PLoS ONE, 2014, 9, e111973.	2.5	8
22	Inferring the interplay between network structure and market effects in Bitcoin. New Journal of Physics, 2014, 16, 125003.	2.9	77
23	Efficient classification of billions of points into complex geographic regions using hierarchical triangular mesh. , 2014, , .		5
24	Do the Rich Get Richer? An Empirical Analysis of the Bitcoin Transaction Network. PLoS ONE, 2014, 9, e86197.	2.5	248
25	Network Measurement Virtual Observatory: An Integrated Database Environment for Internet Research and Experimentation. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2014, , 65-74.	0.3	0
26	A multi-terabyte relational database for geo-tagged social network data. , 2013, , .		11
27	Using Robust PCA to estimate regional characteristics of language use from geo-tagged Twitter messages. , 2013, , .		7
28	Regional properties of global communication as reflected in aggregated Twitter data. , 2013, , .		3
29	Measuring the dimension of partially embedded networks. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 4160-4171.	2.6	2
30	Dynamics and Structure in Cell Signaling Networks: Off-State Stability and Dynamically Positive Cycles. PLoS ONE, 2013, 8, e57653.	2.5	8
31	Complete Genes May Pass from Food to Human Blood. PLoS ONE, 2013, 8, e69805.	2.5	52
32	Effect of network structure on phase transitions in queuing networks. Physical Review E, 2012, 86, 066111.	2.1	2
33	On the spatial properties of internet routes. Computer Networks, 2012, 56, 2237-2248.	5.1	13
34	A cell signaling model as a trainable neural nanonetwork. Nano Communication Networks, 2012, 3, 57-64.	2.9	10
35	A neural nanonetwork model based on cell signaling molecules. , 2011, , .		0
36	On the network geography of the Internet. , 2011, , .		10

#	Article	IF	Citations
37	Spotter: A model based active geolocation service. , 2011, , .		71
38	Title is missing!. Acta Physica Polonica B, 2011, 42, 1057.	0.8	0
39	ETOMIC Advanced Network Monitoring System for Future Internet Experimentation. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2011, , 243-254.	0.3	4
40	Shortest-path sampling of dense homogeneous networks. Europhysics Letters, 2010, 89, 18007.	2.0	1
41	A model based approach for improving router geolocation. Computer Networks, 2010, 54, 1490-1501.	5.1	80
42	Random matrix analysis of localization properties of gene coexpression network. Physical Review E, 2010, 81, 046118.	2.1	37
43	Inferring the background traffic arrival process in the Internet. Physical Review E, 2009, 80, 066103.	2.1	1
44	Shortest path discovery of complex networks. Physical Review E, 2009, 79, 065101.	2.1	8
45	A detailed path-latency model for router geolocation. , 2009, , .		16
46	Formation of Self-similar Traffic at Bottleneck Buffers of Computer Networks. Studies in Computational Intelligence, 2009, , 251-268.	0.9	0
47	High quality queueing information from accelerated active network tomography. , 2008, , .		3
48	Relative Rate Reduction Based Control with Adjustable Congestion Level. , 2008, , .		0
49	Building a prototype for network measurement virtual observatory. , 2007, , .		16
50	Neural Network Based Available Bandwidth Estimation in the ETOMIC Infrastructure. , 2007, , .		3
51	Granular model of packet pair separation in Poissonian traffic. Computer Networks, 2007, 51, 683-698.	5.1	4
52	Understanding Packet Pair Separation Beyond the Fluid Model: The Key Role of Traffic Granularity. , 2006, , .		12
53	Traffic Dynamics in Scale-Free Networks. Complexus, 2006, 3, 97-107.	0.6	29
54	Measuring the Dynamical State of the Internet: Large-Scale Network Tomography via the ETOMIC Infrastructure. Complexus, 2006, 3, 119-130.	0.6	2

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55	Analysis of the effect of immunization in rabies time series. Journal of Theoretical Biology, 2006, 240, 72-77.	1.7	7
56	On the propagation of congestion waves in the Internet. Physica A: Statistical Mechanics and Its Applications, 2006, 360, 134-142.	2.6	6
57	Spectral transitions in networks. New Journal of Physics, 2006, 8, 307-307.	2.9	25
58	Results of Large-Scale Queueing Delay Tomography Performed in the ETOMIC Infrastructure. , 2006, , .		4
59	Distribution of edge load in scale-free trees. Physical Review E, 2006, 73, 046102.	2.1	11
60	Public-key encryption with chaos. Chaos, 2004, 14, 1078-1082.	2.5	54
61	TCP's role in the propagation of self-similarity in the Internet. Computer Communications, 2003, 26, 899-913.	5.1	11
62	Giant clusters in randomad hocnetworks. Physical Review E, 2003, 67, 036110.	2.1	40
63	Spectral determinant method for interactingN-body systems including impurities. Physical Review B, 2002, 65, .	3.2	0
64	Excitation spectra for Andreev billiards of box and disk geometries. Physical Review B, 2002, 66, .	3.2	12
65	Noise Corrections to Stochastic Trace Formulas. Foundations of Physics, 2001, 31, 641-657.	1.3	7
66	Trace formula for noise corrections to trace formulas. Physical Review E, 2001, 64, 012104.	2.1	5
67	On the propagation of long-range dependence in the Internet. Computer Communication Review, 2000, 30, 243-254.	1.8	37
68	Scaling and intermittency in animal behaviour. Physica A: Statistical Mechanics and Its Applications, 2000, 286, 312-320.	2.6	25
69	Asymptotics of High Order Noise Corrections. Journal of Statistical Physics, 2000, 101, 385-395.	1.2	3
70	Negative Length Orbits in Normal-Superconductor Billiard Systems. Physical Review Letters, 2000, 85, 3704-3707.	7.8	3
71	Trace formulae for stochastic evolution operators: smooth conjugation method. Nonlinearity, 1999, 12, 939-953.	1.4	22
72	Spectral correlations in systems undergoing a transition from periodicity to disorder. Physical Review E, 1999, 59, 6541-6551.	2.1	6

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73	Spectrum of stochastic evolution operators:â€ƒLocal matrix representation approach. Physical Review E, 1999, 60, 3936-3941.	2.1	25
74	Trace Formulas for Stochastic Evolution Operators: Weak Noise Perturbation Theory. Journal of Statistical Physics, 1998, 93, 981-999.	1.2	29
75	Beyond the periodic orbit theory. Nonlinearity, 1998, 11, 1209-1232.	1.4	5
76	Periodic orbit quantization of the Sinai billiard in the small scatterer limit. Journal of Physics A, 1998, 31, 6333-6345.	1.6	7
77	Crossover from regular to chaotic behavior in the conductance of periodic quantum chains. Physical Review B, 1998, 57, R15092-R15095.	3.2	6
78	Quantum fluids and classical determinants. , 1997, , 29-62.		3
79	Diffraction in the semiclassical description of mesoscopic devices. Chaos, Solitons and Fractals, 1997, 8, 1031-1045.	5.1	6
80	Application of the diffraction trace formula to the three-disk scattering system. Journal of Statistical Physics, 1996, 83, 243-257.	1.2	22
81	Periodic Orbit Quantization beyond the Semiclassical Theory. Physical Review Letters, 1996, 76, 335-339.	7.8	26
82	Bohr-Sommerfeld Quantization of Periodic Orbits. Physical Review Letters, 1996, 76, 1059-1062.	7.8	13
83	New Method for Computing Topological Pressure. Physical Review Letters, 1996, 76, 4155-4158.	7.8	10
84	Scaling behavior in daily air humidity fluctuations. Physical Review Letters, 1994, 73, 768-771.	7.8	38
85	Transition from Poissonian to Gaussian-orthogonal-ensemble level statistics in a modified Artinâ€™s billiard. Physical Review E, 1994, 49, 325-332.	2.1	8
86	Periodic Orbit Theory of Diffraction. Physical Review Letters, 1994, 73, 2304-2307.	7.8	99
87	Advection of Vector Fields by Chaotic Flows. Annals of the New York Academy of Sciences, 1993, 706, 148-160.	3.8	6
88	Entire Fredholm determinants for evaluation of semiclassical and thermodynamical spectra. Physical Review Letters, 1993, 71, 4138-4141.	7.8	34
89	A Fredholm determinant for semiclassical quantization. Chaos, 1993, 3, 619-636.	2.5	35
90	Soft turbulent state of the atmospheric boundary layer. Physical Review A, 1992, 46, 6386-6389.	2.5	16

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91	Criticality in the one-dimensional Kohonen neural map. Physical Review A, 1992, 46, R6181-R6184.	2.5	7
92	Thermodynamics of Lorenz-type maps. Physical Review A, 1991, 43, 681-692.	2.5	12
93	Level statistics of a noncompact integrable billiard. Physical Review A, 1991, 44, 7002-7015.	2.5	13
94	Chaos in the relativistic generalization of the standard map. Physical Review A, 1989, 40, 4072-4076.	2.5	50