Gabor Vattay

List of Publications by Year
in descending order

94	1,747	304743	330143
papers	citations	22	37
		h-index	g-index

95	95	95	1426
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Do the Rich Get Richer? An Empirical Analysis of the Bitcoin Transaction Network. PLoS ONE, 2014, 9, e86197.	2.5	248
2	Periodic Orbit Theory of Diffraction. Physical Review Letters, 1994, 73, 2304-2307.	7.8	99
3	A model based approach for improving router geolocation. Computer Networks, 2010, 54, 1490-1501.	5.1	80
4	Inferring the interplay between network structure and market effects in Bitcoin. New Journal of Physics, 2014, 16, 125003.	2.9	77
5	Spotter: A model based active geolocation service. , 2011, , .		71
6	Public-key encryption with chaos. Chaos, 2004, 14, 1078-1082.	2.5	54
7	Complete Genes May Pass from Food to Human Blood. PLoS ONE, 2013, 8, e69805.	2.5	52
8	Chaos in the relativistic generalization of the standard map. Physical Review A, 1989, 40, 4072-4076.	2.5	50
9	Giant clusters in randomad hocnetworks. Physical Review E, 2003, 67, 036110.	2.1	40
10	Scaling behavior in daily air humidity fluctuations. Physical Review Letters, 1994, 73, 768-771.	7.8	38
11	On the propagation of long-range dependence in the Internet. Computer Communication Review, 2000, 30, 243-254.	1.8	37
12	Random matrix analysis of localization properties of gene coexpression network. Physical Review E, 2010, 81, 046118.	2.1	37
13	Quantum criticality at the origin of life. Journal of Physics: Conference Series, 2015, 626, 012023.	0.4	37
14	A Fredholm determinant for semiclassical quantization. Chaos, 1993, 3, 619-636.	2.5	35
15	Entire Fredholm determinants for evaluation of semiclassical and thermodynamical spectra. Physical Review Letters, 1993, 71, 4138-4141.	7.8	34
16	Quantum Biology on the Edge of Quantum Chaos. PLoS ONE, 2014, 9, e89017.	2.5	34
17	Trace Formulas for Stochastic Evolution Operators: Weak Noise Perturbation Theory. Journal of Statistical Physics, 1998, 93, 981-999.	1.2	29
18	Traffic Dynamics in Scale-Free Networks. Complexus, 2006, 3, 97-107.	0.6	29

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19	Observation of giant conductance fluctuations in a protein. Nano Futures, 2017, 1, 035002.	2.2	27
20	A Bayesian approach to identify Bitcoin users. PLoS ONE, 2018, 13, e0207000.	2.5	27
21	Periodic Orbit Quantization beyond the Semiclassical Theory. Physical Review Letters, 1996, 76, 335-339.	7.8	26
22	Spectrum of stochastic evolution operators: Local matrix representation approach. Physical Review E, 1999, 60, 3936-3941.	2.1	25
23	Scaling and intermittency in animal behaviour. Physica A: Statistical Mechanics and Its Applications, 2000, 286, 312-320.	2.6	25
24	Spectral transitions in networks. New Journal of Physics, 2006, 8, 307-307.	2.9	25
25	Application of the diffraction trace formula to the three-disk scattering system. Journal of Statistical Physics, 1996, 83, 243-257.	1.2	22
26	Trace formulae for stochastic evolution operators: smooth conjugation method. Nonlinearity, 1999, 12, 939-953.	1.4	22
27	Race, religion and the city: twitter word frequency patterns reveal dominant demographic dimensions in the United States. Palgrave Communications, 2016, 2, .	4.7	22
28	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
29	Soft turbulent state of the atmospheric boundary layer. Physical Review A, 1992, 46, 6386-6389.	2.5	16
30	Building a prototype for network measurement virtual observatory. , 2007, , .		16
31	A detailed path-latency model for router geolocation. , 2009, , .		16
32	A Landauer Formula for Bioelectronic Applications. Biomolecules, 2019, 9, 599.	4.0	15
33	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
34	Prediction of employment and unemployment rates from Twitter daily rhythms in the US. EPJ Data Science, 2017, 6, .	2.8	14
35	Level statistics of a noncompact integrable billiard. Physical Review A, 1991, 44, 7002-7015.	2.5	13
36	Bohr-Sommerfeld Quantization of Periodic Orbits. Physical Review Letters, 1996, 76, 1059-1062.	7.8	13

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37	On the spatial properties of internet routes. Computer Networks, 2012, 56, 2237-2248.	5.1	13
38	Thermodynamics of Lorenz-type maps. Physical Review A, 1991, 43, 681-692.	2.5	12
39	Excitation spectra for Andreev billiards of box and disk geometries. Physical Review B, 2002, 66, .	3.2	12
40	Understanding Packet Pair Separation Beyond the Fluid Model: The Key Role of Traffic Granularity. , 2006, , .		12
41	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
42	TCP's role in the propagation of self-similarity in the Internet. Computer Communications, 2003, 26, 899-913.	5.1	11
43	Distribution of edge load in scale-free trees. Physical Review E, 2006, 73, 046102.	2.1	11
44	A multi-terabyte relational database for geo-tagged social network data. , 2013, , .		11
45	Universal scaling laws in metro area election results. PLoS ONE, 2018, 13, e0192913.	2.5	11
46	New Method for Computing Topological Pressure. Physical Review Letters, 1996, 76, 4155-4158.	7.8	10
47	On the network geography of the Internet. , 2011, , .		10
48	A cell signaling model as a trainable neural nanonetwork. Nano Communication Networks, 2012, 3, 57-64.	2.9	10
49	Transition from Poissonian to Gaussian-orthogonal-ensemble level statistics in a modified Artin's billiard. Physical Review E, 1994, 49, 325-332.	2.1	8
50	Shortest path discovery of complex networks. Physical Review E, 2009, 79, 065101.	2.1	8
51	Lost in the City: Revisiting Milgram's Experiment in the Age of Social Networks. PLoS ONE, 2014, 9, e111973.	2.5	8
52	Dynamics and Structure in Cell Signaling Networks: Off-State Stability and Dynamically Positive Cycles. PLoS ONE, 2013, 8, e57653.	2.5	8
53	Criticality in the one-dimensional Kohonen neural map. Physical Review A, 1992, 46, R6181-R6184.	2.5	7
54	Periodic orbit quantization of the Sinai billiard in the small scatterer limit. Journal of Physics A, 1998, 31, 6333-6345.	1.6	7

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55	Noise Corrections to Stochastic Trace Formulas. Foundations of Physics, 2001, 31, 641-657.	1.3	7
56	Analysis of the effect of immunization in rabies time series. Journal of Theoretical Biology, 2006, 240, 72-77.	1.7	7
57	Using Robust PCA to estimate regional characteristics of language use from geo-tagged Twitter messages. , 2013, , .		7
58	Advection of Vector Fields by Chaotic Flows. Annals of the New York Academy of Sciences, 1993, 706, 148-160.	3.8	6
59	Diffraction in the semiclassical description of mesoscopic devices. Chaos, Solitons and Fractals, 1997, 8, 1031-1045.	5.1	6
60	Crossover from regular to chaotic behavior in the conductance of periodic quantum chains. Physical Review B, 1998, 57, R15092-R15095.	3.2	6
61	Spectral correlations in systems undergoing a transition from periodicity to disorder. Physical Review E, 1999, 59, 6541-6551.	2.1	6
62	On the propagation of congestion waves in the Internet. Physica A: Statistical Mechanics and Its Applications, 2006, 360, 134-142.	2.6	6
63	Beyond the periodic orbit theory. Nonlinearity, 1998, 11, 1209-1232.	1.4	5
64	Trace formula for noise corrections to trace formulas. Physical Review E, 2001, 64, 012104.	2.1	5
65	Efficient classification of billions of points into complex geographic regions using hierarchical triangular mesh. , 2014, , .		5
66	Results of Large-Scale Queueing Delay Tomography Performed in the ETOMIC Infrastructure. , 2006, , .		4
67	Granular model of packet pair separation in Poissonian traffic. Computer Networks, 2007, 51, 683-698.	5.1	4
68	Influence of Twitter activity on the stock price of soccer clubs. Social Network Analysis and Mining, 2020, 10, 1.	2.8	4
69	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
70	Quantum fluids and classical determinants. , 1997, , 29-62.		3
71	Asymptotics of High Order Noise Corrections. Journal of Statistical Physics, 2000, 101, 385-395.	1.2	3
72	Negative Length Orbits in Normal-Superconductor Billiard Systems. Physical Review Letters, 2000, 85, 3704-3707.	7.8	3

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73	Neural Network Based Available Bandwidth Estimation in the ETOMIC Infrastructure. , 2007, , .		3
74	Regional properties of global communication as reflected in aggregated Twitter data. , 2013, , .		3
75	Scaling in words on Twitter. Royal Society Open Science, 2019, 6, 190027.	2.4	3
76	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
77	High quality queueing information from accelerated active network tomography. , 2008, , .		3
78	Video Pandemics: Worldwide Viral Spreading ofÂPsyâ€™s Gangnam Style Video. Communications in Computer and Information Science, 2017, , 3-12.	0.5	3
79	Measuring the Dynamical State of the Internet: Large-Scale Network Tomography via the ETOMIC Infrastructure. Complexus, 2006, 3, 119-130.	0.6	2
80	Effect of network structure on phase transitions in queuing networks. Physical Review E, 2012, 86, 066111.	2.1	2
81	Measuring the dimension of partially embedded networks. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 4160-4171.	2.6	2
82	Inferring the background traffic arrival process in the Internet. Physical Review E, 2009, 80, 066103.	2.1	1
83	Shortest-path sampling of dense homogeneous networks. Europhysics Letters, 2010, 89, 18007.	2.0	1
84	Urban scaling of football followership on Twitter. , 2018, , .		1
85	Urban Scaling of Football Followership on TwitterÂ. Acta Polytechnica Hungarica, 2018, 15, .	2.9	1
86	Audio-based performance evaluation of squash players. PLoS ONE, 2018, 13, e0194394.	2.5	1
87	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
88	Spectral determinant method for interactingN-body systems including impurities. Physical Review B, 2002, 65, .	3.2	0
89	A neural nanonetwork model based on cell signaling molecules. , 2011, , .		0
90	Title is missing!. Acta Physica Polonica B, 2011, 42, 1057.	0.8	0

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91	Monitoring Patient Activity during Chemotherapy with Wearable Fitness Devices. , 2016, , .		0
92	Relative Rate Reduction Based Control with Adjustable Congestion Level. , 2008, , .		0
93	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
94	Formation of Self-similar Traffic at Bottleneck Buffers of Computer Networks. Studies in Computational Intelligence, 2009, , 251-268.	0.9	0