

Baruch Barzel

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1850739/publications.pdf>

Version: 2024-02-01

34
papers

2,144
citations

516710

16
h-index

377865

34
g-index

42
all docs

42
docs citations

42
times ranked

2333
citing authors

#	ARTICLE	IF	CITATIONS
1	Universal resilience patterns in complex networks. <i>Nature</i> , 2016, 530, 307-312.	27.8	754
2	Universality in network dynamics. <i>Nature Physics</i> , 2013, 9, 673-681.	16.7	253
3	Network link prediction by global silencing of indirect correlations. <i>Nature Biotechnology</i> , 2013, 31, 720-725.	17.5	224
4	Spectrum of controlling and observing complex networks. <i>Nature Physics</i> , 2015, 11, 779-786.	16.7	212
5	Spatiotemporal signal propagation in complex networks. <i>Nature Physics</i> , 2019, 15, 403-412.	16.7	123
6	Dynamic patterns of information flow in complex networks. <i>Nature Communications</i> , 2017, 8, 2181.	12.8	101
7	Constructing minimal models for complex system dynamics. <i>Nature Communications</i> , 2015, 6, 7186.	12.8	69
8	Quantifying the connectivity of a network: The network correlation function method. <i>Physical Review E</i> , 2009, 80, 046104.	2.1	45
9	Alternating quarantine for sustainable epidemic mitigation. <i>Nature Communications</i> , 2021, 12, 220.	12.8	37
10	Growing scale-free simplices. <i>Communications Physics</i> , 2021, 4, .	5.3	33
11	Efficient Simulations of Interstellar Gas-Grain Chemistry Using Moment Equations. <i>Astrophysical Journal</i> , 2007, 658, L37-L40.	4.5	29
12	Binomial Moment Equations for Stochastic Reaction Systems. <i>Physical Review Letters</i> , 2011, 106, 150602.	7.8	28
13	Reviving a failed network through microscopic interventions. <i>Nature Physics</i> , 2022, 18, 338-349.	16.7	25
14	Efficient stochastic simulations of complex reaction networks on surfaces. <i>Journal of Chemical Physics</i> , 2007, 127, 144703.	3.0	19
15	Calculation of switching times in the genetic toggle switch and other bistable systems. <i>Physical Review E</i> , 2008, 78, 041919.	2.1	19
16	Stochastic analysis of complex reaction networks using binomial moment equations. <i>Physical Review E</i> , 2012, 86, 031126.	2.1	16
17	Joint Network Topology and Dynamics Recovery From Perturbed Stationary Points. <i>IEEE Transactions on Signal Processing</i> , 2019, 67, 4582-4596.	5.3	16
18	Contagion in simplicial complexes. <i>Chaos, Solitons and Fractals</i> , 2021, 152, 111307.	5.1	16

#	ARTICLE	IF	CITATIONS
19	Synchronization of chaotic systems: A microscopic description. <i>Physical Review E</i> , 2018, 98, .	2.1	14
20	Epidemic spreading under infection-reduced-recovery. <i>Chaos, Solitons and Fractals</i> , 2020, 140, 110130.	5.1	14
21	Universal patterns in passenger flight departure delays. <i>Scientific Reports</i> , 2020, 10, 6890.	3.3	13
22	The Metastability of the Double-Tripod Gait in Locust Locomotion. <i>IScience</i> , 2019, 12, 53-65.	4.1	11
23	Topological synchronization of chaotic systems. <i>Scientific Reports</i> , 2022, 12, 2508.	3.3	11
24	IRS1 phosphorylation underlies the non-stochastic probability of cancer cells to persist during EGFR inhibition therapy. <i>Nature Cancer</i> , 2021, 2, 1055-1070.	13.2	9
25	Stochastic analysis of dimerization systems. <i>Physical Review E</i> , 2009, 80, 031117.	2.1	7
26	Digitizable therapeutics for decentralized mitigation of global pandemics. <i>Scientific Reports</i> , 2019, 9, 14345.	3.3	7
27	Evaluation of the multiplane method for efficient simulations of reaction networks. <i>Physical Review E</i> , 2007, 76, 026703.	2.1	5
28	Analysis of the Multiplane Method for Stochastic Simulations of Reaction Networks with Fluctuations. <i>Multiscale Modeling and Simulation</i> , 2007, 6, 963-982.	1.6	5
29	Reply to: Asymptotic scaling describing signal propagation in complex networks. <i>Nature Physics</i> , 2020, 16, 1084-1085.	16.7	4
30	Dimensional reduction of the master equation for stochastic chemical networks: The reduced-multiplane method. <i>Physical Review E</i> , 2010, 82, 021117.	2.1	3
31	Unusual changeover in the transition nature of local-interaction Potts models. <i>Physical Review E</i> , 2019, 100, 052119.	2.1	3
32	Response to Letter of Correspondence “ Bastiaens et al.. <i>Nature Biotechnology</i> , 2015, 33, 339-342.	17.5	2
33	Distribution equality as an optimal epidemic mitigation strategy. <i>Scientific Reports</i> , 2022, 12, .	3.3	2
34	Barzel and Biham Reply. <i>Physical Review Letters</i> , 2014, 112, .	7.8	0