ZdzisÅ‚aw Burda

List of Publications by Year
in descending order

48 papers	1,088 citations	394390 19 h-index	414395 32 g-index
48 all docs	48 docs citations	48 times ranked	665 citing authors

#	Article	IF	Citations
1	Localization of the Maximal Entropy Random Walk. Physical Review Letters, 2009, 102, 160602.	7.8	132
2	Condensation in the Backgammon model. Nuclear Physics B, 1997, 493, 505-516.	2.5	107
3	Signal and noise in correlation matrix. Physica A: Statistical Mechanics and Its Applications, 2004, 343, 295-310.	2.6	75
4	Motifs emerge from function in model gene regulatory networks. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17263-17268.	7.1	69
5	Universal microscopic correlation functions for products of independent Ginibre matrices. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 465201.	2.1	61
6	Appearance of mother universe and singular vertices in random geometries. Nuclear Physics B, 1997, 495, 463-476.	2.5	47
7	Spectral moments of correlated Wishart matrices. Physical Review E, 2005, 71, 026111.	2.1	46
8	Phase transition in fluctuating branched geometry. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 384, 75-80.	4.1	43
9	Signal and noise in financial correlation matrices. Physica A: Statistical Mechanics and Its Applications, 2004, 344, 67-72.	2.6	40
10	Free random LÃ©vy matrices. Physical Review E, 2002, 65, 021106.	2.1	34
11	Homogeneous complex networks. Physica A: Statistical Mechanics and Its Applications, 2006, 366, 587-607.	2.6	31
12	Dysonian Dynamics of the Ginibre Ensemble. Physical Review Letters, 2014, 113, 104102.	7.8	29
13	Applying free random variables to random matrix analysis of financial data. Part I: The Gaussian case. Quantitative Finance, 2011, 11, 1103-1124.	1.7	28
14	Universal microscopic correlation functions for products of truncated unitary matrices. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 255202.	2.1	28
15	Beyond the Hypercube: Evolutionary Accessibility of Fitness Landscapes with Realistic Mutational Networks. PLoS Computational Biology, 2016, 12, e1005218.	3.2	28
16	Free random LÃ©vy and Wigner-LÃ©vy matrices. Physical Review E, 2007, 75, 051126.	2.1	24
17	Unveiling the significance of eigenvectors in diffusing non-Hermitian matrices by identifying the underlying Burgers dynamics. Nuclear Physics B, 2015, 897, 421-447.	2.5	24
18	Universal distribution of Lyapunov exponents for products of Ginibre matrices. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 395202.	2.1	21

#	Article	IF	Citations
19	Spectral properties of empirical covariance matrices for data with power-law tails. Physical Review E, 2006, 74, 041129.	2.1	20
20	Free products of large random matrices â€“ a short review of recent developments. Journal of Physics: Conference Series, 2013, 473, 012002.	0.4	19
21	From integrable to chaotic systems: Universal local statistics of Lyapunov exponents. Europhysics Letters, 2019, 126, 40001.	2.0	19
22	Modelling Excess Mortality in Covid-19-Like Epidemics. Entropy, 2020, 22, 1236.	2.2	17
23	Free LÃ©vy matrices and financial correlations. Physica A: Statistical Mechanics and Its Applications, 2004, 343, 694-700.	2.6	15
24	A random matrix approach to VARMA processes. New Journal of Physics, 2010, 12, 075036.	2.9	15
25	Four-dimensional dynamically triangulated gravity coupled to matter. Physical Review D, 1993, 48, 3695-3703.	4.7	14
26	Universality of local spectral statistics of products of random matrices. Physical Review E, 2020, 102, 052134.	2.1	12
27	Power laws in zero-range processes on random networks. European Physical Journal B, 2008, 65, 565-570.	1.5	11
28	Collapse of 4D random geometries. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 416, 281-285.	4.1	9
29	Commutative law for products of infinitely large isotropic random matrices. Physical Review E, 2013, 88, 022107.	2.1	9
30	Semiclassical Geometry of 4D Reduced Supersymmetric Yang-Mills Integrals. Journal of High Energy Physics, 2005, 2005, 058-058.	4.7	8
31	Free random LÃ©vy variables and financial probabilities. Physica A: Statistical Mechanics and Its Applications, 2001, 299, 181-187.	2.6	7
32	Statistical mechanics of random graphs. Physica A: Statistical Mechanics and Its Applications, 2004, 344, 56-61.	2.6	7
33	Eigenvector statistics of the product of Ginibre matrices. Physical Review E, 2017, 95, 022134.	2.1	7
34	Simplicial quantum gravity on a computer. Computer Physics Communications, 1995, 85, 278-292.	7.5	6
35	QuaternionicRtransform and non-Hermitian random matrices. Physical Review E, 2015, 92, 052111.	2.1	5
36	Towards the Heider balance: Cellular automaton with a global neighborhood. Physical Review E, 2021, 104, 024307.	2.1	5

#	Article	IF	Citations
37	Cleaning large-dimensional covariance matrices for correlated samples. Physical Review E, 2022, 105, 034136.	2.1	4
38	Swendsen-Wang dynamics for the Potts model on a dynamically triangulated random surface. Computer Physics Communications, 1992, 70, 510-520.	7.5	2
39	Reply to the Comment â€˜â€˜Critical temperature of the two coupled Ising planesâ€™â€™. Physical Review B, 1995, 51, 12007-12008.	3.2	2
40	Balls in boxes and quantum gravity. Nuclear Physics, Section B, Proceedings Supplements, 1998, 63, 763-765.	0.4	2
41	A program generating homogeneous random graphs with given weights. Computer Physics Communications, 2005, 173, 162-174.	7.5	2
42	Dynamics of wealth inequality. Comptes Rendus Physique, 2019, 20, 349-363.	0.9	2
43	Ageing of complex networks. Physical Review E, 2020, 102, 042302.	2.1	1
44	Perfect cycles in the synchronous Heider dynamics in complete network. Physical Review E, 2022, 105, .	2.1	1
45	Using a fermionic ensemble of systems to determine excited states. Journal of Physics A, 2001, 34, 3947-3956.	1.6	0
46	Invariant sums of random matrices and the onset of level repulsion. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P06024.	2.3	0
47	Wealth Rheology. Entropy, 2021, 23, 842.	2.2	0
48	Surplus Anomaly and Random Geometries. , 2002, , 251-259.		0