Lev N Shchur

List of Publications by Year
in descending order

80 papers	1,071 citations	430874 18 h-index	454955 30 g-index
84 all docs	84 docs citations	84 times ranked	571 citing authors

#	Article	IF	Citations
1	Spatial chaos in the Nowak-May game in three dimensions. Journal of Physics: Conference Series, 2021, 1740, 012057.	0.4	1
2	Algorithm for foam generation in plane. Journal of Physics: Conference Series, 2021, 1740, 012030.	0.4	0
3	Local time evolution in Personal Communication Service model. Journal of Physics: Conference Series, 2021, 1740, 012005.	0.4	0
4	Simulation of the Drops Oscillations in the Channel. Smart Innovation, Systems and Technologies, 2021, , 275-282.	0.6	0
5	Organizing an international conference online during a pandemic: first experience. Journal of Physics: Conference Series, 2021, 1740, 011002.	0.4	0
6	Immersed boundary simulation of drop stability. Journal of Physics: Conference Series, 2021, 1740, 012026.	0.4	0
7	Algorithm for replica redistribution in an implementation of the population annealing method on a hybrid supercomputer architecture. Computer Physics Communications, 2021, 261, 107786.	7.5	2
8	Understanding population annealing Monte Carlo simulations. Physical Review E, 2021, 103, 053301.	2.1	12
9	Mean-field interactions in evolutionary spatial games. Physical Review Research, 2021, 3, .	3.6	2
10	Universality classes and machine learning. Journal of Physics: Conference Series, 2021, 1740, 012003.	0.4	2
11	Computer analysis of the cemented carbidesâ€™ microstructure. Letters on Materials, 2021, 11, 447-451.	0.7	2
12	Simulation of Drop Oscillation Using the Lattice Boltzmann Method. Lobachevskii Journal of Mathematics, 2020, 41, 992-995.	0.9	4
13	Marginal Effect of Structural Defects on the Nonequilibrium Critical Behavior of the Two-Dimensional Ising Model. Journal of Experimental and Theoretical Physics, 2020, 130, 258-273.	0.9	2
14	Drop Oscillation Modeling. Communications in Computer and Information Science, 2020, , 198-206.	0.5	1
15	Special Purpose Computers for Statistical Physics: achievements and lessons. , 2020, , .		0
16	On properties of the Wangâ€“Landau algorithm. Journal of Physics: Conference Series, 2019, 1252, 012010.	0.4	3
17	Matrix multiplication and universal scalability of the time on the Intel Scalable processors. Journal of Physics: Conference Series, 2019, 1163, 012079.	0.4	1
18	Variable-step-length algorithms for a random walk: Hitting probability and computation performance. Computer Physics Communications, 2019, 241, 28-32.	7.5	2

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19	Synchronization of Processes in Parallel Discrete Event Simulation. Journal of Experimental and Theoretical Physics, 2019, 129, 722-732.	0.9	2
20	On the geometric structures in evolutionary games on square and triangular lattices. Journal of Physics: Conference Series, 2019, 1290, 012027.	0.4	2
21	Acceptance rate is a thermodynamic function in local Monte Carlo algorithms. Physical Review E, 2019, 100, 063303.	2.1	3
22	Population Annealing and Large Scale Simulations in Statistical Mechanics. Communications in Computer and Information Science, 2019, , 354-366.	0.5	1
23	Dynamic fractals in spatial evolutionary games. Physica A: Statistical Mechanics and Its Applications, 2018, 499, 142-147.	2.6	4
24	Influence of the random walk finite step on the first-passage probability. Journal of Physics: Conference Series, 2018, 955, 012009.	0.4	0
25	Interfaces in evolutionary games. Journal of Physics: Conference Series, 2018, 955, 012023.	0.4	1
26	On the mixing time in the Wang-Landau algorithm. Journal of Physics: Conference Series, 2018, 955, 012028.	0.4	2
27	Synchronization of conservative parallel discrete event simulations on a small-world network. Physical Review E, 2018, 98, 022218.	2.1	6
28	Employing AVX vectorization to improve the performance of random number generators. Programming and Computer Software, 2017, 43, 145-160.	0.9	0
29	Simulation of virtual time profile in conservative parallel discrete event simulation algorithm for small-world network. Lobachevskii Journal of Mathematics, 2017, 38, 967-970.	0.9	2
30	Control of accuracy in the Wang-Landau algorithm. Physical Review E, 2017, 96, 043307.	2.1	10
31	GPU accelerated population annealing algorithm. Computer Physics Communications, 2017, 220, 341-350.	7.5	36
32	Exploring first-order phase transitions with population annealing. European Physical Journal: Special Topics, 2017, 226, 595-604.	2.6	12
33	Population annealing: Massively parallel simulations in statistical physics. Journal of Physics: Conference Series, 2017, 921, 012017.	0.4	5
34	Properties of the Conservative Parallel Discrete Event Simulation Algorithm. Lecture Notes in Computer Science, 2017, , 246-253.	1.3	1
35	New trends in Computer Simulations in Physics and not only in physics. Journal of Physics: Conference Series, 2016, 681, 011001.	0.4	0
36	Model for the evolution of the time profile in optimistic parallel discrete event simulations. Journal of Physics: Conference Series, 2016, 681, 012047.	0.4	5

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37	RNGAVXLIB: Program library for random number generation, AVX realization. Computer Physics Communications, 2016, 200, 402-405.	7.5	13
38	Relation of Parallel Discrete Event Simulation algorithms with physical models. Journal of Physics: Conference Series, 2015, 640, 012065.	0.4	3
39	Interfacial adsorption in Potts models on the square lattice. European Physical Journal B, 2015, 88, 1.	1.5	6
40	25th IUPAP Conference on Computational Physics (CCP2013). Journal of Physics: Conference Series, 2014, 510, 011001.	0.4	0
41	PRAND: GPU accelerated parallel random number generation library: Using most reliable algorithms and applying parallelism of modern GPUs and CPUs. Computer Physics Communications, 2014, 185, 1343-1353.	7.5	24
42	RNGSSELIB: Program library for random number generation. More generators, parallel streams of random numbers and Fortran compatibility. Computer Physics Communications, 2013, 184, 2367-2369.	7.5	11
43	The two-dimensional 4-state Potts model in a magnetic field. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 095001.	2.1	5
44	Computational physics and testing theoretical predictions. Physics-Uspekhi, 2012, 55, 733-738.	2.2	11
45	RNGSSELIB: Program library for random number generation, SSE2 realization. Computer Physics Communications, 2011, 182, 1518-1527.	7.5	14
46	Morphological diagram of diffusion driven aggregate growth in plane: Competition of anisotropy and adhesion. Computer Physics Communications, 2011, 182, 1819-1823.	7.5	11
47	Logarithmic corrections and universal amplitude ratios in the 4-state Potts model. Physics Procedia, 2010, 7, 7-18.	1.2	2
48	Critical amplitude ratios of the Baxterâ€“Wu model. Nuclear Physics B, 2010, 840, 491-512.	2.5	16
49	Universal ratios of critical amplitudes in the Potts model universality class. Computer Physics Communications, 2009, 180, 493-496.	7.5	4
50	Numerical revision of the universal amplitude ratios for the two-dimensional 4-state Potts model. Nuclear Physics B, 2009, 811, 491-518.	2.5	13
51	Critical Binder cumulant in a two-dimensional anisotropic Ising model with competing interactions. Physical Review E, 2009, 80, 042104.	2.1	38
52	Evaporation and fluid dynamics of a sessile drop of capillary size. Physical Review E, 2009, 79, 046301.	2.1	86
53	Finite size effect of harmonic measure estimation in a DLA model: Variable size of probe particles. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 6299-6309.	2.6	9
54	Cyclotron enhancement of tunneling. Physical Review B, 2008, 78, .	3.2	2

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55	A study of logarithmic corrections and universal amplitude ratios in the two-dimensional 4-state Potts model. Europhysics Letters, 2008, 81, 30008.	2.0	10
56	High-precision determination of universal amplitude ratios for the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>q</mml:mi><mml:mo>=</mml:mo><mml:mn>3</mml:mn></mml:mrow></mml:math>Potts model in two dimensions. Physical Review B, 2008, 77, .	3.2	13
57	Probing surface characteristics of diffusion-limited-aggregation clusters with particles of variable size. Physical Review E, 2007, 75, 010401.	2.1	10
58	On the universality of rank distributions of website popularity. Computer Networks, 2006, 50, 1769-1780.	5.1	39
59	Periodic orbits of the ensemble of Sinai-Arnold cat maps and pseudorandom number generation. Physical Review E, 2006, 73, 036701.	2.1	17
60	Test of multiscaling in a diffusion-limited-aggregation model using an off-lattice killing-free algorithm. Physical Review E, 2006, 73, 011407.	2.1	22
61	Critical Binder cumulant in two-dimensional anisotropic Ising models. Journal of Physics A, 2005, 38, L739-L744.	1.6	73
62	Evolution of time horizons in parallel and grid simulations. Physical Review E, 2004, 70, 026703.	2.1	12
63	Numerical investigation of logarithmic corrections in two-dimensional spin models. JETP Letters, 2004, 79, 213-217.	1.4	6
64	Susceptibility amplitude ratio in the two-dimensional three-state Potts model. Nuclear Physics B, 2002, 620, 579-587.	2.5	11
65	Early stages of generation of two-dimensional structures by the Hastings-Levitov method of conformal mapping dynamics. Journal of Experimental and Theoretical Physics, 2002, 95, 145-153.	0.9	3
66	On the Aizenman exponent in critical percolation. JETP Letters, 2002, 76, 475-480.	1.4	14
67	On the distribution function of the information speed in computer network. Computer Physics Communications, 2002, 147, 595-599.	7.5	0
68	ACTIVE MEASUREMENTS (EXPERIMENTS) OF THE INTERNET TRAFFIC USING CACHE-MESH. International Journal of Modern Physics C, 2001, 12, 549-562.	1.7	3
69	Quenched bond dilution in two-dimensional Potts models. Journal of Physics A, 2001, 34, 9593-9614.	1.6	14
70	Critical amplitude ratio of the susceptibility in the random-site two-dimensional Ising model. Physical Review E, 2001, 65, 016107.	2.1	18
71	THE CLUSTER PROCESSOR: NEW RESULTS. International Journal of Modern Physics C, 1999, 10, 1137-1148.	1.7	70
72	On the quality of random number generators with taps. Computer Physics Communications, 1999, 121-122, 83-85.	7.5	20

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73	Specific heat of two-dimensional diluted magnets. Physica A: Statistical Mechanics and Its Applications, 1998, 259, 388-396.	2.6	40
74	The RANLUX Generator: Resonances in a Random Walk Test. International Journal of Modern Physics C, 1998, 09, 607-624.	1.7	20
75	Cluster Monte Carlo: tScaling of systematic errors in the two-dimensional Ising model. Physical Review E, 1997, 55, R4905-R4908.	2.1	31
76	Probability of Incipient Spanning Clusters in Critical Square Bond Percolation. International Journal of Modern Physics C, 1997, 08, 473-481.	1.7	33
77	Simulation of a directed random-walk model the effect of pseudo-random-number correlations. Physica A: Statistical Mechanics and Its Applications, 1997, 241, 579-592.	2.6	32
78	The critical region of the random-bond Ising model. Journal of Physics Condensed Matter, 1994, 6, 8295-8308.	1.8	20
79	Critical-Point Correlation Function for the 2D Random Bond Ising Model. Europhysics Letters, 1994, 27, 193-196.	2.0	31
80	On the stochasticity in relativistic cosmology. Journal of Statistical Physics, 1985, 38, 97-114.	1.2	115