

Gideon Simpson

List of Publications by Year in descending order

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all docs

43
docs citations

43
times ranked

324
citing authors

#	ARTICLE	IF	CITATIONS
1	Solitary Wave Benchmarks in Magma Dynamics. <i>Journal of Scientific Computing</i> , 2011, 49, 268-290.	2.3	58
2	Stability of Solitary Waves for a Generalized Derivative Nonlinear Schrödinger Equation. <i>Journal of Nonlinear Science</i> , 2013, 23, 557-583.	2.1	39
3	Asymptotic Stability of High-dimensional Zakharov-Kuznetsov Solitons. <i>Archive for Rational Mechanics and Analysis</i> , 2016, 220, 639-710.	2.4	31
4	Kullback-Leibler Approximation for Probability Measures on Infinite Dimensional Spaces. <i>SIAM Journal on Mathematical Analysis</i> , 2015, 47, 4091-4122.	1.9	30
5	Algorithms for Kullback-Leibler Approximation of Probability Measures in Infinite Dimensions. <i>SIAM Journal of Scientific Computing</i> , 2015, 37, A2733-A2757.	2.8	30
6	Spectral analysis for matrix Hamiltonian operators. <i>Nonlinearity</i> , 2011, 24, 389-429.	1.4	23
7	A generalized parallel replica dynamics. <i>Journal of Computational Physics</i> , 2015, 284, 595-616.	3.8	23
8	Ill-posedness of degenerate dispersive equations. <i>Nonlinearity</i> , 2012, 25, 2655-2680.	1.4	17
9	Focusing singularity in a derivative nonlinear Schrödinger equation. <i>Physica D: Nonlinear Phenomena</i> , 2013, 262, 48-58.	2.8	17
10	Exploring thematic structure and predicted functionality of 16S rRNA amplicon data. <i>PLoS ONE</i> , 2019, 14, e0219235.	2.5	17
11	Asymptotic Stability of Ascending Solitary Magma Waves. <i>SIAM Journal on Mathematical Analysis</i> , 2008, 40, 1337-1391.	1.9	14
12	Polychromatic Solitary Waves in a Periodic and Nonlinear Maxwell System. <i>SIAM Journal on Applied Dynamical Systems</i> , 2012, 11, 478-506.	1.6	13
13	On a Hamiltonian PDE arising in magma dynamics. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2008, 10, 903-924.	0.9	13
14	Local Existence Theory for Derivative Nonlinear Schrödinger Equations with Noninteger Power Nonlinearities. <i>SIAM Journal on Mathematical Analysis</i> , 2015, 47, 2241-2264.	1.9	12
15	A System of ODEs for a Perturbation of a Minimal Mass Soliton. <i>Journal of Nonlinear Science</i> , 2010, 20, 425-461.	2.1	10
16	A Theoretical Examination of Diffusive Molecular Dynamics. <i>SIAM Journal on Applied Mathematics</i> , 2016, 76, 2175-2195.	1.8	10
17	Petviashvili's Method for the Dirichlet Problem. <i>Journal of Scientific Computing</i> , 2016, 66, 296-320.	2.3	9
18	Numerical analysis of parallel replica dynamics. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2013, 47, 1287-1314.	1.9	8

#	ARTICLE	IF	CITATIONS
19	Behavior of a Model Dynamical System with Applications to Weak Turbulence. <i>Experimental Mathematics</i> , 2013, 22, 250-264.	0.7	7
20	Local Structure of Singular Profiles for a Derivative Nonlinear Schrödinger Equation. <i>SIAM Journal on Applied Dynamical Systems</i> , 2017, 16, 514-545.	1.6	6
21	Transient probability currents provide upper and lower bounds on non-equilibrium steady-state currents in the Smoluchowski picture. <i>Journal of Chemical Physics</i> , 2019, 151, 174108.	3.0	6
22	Anharmonic free energy of lattice vibrations in fcc crystals from a mean-field bond. <i>Physical Review B</i> , 2020, 102, .	3.2	6
23	Coherent Structures and Carrier Shocks in the Nonlinear Periodic Maxwell Equations. <i>Multiscale Modeling and Simulation</i> , 2011, 9, 955-990.	1.6	5
24	Analysis of estimators for Adaptive Kinetic Monte Carlo. <i>Communications in Applied Mathematics and Computational Science</i> , 2016, 11, 171-186.	1.8	5
25	Spin-diffusions and diffusive molecular dynamics. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2017, 25, 084003.	2.0	3
26	Analytical and numerical results on the positivity of steady state solutions of a thin film equation. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2013, 18, 1305-1321.	0.9	2
27	Existence theory for magma equations in dimension two and higher. <i>Nonlinearity</i> , 2018, 31, 4724-4745.	1.4	1
28	Sampling from rough energy landscapes. <i>Communications in Mathematical Sciences</i> , 2020, 18, 2271-2303.	1.0	1
29	A numerical method for a nonlocal diffusion equation with additive noise. <i>Stochastics and Partial Differential Equations: Analysis and Computations</i> , 2023, 11, 1433-1469.	0.9	1
30	Conservative integrators for a toy model of weak turbulence. <i>Journal of Computational and Applied Mathematics</i> , 2017, 325, 113-124.	2.0	0
31	Detection of thin high contrast dielectrics from boundary measurements. <i>Journal of Physics Communications</i> , 2019, 3, 115016.	1.2	0
32	Unbiased Trajectory-Based Estimation of Stationary Distributions and Splitting Probabilities. <i>Biophysical Journal</i> , 2021, 120, 177a.	0.5	0
33	Relative entropy minimization over Hilbert spaces via Robbins-Monro. <i>AIMS Mathematics</i> , 2019, 4, 359-383.	1.6	0
34	Well-posedness of a random coefficient damage mechanics model*. <i>Applicable Analysis</i> , 0, , 1-28.	1.3	0
35	Exploring thematic structure and predicted functionality of 16S rRNA amplicon data. , 2019, 14, e0219235.		0
36	Exploring thematic structure and predicted functionality of 16S rRNA amplicon data. , 2019, 14, e0219235.		0

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37	Exploring thematic structure and predicted functionality of 16S rRNA amplicon data. , 2019, 14, e0219235.		0
38	Exploring thematic structure and predicted functionality of 16S rRNA amplicon data. , 2019, 14, e0219235.		0
39	Iterate averaging, the Kalman filter, and 3DVAR for linear inverse problems. Numerical Algorithms, 0, , .	1.9	0