

Jialin Hong

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11642045/publications.pdf>

Version: 2024-02-01

88
papers

1,477
citations

304743

22
h-index

395702

33
g-index

89
all docs

89
docs citations

89
times ranked

371
citing authors

#	ARTICLE	IF	CITATIONS
1	Large Deviations Principles for Symplectic Discretizations of Stochastic Linear Schrödinger Equation. <i>Potential Analysis</i> , 2023, 59, 971-1011.	0.9	3
2	Stochastic differential equation with piecewise continuous arguments: Markov property, invariant measure and numerical approximation. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2023, 28, 765.	0.9	4
3	Positivity-preserving symplectic methods for the stochastic Lotka–Volterra predator-prey model. <i>BIT Numerical Mathematics</i> , 2022, 62, 493-520.	2.0	3
4	Optimal Hölder continuity and hitting probabilities for SPDEs with rough fractional noises. <i>Journal of Mathematical Analysis and Applications</i> , 2022, 512, 126125.	1.0	0
5	Weak intermittency of stochastic heat equation under discretizations. <i>Journal of Differential Equations</i> , 2022, 333, 268-301.	2.2	1
6	Three kinds of novel multi-symplectic methods for stochastic Hamiltonian partial differential equations. <i>Journal of Computational Physics</i> , 2022, 467, 111453.	3.8	2
7	Optimal rate of convergence for two classes of schemes to stochastic differential equations driven by fractional Brownian motions. <i>IMA Journal of Numerical Analysis</i> , 2021, 41, 1608-1638.	2.9	6
8	Weak convergence and invariant measure of a full discretization for parabolic SPDEs with non-globally Lipschitz coefficients. <i>Stochastic Processes and Their Applications</i> , 2021, 134, 55-93.	0.9	17
9	Strong Convergence of Full Discretization for Stochastic Cahn–Hilliard Equation Driven by Additive Noise. <i>SIAM Journal on Numerical Analysis</i> , 2021, 59, 2866-2899.	2.3	11
10	Absolute continuity and numerical approximation of stochastic Cahn–Hilliard equation with unbounded noise diffusion. <i>Journal of Differential Equations</i> , 2020, 269, 10143-10180.	2.2	10
11	Energy and quadratic invariants preserving (EQUIP) multi-symplectic methods for Hamiltonian wave equations. <i>Journal of Computational Physics</i> , 2020, 418, 109599.	3.8	4
12	Exponential integrators for stochastic Maxwell's equations driven by Itô noise. <i>Journal of Computational Physics</i> , 2020, 410, 109382.	3.8	15
13	Modified averaged vector field methods preserving multiple invariants for conservative stochastic differential equations. <i>BIT Numerical Mathematics</i> , 2020, 60, 917-957.	2.0	2
14	Strong convergence rates of semidiscrete splitting approximations for the stochastic Allen–Cahn equation. <i>IMA Journal of Numerical Analysis</i> , 2019, 39, 2096-2134.	2.9	39
15	A Review on Stochastic Multi-symplectic Methods for Stochastic Maxwell Equations. <i>Communications on Applied Mathematics and Computation</i> , 2019, 1, 467-501.	1.7	4
16	Strong and Weak Convergence Rates of a Spatial Approximation for Stochastic Partial Differential Equation with One-sided Lipschitz Coefficient. <i>SIAM Journal on Numerical Analysis</i> , 2019, 57, 1815-1841.	2.3	35
17	Invariant Measures for Stochastic Nonlinear Schrödinger Equations. <i>Lecture Notes in Mathematics</i> , 2019, , .	0.2	14
18	Optimal regularity of stochastic evolution equations in M-type 2 Banach spaces. <i>Journal of Differential Equations</i> , 2019, 267, 1955-1971.	2.2	1

#	ARTICLE	IF	CITATIONS
19	Mean-Square Convergence of a Semidiscrete Scheme for Stochastic Maxwell Equations. SIAM Journal on Numerical Analysis, 2019, 57, 728-750.	2.3	8
20	Runge–Kutta Semidiscretizations for Stochastic Maxwell Equations with Additive Noise. SIAM Journal on Numerical Analysis, 2019, 57, 702-727.	2.3	8
21	Dynamic Evaluation of Exponential Polynomial Curves and Surfaces via Basis Transformation. SIAM Journal of Scientific Computing, 2019, 41, A3401-A3420.	2.8	1
22	Parareal Exponential θ -Scheme for Longtime Simulation of Stochastic Schrödinger Equations with Weak Damping. SIAM Journal of Scientific Computing, 2019, 41, B1155-B1177.	2.8	3
23	Well-posedness and optimal regularity of stochastic evolution equations with multiplicative noises. Journal of Differential Equations, 2019, 266, 4712-4745.	2.2	3
24	Strong convergence rate of splitting schemes for stochastic nonlinear Schrödinger equations. Journal of Differential Equations, 2019, 266, 5625-5663.	2.2	28
25	Finite element approximations for second-order stochastic differential equation driven by fractional Brownian motion. IMA Journal of Numerical Analysis, 2018, 38, 184-197.	2.9	18
26	Symplectic Runge–Kutta methods for Hamiltonian systems driven by Gaussian rough paths. Applied Numerical Mathematics, 2018, 129, 120-136.	2.1	12
27	Explicit pseudo-symplectic methods for stochastic Hamiltonian systems. BIT Numerical Mathematics, 2018, 58, 163-178.	2.0	7
28	Analysis of a Splitting Scheme for Damped Stochastic Nonlinear Schrödinger Equation with Multiplicative Noise. SIAM Journal on Numerical Analysis, 2018, 56, 2045-2069.	2.3	19
29	Local energy- and momentum-preserving schemes for Klein–Gordon–Schrödinger equations and convergence analysis. Numerical Methods for Partial Differential Equations, 2017, 33, 1329-1351.	3.6	3
30	Construction of Symplectic Runge-Kutta Methods for Stochastic Hamiltonian Systems. Communications in Computational Physics, 2017, 21, 237-270.	1.7	15
31	A Compact Scheme for Coupled Stochastic Nonlinear Schrödinger Equations. Communications in Computational Physics, 2017, 21, 93-125.	1.7	9
32	Stochastic symplectic Runge–Kutta methods for the strong approximation of Hamiltonian systems with additive noise. Journal of Computational and Applied Mathematics, 2017, 325, 134-148.	2.0	17
33	Stochastic symplectic and multi-symplectic methods for nonlinear Schrödinger equation with white noise dispersion. Journal of Computational Physics, 2017, 342, 267-285.	3.8	22
34	Strong convergence rate of finite difference approximations for stochastic cubic Schrödinger equations. Journal of Differential Equations, 2017, 263, 3687-3713.	2.2	36
35	Dynamic Evaluation of Free-Form Curves and Surfaces. SIAM Journal of Scientific Computing, 2017, 39, B424-B441.	2.8	4
36	Numerical Analysis on Ergodic Limit of Approximations for Stochastic NLS Equation via Multi-symplectic Scheme. SIAM Journal on Numerical Analysis, 2017, 55, 305-327.	2.3	15

#	ARTICLE	IF	CITATIONS
37	An energy-conserving method for stochastic Maxwell equations with multiplicative noise. <i>Journal of Computational Physics</i> , 2017, 351, 216-229.	3.8	17
38	Approximating Stochastic Evolution Equations with Additive White and Rough Noises. <i>SIAM Journal on Numerical Analysis</i> , 2017, 55, 1958-1981.	2.3	32
39	High Order Conformal Symplectic and Ergodic Schemes for the Stochastic Langevin Equation via Generating Functions. <i>SIAM Journal on Numerical Analysis</i> , 2017, 55, 3006-3029.	2.3	22
40	Approximation of Invariant Measure for Damped Stochastic Nonlinear Schrödinger Equation via an Ergodic Numerical Scheme. <i>Potential Analysis</i> , 2017, 46, 323-367.	0.9	18
41	Convergence of a θ -scheme to solve the stochastic nonlinear Schrödinger equation with Stratonovich noise. <i>Stochastics and Partial Differential Equations: Analysis and Computations</i> , 2016, 4, 274-318.	0.9	2
42	Projection methods for stochastic differential equations with conserved quantities. <i>BIT Numerical Mathematics</i> , 2016, 56, 1497-1518.	2.0	17
43	Symplectic Runge–Kutta Semidiscretization for Stochastic Schrödinger Equation. <i>SIAM Journal on Numerical Analysis</i> , 2016, 54, 2569-2593.	2.3	23
44	Energy evolution of multi-symplectic methods for Maxwell equations with perfectly matched layer boundary. <i>Journal of Mathematical Analysis and Applications</i> , 2016, 439, 256-270.	1.0	5
45	Preservation of physical properties of stochastic Maxwell equations with additive noise via stochastic multi-symplectic methods. <i>Journal of Computational Physics</i> , 2016, 306, 500-519.	3.8	27
46	Modified equations for weakly convergent stochastic symplectic schemes via their generating functions. <i>BIT Numerical Mathematics</i> , 2016, 56, 1131-1162.	2.0	12
47	Compact and efficient conservative schemes for coupled nonlinear Schrödinger equations. <i>Numerical Methods for Partial Differential Equations</i> , 2015, 31, 1814-1843.	3.6	24
48	Two Energy-Conserved Splitting Methods for Three-Dimensional Time-Domain Maxwell's Equations and the Convergence Analysis. <i>SIAM Journal on Numerical Analysis</i> , 2015, 53, 1918-1940.	2.3	22
49	Preservation of quadratic invariants of stochastic differential equations via Runge–Kutta methods. <i>Applied Numerical Mathematics</i> , 2015, 87, 38-52.	2.1	28
50	Energy-dissipation splitting finite-difference time-domain method for Maxwell equations with perfectly matched layers. <i>Journal of Computational Physics</i> , 2014, 269, 201-214.	3.8	23
51	A stochastic multi-symplectic scheme for stochastic Maxwell equations with additive noise. <i>Journal of Computational Physics</i> , 2014, 268, 255-268.	3.8	30
52	Generating functions for stochastic symplectic methods. <i>Discrete and Continuous Dynamical Systems</i> , 2014, 34, 1211-1228.	0.9	18
53	Solvability of concatenated Runge–Kutta equations for second-order nonlinear PDEs. <i>Journal of Computational and Applied Mathematics</i> , 2013, 245, 232-241.	2.0	1
54	LOD-MS for Gross-Pitaevskii Equation in Bose-Einstein Condensates. <i>Communications in Computational Physics</i> , 2013, 14, 219-241.	1.7	8

#	ARTICLE	IF	CITATIONS
55	Stochastic Multi-Symplectic Integrator for Stochastic Nonlinear Schrödinger Equation. Communications in Computational Physics, 2013, 14, 393-411.	1.7	28
56	Solvability of the central box scheme for a kind of nonlinear partial differential equations. , 2012, , .		0
57	Stochastic multisymplectic integrator for stochastic KdV equation. AIP Conference Proceedings, 2012, , .	0.4	3
58	Stochastic multi-symplectic wavelet collocation method for stochastic Hamiltonian Maxwell's equations. , 2012, , .		1
59	Discrete Gradient Approach to Stochastic Differential Equations with a Conserved Quantity. SIAM Journal on Numerical Analysis, 2011, 49, 2017-2038.	2.3	30
60	High-order compact splitting multisymplectic method for the coupled nonlinear Schrödinger equations. Computers and Mathematics With Applications, 2011, 61, 319-333.	2.7	47
61	Symplectic structure-preserving integrators for the two-dimensional Grossâ€Pitaevskii equation for BEC. Journal of Computational and Applied Mathematics, 2011, 235, 4937-4948.	2.0	11
62	Splitting multisymplectic integrators for Maxwellâ€™s equations. Journal of Computational Physics, 2010, 229, 4259-4278.	3.8	65
63	Explicit multi-symplectic methods for Kleinâ€Gordonâ€Schrödinger equations. Journal of Computational Physics, 2009, 228, 3517-3532.	3.8	71
64	Accuracy of classical conservation laws for Hamiltonian PDEs under Rungeâ€Kutta discretizations. Numerische Mathematik, 2009, 112, 1-23.	1.9	5
65	Symplectic integrator for nonlinear high order Schrödinger equation with a trapped term. Journal of Computational and Applied Mathematics, 2009, 231, 664-679.	2.0	16
66	Generating functions of multi-symplectic RK methods via DW Hamiltonâ€Jacobi equations. Numerische Mathematik, 2008, 110, 491-519.	1.9	7
67	Long-term numerical simulation of the interaction between a neutron field and a neutral meson field by a symplectic-preserving scheme. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 255207.	2.1	15
68	Numerical comparison of five difference schemes for coupled Kleinâ€Gordonâ€Schrödinger equations in quantum physics. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 9125-9135.	2.1	21
69	Predictorâ€corrector methods for a linear stochastic oscillator with additive noise. Mathematical and Computer Modelling, 2007, 46, 738-764.	2.0	19
70	Multi-symplectic Rungeâ€Kuttaâ€Nyström methods for nonlinear Schrödinger equations with variable coefficients. Journal of Computational Physics, 2007, 226, 1968-1984.	3.8	33
71	Almost periodic random sequences in probability. Journal of Mathematical Analysis and Applications, 2007, 336, 962-974.	1.0	10
72	Globally conservative properties and error estimation of a multi-symplectic scheme for Schrödinger equations with variable coefficients. Applied Numerical Mathematics, 2006, 56, 814-843.	2.1	62

#	ARTICLE	IF	CITATIONS
73	Multi-symplectic Runge-Kutta methods for nonlinear Dirac equations. <i>Journal of Computational Physics</i> , 2006, 211, 448-472.	3.8	81
74	A Survey of Multi-symplectic Runge-Kutta Type Methods for Hamiltonian Partial Differential Equations. <i>Series in Contemporary Applied Mathematics</i> , 2006, , 71-113.	0.8	3
75	The multi-symplecticity of partitioned Runge-Kutta methods for Hamiltonian PDEs. <i>Mathematics of Computation</i> , 2005, 75, 167-182.	2.1	37
76	Multisymplecticity of the centred box scheme for a class of hamiltonian PDEs and an application to quasi-periodically solitary waves. <i>Mathematical and Computer Modelling</i> , 2004, 39, 1035-1047.	2.0	8
77	A novel numerical approach to simulating nonlinear Schrödinger equations with varying coefficients. <i>Applied Mathematics Letters</i> , 2003, 16, 759-765.	2.7	29
78	Multisymplecticity of the centred box discretization for hamiltonian PDEs with $m \geq 2$ space dimensions. <i>Applied Mathematics Letters</i> , 2002, 15, 1005-1011.	2.7	13
79	Almost periodic type solutions of some differential equations with piecewise constant argument. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2001, 45, 661-688.	1.1	29
80	Numerical simulation of periodic and quasiperiodic solutions for nonautonomous Hamiltonian systems via the scheme preserving weak invariance. <i>Computer Physics Communications</i> , 2000, 131, 86-94.	7.5	3
81	Ergodic solutions via ergodic sequences. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2000, 40, 265-277.	1.1	3
82	Almost periodic type solutions of differential equations with piecewise constant argument via almost periodic type sequences. <i>Applied Mathematics Letters</i> , 2000, 13, 131-137.	2.7	29
83	A class of ergodic solutions of nonlinear differential equations and numerical treatment. <i>Mathematical and Computer Modelling</i> , 2000, 32, 493-506.	2.0	0
84	Exponential trichotomy and a class of ergodic solutions of differential equations with ergodic perturbations. <i>Applied Mathematics Letters</i> , 1999, 12, 7-13.	2.7	11
85	Existence of a class of ergodic solutions implies exponential trichotomy. <i>Applied Mathematics Letters</i> , 1999, 12, 43-45.	2.7	9
86	Exponential dichotomy and trichotomy for difference equations. <i>Computers and Mathematics With Applications</i> , 1999, 38, 41-49.	2.7	43
87	Mean-square convergence of a symplectic local discontinuous Galerkin method applied to stochastic linear Schrödinger equation. <i>IMA Journal of Numerical Analysis</i> , 0, , drw023.	2.9	2
88	Density function of numerical solution of splitting AVF scheme for stochastic Langevin equation. , 0, ,		4