

# Shi Jin

## List of Publications by Year in descending order

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174  
papers

6,368  
citations

87723

38  
h-index

76769

74  
g-index

175  
all docs

175  
docs citations

175  
times ranked

1717  
citing authors

#	ARTICLE	IF	CITATIONS
1	The relaxation schemes for systems of conservation laws in arbitrary space dimensions. <i>Communications on Pure and Applied Mathematics</i> , 1995, 48, 235-276.	1.2	734
2	Efficient Asymptotic-Preserving (AP) Schemes For Some Multiscale Kinetic Equations. <i>SIAM Journal of Scientific Computing</i> , 1999, 21, 441-454.	1.3	358
3	On Time-Splitting Spectral Approximations for the Schrödinger Equation in the Semiclassical Regime. <i>Journal of Computational Physics</i> , 2002, 175, 487-524.	1.9	318
4	Physical symmetry and lattice symmetry in the lattice Boltzmann method. <i>Physical Review E</i> , 1997, 55, R21-R24.	0.8	237
5	A class of asymptotic-preserving schemes for kinetic equations and related problems with stiff sources. <i>Journal of Computational Physics</i> , 2010, 229, 7625-7648.	1.9	236
6	Runge-Kutta Methods for Hyperbolic Conservation Laws with Stiff Relaxation Terms. <i>Journal of Computational Physics</i> , 1995, 122, 51-67.	1.9	176
7	Numerical Schemes for Hyperbolic Conservation Laws with Stiff Relaxation Terms. <i>Journal of Computational Physics</i> , 1996, 126, 449-467.	1.9	172
8	Numerical Study of Time-Splitting Spectral Discretizations of Nonlinear Schrödinger Equations in the Semiclassical Regimes. <i>SIAM Journal of Scientific Computing</i> , 2003, 25, 27-64.	1.3	167
9	Uniformly Accurate Diffusive Relaxation Schemes for Multiscale Transport Equations. <i>SIAM Journal on Numerical Analysis</i> , 2000, 38, 913-936.	1.1	152
10	A steady-state capturing method for hyperbolic systems with geometrical source terms. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2001, 35, 631-645.	0.8	145
11	Diffusive Relaxation Schemes for Multiscale Discrete-Velocity Kinetic Equations. <i>SIAM Journal on Numerical Analysis</i> , 1998, 35, 2405-2439.	1.1	140
12	Uniformly Accurate Schemes for Hyperbolic Systems with Relaxation. <i>SIAM Journal on Numerical Analysis</i> , 1997, 34, 246-281.	1.1	138
13	Regularization of the Burnett Equations via Relaxation. <i>Journal of Statistical Physics</i> , 2001, 103, 1009-1033.	0.5	109
14	Mathematical and computational methods for semiclassical Schrödinger equations. <i>Acta Numerica</i> , 2011, 20, 121-209.	6.3	107
15	An All-Speed Asymptotic-Preserving Method for the Isentropic Euler and Navier-Stokes Equations. <i>Communications in Computational Physics</i> , 2012, 12, 955-980.	0.7	90
16	Numerical Approximations of Pressureless and Isothermal Gas Dynamics. <i>SIAM Journal on Numerical Analysis</i> , 2003, 41, 135-158.	1.1	89
17	Numerical Passage from Systems of Conservation Laws to Hamilton-Jacobi Equations, and Relaxation Schemes. <i>SIAM Journal on Numerical Analysis</i> , 1998, 35, 2385-2404.	1.1	88
18	The Convergence of Numerical Transfer Schemes in Diffusive Regimes I: Discrete-Ordinate Method. <i>SIAM Journal on Numerical Analysis</i> , 1999, 36, 1333-1369.	1.1	73

#	ARTICLE	IF	CITATIONS
19	Multi-phase computations of the semiclassical limit of the Schrödinger equation and related problems: Whitham vs Wigner. <i>Physica D: Nonlinear Phenomena</i> , 2003, 182, 46-85.	1.3	70
20	A smooth transition model between kinetic and hydrodynamic equations. <i>Journal of Computational Physics</i> , 2005, 209, 665-694.	1.9	67
21	A level set method for the computation of multi-valued solutions to quasi-linear hyperbolic PDE's and Hamilton-Jacobi equations. <i>Communications in Mathematical Sciences</i> , 2003, 1, 575-591.	0.5	67
22	The Effects of Numerical Viscosities. <i>Journal of Computational Physics</i> , 1996, 126, 373-389.	1.9	66
23	A time-splitting spectral scheme for the Maxwell-Dirac system. <i>Journal of Computational Physics</i> , 2005, 208, 761-789.	1.9	64
24	The Random Projection Method for Hyperbolic Conservation Laws with Stiff Reaction Terms. <i>Journal of Computational Physics</i> , 2000, 163, 216-248.	1.9	62
25	Random Batch Methods (RBM) for interacting particle systems. <i>Journal of Computational Physics</i> , 2020, 400, 108877.	1.9	62
26	Computing multivalued physical observables for the semiclassical limit of the Schrödinger equation. <i>Journal of Computational Physics</i> , 2005, 205, 222-241.	1.9	59
27	Numerical simulation of a generalized Zakharov system. <i>Journal of Computational Physics</i> , 2004, 201, 376-395.	1.9	58
28	An Asymptotic Preserving Scheme for the ES-BGK Model of the Boltzmann Equation. <i>Journal of Scientific Computing</i> , 2011, 46, 204-224.	1.1	55
29	A stochastic Galerkin method for the Boltzmann equation with uncertainty. <i>Journal of Computational Physics</i> , 2016, 315, 150-168.	1.9	55
30	The discrete-ordinate method in diffusive regimes. <i>Transport Theory and Statistical Physics</i> , 1991, 20, 413-439.	0.4	51
31	TWO MOMENT SYSTEMS FOR COMPUTING MULTIPHASE SEMICLASSICAL LIMITS OF THE SCHRÖDINGER EQUATION. <i>Mathematical Models and Methods in Applied Sciences</i> , 2003, 13, 1689-1723.	1.7	49
32	Two Interface-Type Numerical Methods for Computing Hyperbolic Systems with Geometrical Source Terms Having Concentrations. <i>SIAM Journal of Scientific Computing</i> , 2005, 26, 2079-2101.	1.3	49
33	Fully-discrete numerical transfer in diffusive regimes. <i>Transport Theory and Statistical Physics</i> , 1993, 22, 739-791.	0.4	47
34	Asymptotic-preserving methods for hyperbolic and transport equations with random inputs and diffusive scalings. <i>Journal of Computational Physics</i> , 2015, 289, 35-52.	1.9	47
35	Hamiltonian-Preserving Schemes for the Liouville Equation with Discontinuous Potentials. <i>Communications in Mathematical Sciences</i> , 2005, 3, 285-315.	0.5	46
36	Discretization of the Multiscale Semiconductor Boltzmann Equation by Diffusive Relaxation Schemes. <i>Journal of Computational Physics</i> , 2000, 161, 312-330.	1.9	44

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37	A Smooth Transition Model between Kinetic and Diffusion Equations. <i>SIAM Journal on Numerical Analysis</i> , 2005, 42, 2671-2687.	1.1	43
38	A class of asymptotic-preserving schemes for the Fokker-Planck-Landau equation. <i>Journal of Computational Physics</i> , 2011, 230, 6420-6437.	1.9	41
39	A consensus-based global optimization method for high dimensional machine learning problems. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2021, 27, S5.	0.7	39
40	A Hamiltonian-Preserving Scheme for the Liouville Equation of Geometrical Optics with Partial Transmissions and Reflections. <i>SIAM Journal on Numerical Analysis</i> , 2006, 44, 1801-1828.	1.1	38
41	An asymptotic-preserving Monte Carlo method for the Boltzmann equation. <i>Journal of Computational Physics</i> , 2014, 276, 380-404.	1.9	38
42	Computing multi-valued physical observables for the high frequency limit of symmetric hyperbolic systems. <i>Journal of Computational Physics</i> , 2005, 210, 497-518.	1.9	35
43	A Domain Decomposition Analysis for a Two-Scale Linear Transport Problem. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2003, 37, 869-892.	0.8	33
44	Hamiltonian-preserving schemes for the Liouville equation of geometrical optics with discontinuous local wave speeds. <i>Journal of Computational Physics</i> , 2006, 214, 672-697.	1.9	33
45	A numerical scheme for the quantum Boltzmann equation with stiff collision terms. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2012, 46, 443-463.	0.8	32
46	Convergence of a first-order consensus-based global optimization algorithm. <i>Mathematical Models and Methods in Applied Sciences</i> , 2020, 30, 2417-2444.	1.7	31
47	On the Time Splitting Spectral Method for the Complex Ginzburg-Landau Equation in the Large Time and Space Scale Limit. <i>SIAM Journal of Scientific Computing</i> , 2008, 30, 2466-2487.	1.3	30
48	An Asymptotic-Preserving Stochastic Galerkin Method for the Semiconductor Boltzmann Equation with Random Inputs and Diffusive Scalings. <i>Multiscale Modeling and Simulation</i> , 2017, 15, 157-183.	0.6	29
49	An asymptotic preserving Monte Carlo method for the multispecies Boltzmann equation. <i>Journal of Computational Physics</i> , 2016, 305, 575-588.	1.9	28
50	The Vlasov-Poisson-Fokker-Planck System with Uncertainty and a One-dimensional Asymptotic Preserving Method. <i>Multiscale Modeling and Simulation</i> , 2017, 15, 1502-1529.	0.6	28
51	Application of Relaxation Scheme to Wave-Propagation Simulation in Open-Channel Networks. <i>Journal of Hydraulic Engineering</i> , 1998, 124, 1125-1133.	0.7	27
52	Uniform spectral convergence of the stochastic Galerkin method for the linear transport equations with random inputs in diffusive regime and a micro-macro decomposition-based asymptotic-preserving method. <i>Research in Mathematical Sciences</i> , 2017, 4, 1.	0.5	27
53	A Stochastic Galerkin Method for the Boltzmann Equation with Multi-Dimensional Random Inputs Using Sparse Wavelet Bases. <i>Numerical Mathematics</i> , 2017, 10, 465-488.	0.6	25
54	Numerical Integrations of Systems of Conservation Laws of Mixed Type. <i>SIAM Journal on Applied Mathematics</i> , 1995, 55, 1536-1551.	0.8	24

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55	Regularization of the Burnett equations for rapid granular flows via relaxation. <i>Physica D: Nonlinear Phenomena</i> , 2001, 150, 207-218.	1.3	24
56	Eulerian method for computing multivalued solutions of the Euler-Poisson equations and applications to wave breaking in klystrons. <i>Physical Review E</i> , 2004, 70, 016502.	0.8	24
57	Computational high frequency waves through curved interfaces via the Liouville equation and geometric theory of diffraction. <i>Journal of Computational Physics</i> , 2008, 227, 6106-6139.	1.9	24
58	Hypo-coercivity and Uniform Regularity for the Vlasov-Poisson-Fokker-Planck System with Uncertainty and Multiple Scales. <i>SIAM Journal on Mathematical Analysis</i> , 2018, 50, 1790-1816.	0.9	24
59	Hypo-coercivity Based Sensitivity Analysis and Spectral Convergence of the Stochastic Galerkin Approximation to Collisional Kinetic Equations with Multiple Scales and Random Inputs. <i>Multiscale Modeling and Simulation</i> , 2018, 16, 1085-1114.	0.6	24
60	Robust Numerical Simulation of Porosity Evolution in Chemical Vapor Infiltration. <i>Journal of Computational Physics</i> , 2002, 179, 557-577.	1.9	23
61	A Relaxation Scheme for Solving the Boltzmann Equation Based on the Chapman-Enskog Expansion. <i>Acta Mathematicae Applicatae Sinica</i> , 2002, 18, 37-62.	0.4	23
62	Bloch decomposition-based Gaussian beam method for the Schrödinger equation with periodic potentials. <i>Journal of Computational Physics</i> , 2010, 229, 4869-4883.	1.9	23
63	Gaussian beam methods for the Dirac equation in the semi-classical regime. <i>Communications in Mathematical Sciences</i> , 2012, 10, 1301-1315.	0.5	23
64	A HAMILTONIAN-PRESERVING SCHEME FOR HIGH FREQUENCY ELASTIC WAVES IN HETEROGENEOUS MEDIA. <i>Journal of Hyperbolic Differential Equations</i> , 2006, 03, 741-777.	0.3	22
65	A Random Batch Ewald Method for Particle Systems with Coulomb Interactions. <i>SIAM Journal of Scientific Computing</i> , 2021, 43, B937-B960.	1.3	22
66	Zero Reaction Limit for Hyperbolic Conservation Laws with Source Terms. <i>Journal of Differential Equations</i> , 2000, 168, 270-294.	1.1	21
67	An asymptotic preserving scheme for the vlasov-poisson-fokker-planck system in the high field regime. <i>Acta Mathematica Scientia</i> , 2011, 31, 2219-2232.	0.5	21
68	Convergence of the Random Batch Method for Interacting Particles with Disparate Species and Weights. <i>SIAM Journal on Numerical Analysis</i> , 2021, 59, 746-768.	1.1	21
69	The Random Projection Method for Stiff Multispecies Detonation Capturing. <i>Journal of Computational Physics</i> , 2002, 178, 37-57.	1.9	20
70	A Bloch Decomposition-Based Split-Step Pseudospectral Method for Quantum Dynamics with Periodic Potentials. <i>SIAM Journal of Scientific Computing</i> , 2007, 29, 515-538.	1.3	20
71	An asymptotic-preserving stochastic Galerkin method for the radiative heat transfer equations with random inputs and diffusive scalings. <i>Journal of Computational Physics</i> , 2017, 334, 182-206.	1.9	20
72	Asymptotic-preserving schemes for multiscale physical problems. <i>Acta Numerica</i> , 2022, 31, 415-489.	6.3	20

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73	Hyperbolic Systems with Supercharacteristic Relaxations and Roll Waves. <i>SIAM Journal on Applied Mathematics</i> , 2000, 61, 273-292.	0.8	19
74	A Micro-Macro Decomposition-Based Asymptotic-Preserving Scheme for the Multispecies Boltzmann Equation. <i>SIAM Journal of Scientific Computing</i> , 2010, 31, 4580-4606.	1.3	19
75	A Successive Penalty-Based Asymptotic-Preserving Scheme for Kinetic Equations. <i>SIAM Journal of Scientific Computing</i> , 2013, 35, A150-A172.	1.3	19
76	Semi-Eulerian and High Order Gaussian Beam Methods for the Schrödinger Equation in the Semiclassical Regime. <i>Communications in Computational Physics</i> , 2011, 9, 668-687.	0.7	18
77	A Well-Balanced Stochastic Galerkin Method for Scalar Hyperbolic Balance Laws with Random Inputs. <i>Journal of Scientific Computing</i> , 2016, 67, 1198-1218.	1.1	18
78	A Semiclassical Transport Model for Thin Quantum Barriers. <i>Multiscale Modeling and Simulation</i> , 2006, 5, 1063-1086.	0.6	17
79	A BGK-penalization-based asymptotic-preserving scheme for the multispecies Boltzmann equation. <i>Numerical Methods for Partial Differential Equations</i> , 2013, 29, 1056-1080.	2.0	17
80	A Stochastic Galerkin Method for Hamilton-Jacobi Equations with Uncertainty. <i>SIAM Journal of Scientific Computing</i> , 2015, 37, A2246-A2269.	1.3	17
81	Efficient Stochastic Asymptotic-Preserving Implicit-Explicit Methods for Transport Equations with Diffusive Scalings and Random Inputs. <i>SIAM Journal of Scientific Computing</i> , 2018, 40, A671-A696.	1.3	17
82	The Random Projection Method for Stiff Detonation Capturing. <i>SIAM Journal of Scientific Computing</i> , 2001, 23, 1000-1026.	1.3	16
83	Emergent behaviors of the Cucker-Smale ensemble under attractive-repulsive couplings and Rayleigh frictions. <i>Mathematical Models and Methods in Applied Sciences</i> , 2019, 29, 1349-1385.	1.7	16
84	Robust numerical simulation of porosity evolution in chemical vapor infiltration III: three space dimension. <i>Journal of Computational Physics</i> , 2003, 186, 582-595.	1.9	15
85	Numerical Simulation of the Nonlinear Schrödinger Equation with Multidimensional Periodic Potentials. <i>Multiscale Modeling and Simulation</i> , 2008, 7, 539-564.	0.6	15
86	An Eulerian Surface Hopping Method for the Schrödinger Equation with Conical Crossings. <i>Multiscale Modeling and Simulation</i> , 2011, 9, 258-281.	0.6	15
87	A Multiband Semiclassical Model for Surface Hopping Quantum Dynamics. <i>Multiscale Modeling and Simulation</i> , 2015, 13, 205-230.	0.6	15
88	Computation of transmissions and reflections in geometrical optics via the reduced Liouville equation. <i>Wave Motion</i> , 2006, 43, 667-688.	1.0	14
89	A Time-Splitting Spectral Method for the Generalized Zakharov System in Multi-Dimensions. <i>Journal of Scientific Computing</i> , 2006, 26, 127-149.	1.1	14
90	The Gaussian Beam Methods for Schrödinger-Poisson Equations. <i>Journal of Computational Mathematics</i> , 2010, 28, 261-272.	0.2	14

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91	Superscalability of the random batch Ewald method. <i>Journal of Chemical Physics</i> , 2022, 156, 014114.	1.2	14
92	Robust Numerical Simulation of Porosity Evolution in Chemical Vapor Infiltration I: Two Space Dimension. <i>Journal of Computational Physics</i> , 2000, 162, 467-482.	1.9	13
93	A semiclassical transport model for two-dimensional thin quantum barriers. <i>Journal of Computational Physics</i> , 2007, 226, 1623-1644.	1.9	13
94	A Numerical Scheme for the Quantum Fokker-Planck-Landau Equation Efficient in the Fluid Regime. <i>Communications in Computational Physics</i> , 2012, 12, 1541-1561.	0.7	13
95	On kinetic flux vector splitting schemes for quantum Euler equations. <i>Kinetic and Related Models</i> , 2011, 4, 517-530.	0.5	13
96	Diffusion limit of a hyperbolic system with relaxation. <i>Methods and Applications of Analysis</i> , 1998, 5, 317-334.	0.1	13
97	Computation of the Semiclassical Limit of the Schrödinger Equation with Phase Shift by a Level Set Method. <i>Journal of Scientific Computing</i> , 2008, 35, 144-169.	1.1	12
98	Asymptotic-preserving schemes for kinetic-fluid modeling of disperse two-phase flows. <i>Journal of Computational Physics</i> , 2013, 246, 145-164.	1.9	12
99	A stochastic asymptotic-preserving scheme for a kinetic-fluid model for disperse two-phase flows with uncertainty. <i>Journal of Computational Physics</i> , 2017, 335, 905-924.	1.9	12
100	Convergence and error estimates for time-discrete consensus-based optimization algorithms. <i>Numerische Mathematik</i> , 2021, 147, 255-282.	0.9	12
101	Uncertainty Quantification for Kinetic Equations. <i>SEMA SIMAI Springer Series</i> , 2017, , 193-229.	0.4	12
102	A model for front evolution with a nonlocal growth rate. <i>Journal of Materials Research</i> , 1999, 14, 3829-3832.	1.2	11
103	High Frequency Behavior of the Focusing Nonlinear Schrödinger Equation with Random Inhomogeneities. <i>SIAM Journal on Applied Mathematics</i> , 2003, 63, 1328-1358.	0.8	11
104	A Hybrid Phase-Flow Method for Hamiltonian Systems with Discontinuous Hamiltonians. <i>SIAM Journal of Scientific Computing</i> , 2009, 31, 1303-1321.	1.3	11
105	Asymptotic-Preserving Numerical Schemes for the Semiconductor Boltzmann Equation Efficient in the High Field Regime. <i>SIAM Journal of Scientific Computing</i> , 2013, 35, B799-B819.	1.3	11
106	Gaussian beam methods for the Schrödinger equation with discontinuous potentials. <i>Journal of Computational and Applied Mathematics</i> , 2014, 265, 199-219.	1.1	11
107	Nonlinear geometric optics method-based multi-scale numerical schemes for a class of highly oscillatory transport equations. <i>Mathematical Models and Methods in Applied Sciences</i> , 2017, 27, 2031-2070.	1.7	11
108	A semi-Lagrangian time splitting method for the Schrödinger equation with vector potentials. <i>Communications in Information and Systems</i> , 2013, 13, 247-289.	0.3	11

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109	The $L^1$ -Error Estimates for a Hamiltonian-Preserving Scheme for the Liouville Equation with Piecewise Constant Potentials. <i>SIAM Journal on Numerical Analysis</i> , 2008, 46, 2688-2714.	1.1	10
110	A Study of Hyperbolicity of Kinetic Stochastic Galerkin System for the Isentropic Euler Equations with Uncertainty. <i>Chinese Annals of Mathematics Series B</i> , 2019, 40, 765-780.	0.2	10
111	On the Convergence of Time Splitting Methods for Quantum Dynamics in the Semiclassical Regime. <i>Foundations of Computational Mathematics</i> , 2021, 21, 613-647.	1.5	10
112	Simulation of fluidâ€™s particles flows: heavy particles, flowing regime, and asymptotic-preserving schemes. <i>Communications in Mathematical Sciences</i> , 2012, 10, 355-385.	0.5	10
113	Well-Posedness and Singular Limit of a Semilinear Hyperbolic Relaxation System with a Two-Scale Discontinuous Relaxation Rate. <i>Archive for Rational Mechanics and Analysis</i> , 2014, 214, 1051-1084.	1.1	9
114	An Efficient Time-splitting Method for the Ehrenfest Dynamics. <i>Multiscale Modeling and Simulation</i> , 2018, 16, 900-921.	0.6	9
115	A local sensitivity analysis for the kinetic Cuckerâ€™Smale equation with random inputs. <i>Journal of Differential Equations</i> , 2018, 265, 3618-3649.	1.1	9
116	On stochastic Galerkin approximation of the nonlinear Boltzmann equation with uncertainty in the fluid regime. <i>Journal of Computational Physics</i> , 2019, 397, 108838.	1.9	9
117	Asymptotic-Preserving (Ap) Schemes for Multiscale Kinetic Equations: a Unified Approach. , 2001, , 573-582.		9
118	On the classical limit of a time-dependent self-consistent field system: Analysis and computation. <i>Kinetic and Related Models</i> , 2017, 10, 263-298.	0.5	9
119	A coherent semiclassical transport model for pure-state quantum scattering. <i>Communications in Mathematical Sciences</i> , 2010, 8, 253-275.	0.5	9
120	Relaxation Approximations to Front Propagation. <i>Journal of Differential Equations</i> , 1997, 138, 380-387.	1.1	8
121	Relaxation schemes for curvature-dependent front propagation. , 1999, 52, 1587-1615.		8
122	On the Bloch decomposition based spectral method for wave propagation in periodic media. <i>Wave Motion</i> , 2009, 46, 15-28.	1.0	8
123	An Asymptotic Preserving Two-dimensional Staggered Grid Method for Multiscale Transport Equations. <i>SIAM Journal on Numerical Analysis</i> , 2016, 54, 440-461.	1.1	8
124	Uniform regularity in the random space and spectral accuracy of the stochastic Galerkin method for a kinetic-fluid two-phase flow model with random initial inputs in the light particle regime. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2018, 52, 1651-1678.	0.8	8
125	Micro-macro decomposition based asymptotic-preserving numerical schemes and numerical moments conservation for collisional nonlinear kinetic equations. <i>Journal of Computational Physics</i> , 2019, 382, 264-290.	1.9	8
126	Sharp decay estimates in local sensitivity analysis for evolution equations with uncertainties: From ODEs to linear kinetic equations. <i>Journal of Differential Equations</i> , 2020, 268, 1156-1204.	1.1	7



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127	Semi-classical models for the Schrödinger equation with periodic potentials and band crossings. <i>Kinetic and Related Models</i> , 2013, 6, 505-532.	0.5	7
128	An asymptotic-preserving scheme for the semiconductor Boltzmann equation with two-scale collisions: A splitting approach. <i>Kinetic and Related Models</i> , 2015, 8, 707-723.	0.5	7
129	Computation of Interface Reflection and Regular or Diffuse Transmission of the Planar Symmetric Radiative Transfer Equation with Isotropic Scattering and Its Diffusion Limit. <i>SIAM Journal of Scientific Computing</i> , 2008, 30, 1992-2017.	1.3	6
130	Asymptotic-preserving schemes for kinetic-fluid modeling of disperse two-phase flows with variable fluid density. <i>International Journal for Numerical Methods in Fluids</i> , 2014, 75, 81-102.	0.9	6
131	A study of Landau damping with random initial inputs. <i>Journal of Differential Equations</i> , 2019, 266, 1922-1945.	1.1	6
132	Moving-Water Equilibria Preserving Partial Relaxation Scheme for the Saint-Venant System. <i>SIAM Journal of Scientific Computing</i> , 2020, 42, A2206-A2229.	1.3	6
133	Convergence toward equilibrium of the first-order consensus model with random batch interactions. <i>Journal of Differential Equations</i> , 2021, 302, 585-616.	1.1	6
134	On the mean field limit of the Random Batch Method for interacting particle systems. <i>Science China Mathematics</i> , 2022, 65, 169-202.	0.8	6
135	Computational high frequency wave diffraction by a corner via the Liouville equation and geometric theory of diffraction. <i>Kinetic and Related Models</i> , 2011, 4, 295-316.	0.5	6
136	A diffusive subcharacteristic condition for hyperbolic systems with diffusive relaxation. <i>Transport Theory and Statistical Physics</i> , 2000, 29, 583-593.	0.4	5
137	Wave patterns, stability, and slow motions in inviscid and viscous hyperbolic equations with stiff reaction terms. <i>Journal of Differential Equations</i> , 2003, 189, 267-291.	1.1	5
138	THE VLASOV-POISSON EQUATIONS AS THE SEMICLASSICAL LIMIT OF THE SCHRÖDINGER-POISSON EQUATIONS: A NUMERICAL STUDY. <i>Journal of Hyperbolic Differential Equations</i> , 2008, 05, 569-587.	0.3	5
139	A level set method for the semiclassical limit of the Schrödinger equation with discontinuous potentials. <i>Journal of Computational Physics</i> , 2010, 229, 7440-7455.	1.9	5
140	Quantum hydrodynamic approximations to the finite temperature trapped Bose gases. <i>Physica D: Nonlinear Phenomena</i> , 2018, 380-381, 45-57.	1.3	5
141	Uniform error estimates for the random batch method to the first-order consensus models with antisymmetric interaction kernels. <i>Studies in Applied Mathematics</i> , 2021, 146, 983-1022.	1.1	5
142	Uniform-in-time error estimate of the random batch method for the Cucker-Smale model. <i>Mathematical Models and Methods in Applied Sciences</i> , 2021, 31, 1099-1135.	1.7	5
143	A domain decomposition method for a two-scale transport equation with energy flux conserved at the interface. <i>Kinetic and Related Models</i> , 2008, 1, 65-84.	0.5	5
144	A hybrid Schrödinger/Gaussian beam solver for quantum barriers and surface hopping. <i>Kinetic and Related Models</i> , 2011, 4, 1097-1120.	0.5	5

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145	Random Batch Methods for Classical and Quantum Interacting Particle Systems and Statistical Samplings. <i>Modeling and Simulation in Science, Engineering and Technology</i> , 2022, , 153-200.	0.4	5
146	Quantum simulation in the semi-classical regime. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 6, 739.	0.0	5
147	Error estimates on the random projection methods for hyperbolic conservation laws with stiff reaction terms. <i>Applied Numerical Mathematics</i> , 2002, 43, 315-333.	1.2	4
148	A Gaussian Beam Method for High Frequency Solution of Symmetric Hyperbolic Systems with Polarized Waves. <i>Multiscale Modeling and Simulation</i> , 2015, 13, 733-765.	0.6	4
149	The Landau-Zener Transition and the Surface Hopping Method for the 2D Dirac Equation for Graphene. <i>Communications in Computational Physics</i> , 2017, 21, 313-357.	0.7	4
150	A High Order Stochastic Asymptotic Preserving Scheme for Chemotaxis Kinetic Models with Random Inputs. <i>Multiscale Modeling and Simulation</i> , 2018, 16, 1884-1915.	0.6	4
151	Recent Computational Methods for High Frequency Waves in Heterogeneous Media. <i>Series in Contemporary Applied Mathematics</i> , 2009, , 49-64.	0.8	4
152	The Vlasov-Fokker-Planck equation with high dimensional parametric forcing term. <i>Numerische Mathematik</i> , 2022, 150, 479-519.	0.9	4
153	Entropic sub-cell shock capturing schemes via Jin-Xin relaxation and Glimm front sampling for scalar conservation laws. <i>Mathematics of Computation</i> , 2017, 87, 1083-1126.	1.1	3
154	The Discrete Stochastic Galerkin Method for Hyperbolic Equations with Non-smooth and Random Coefficients. <i>Journal of Scientific Computing</i> , 2018, 74, 97-121.	1.1	3
155	Gaussian wave packet transform based numerical scheme for the semi-classical Schrödinger equation with random inputs. <i>Journal of Computational Physics</i> , 2020, 401, 109015.	1.9	3
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