

Qin Sheng

List of Publications by Year in descending order

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52
papers

524
citations

759233

12
h-index

752698

20
g-index

53
all docs

53
docs citations

53
times ranked

240
citing authors

#	ARTICLE	IF	CITATIONS
1	Notes on the diamond- $\hat{\pm}$ dynamic derivative on time scales. <i>Journal of Mathematical Analysis and Applications</i> , 2007, 326, 228-241.	1.0	55
2	Global error estimates for exponential splitting. <i>IMA Journal of Numerical Analysis</i> , 1994, 14, 27-56.	2.9	35
3	Adaptive decomposition finite difference methods for solving singular problems—A review. <i>Frontiers of Mathematics in China</i> , 2009, 4, 599-626.	0.7	25
4	Primordial non-Gaussianity and power asymmetry with quantum gravitational effects in loop quantum cosmology. <i>Physical Review D</i> , 2018, 97, .	4.7	25
5	DETECTING QUANTUM GRAVITATIONAL EFFECTS OF LOOP QUANTUM COSMOLOGY IN THE EARLY UNIVERSE?. <i>Astrophysical Journal Letters</i> , 2015, 807, L17.	8.3	24
6	High-order primordial perturbations with quantum gravitational effects. <i>Physical Review D</i> , 2016, 93, .	4.7	24
7	An adaptive splitting approach for the quenching solution of reaction-diffusion equations over nonuniform grids. <i>Journal of Computational and Applied Mathematics</i> , 2013, 241, 30-44.	2.0	22
8	Constructing analytical solutions of linear perturbations of inflation with modified dispersion relations. <i>International Journal of Modern Physics A</i> , 2014, 29, 1450142.	1.5	22
9	Solving degenerate quenching-combustion equations by an adaptive splitting method on evolving grids. <i>Computers and Structures</i> , 2013, 122, 33-43.	4.4	17
10	Preconditioned iterative methods for fractional diffusion models in finance. <i>Numerical Methods for Partial Differential Equations</i> , 2015, 31, 1382-1395.	3.6	16
11	A Revisit of the Semi-Adaptive Method for Singular Degenerate Reaction-Diffusion Equations. <i>East Asian Journal on Applied Mathematics</i> , 2012, 2, 185-203.	0.9	14
12	Numerical solution of degenerate stochastic Kawarada equations via a semi-discretized approach. <i>Applied Mathematics and Computation</i> , 2018, 325, 210-226.	2.2	13
13	A comparison of induction time and crystallization rate for syndiotactic polystyrene. <i>Polymer Engineering and Science</i> , 2002, 42, 694-706.	3.1	12
14	Sharp integral inequalities in n independent variables. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 1996, 26, 179-210.	1.1	11
15	A semi-adaptive compact splitting method for the numerical solution of 2-dimensional quenching problems. <i>Applied Mathematics and Computation</i> , 2012, 218, 11240-11254.	2.2	11
16	Exponential time differencing Crank-Nicolson method with a quartic spline approximation for nonlinear Schrödinger equations. <i>Applied Mathematics and Computation</i> , 2014, 235, 235-252.	2.2	11
17	Asymptotic Stability of an Eikonal Transformation Based ADI Method for the Paraxial Helmholtz Equation at High Wave Numbers. <i>Communications in Computational Physics</i> , 2012, 12, 1275-1292.	1.7	11
18	An effective z -stretching method for paraxial light beam propagation simulations. <i>Journal of Computational Physics</i> , 2008, 227, 7264-7278.	3.8	10

#	ARTICLE	IF	CITATIONS
19	Preinflationary perturbations from the closed algebra approach in loop quantum cosmology. <i>Physical Review D</i> , 2019, 99, .	4.7	10
20	Boundary data smoothness for solutions of nonlocal boundary value problems for second order differential equations. <i>Journal of Mathematical Analysis and Applications</i> , 2007, 333, 191-203.	1.0	9
21	An exponential transformation based splitting method for fast computations of highly oscillatory solutions. <i>Journal of Computational and Applied Mathematics</i> , 2011, 235, 4452-4463.	2.0	9
22	A fully adaptive approximation for quenching-type reaction-diffusion equations over circular domains. <i>Numerical Methods for Partial Differential Equations</i> , 2014, 30, 472-489.	3.6	8
23	An energy-preserving Crank-Nicolson Galerkin method for Hamiltonian partial differential equations. <i>Numerical Methods for Partial Differential Equations</i> , 2016, 32, 1485-1504.	3.6	8
24	On the positivity, monotonicity, and stability of a semi-adaptive LOD method for solving three-dimensional degenerate Kawarada equations. <i>Journal of Mathematical Analysis and Applications</i> , 2016, 439, 465-480.	1.0	8
25	On variational properties of balanced central fractional derivatives. <i>International Journal of Computer Mathematics</i> , 2018, 95, 1195-1209.	1.8	8
26	A compact adaptive approach for degenerate singular reaction-diffusion equations. <i>Numerical Methods for Partial Differential Equations</i> , 2018, 34, 1166-1187.	3.6	8
27	Hybrid approximations via second-order crossed dynamic derivatives with the derivative. <i>Nonlinear Analysis: Real World Applications</i> , 2008, 9, 628-640.	1.7	7
28	Nonuniform Crank-Nicolson scheme for solving the stochastic Kawarada equation via arbitrary grids. <i>Numerical Methods for Partial Differential Equations</i> , 2017, 33, 1305-1328.	3.6	7
29	A note on the adaptive numerical solution of a Riemann-Liouville space-fractional Kawarada problem. <i>Journal of Computational and Applied Mathematics</i> , 2020, 374, 112714.	2.0	7
30	Solutions of n-point boundary value problems associated with nonlinear summary difference equations. <i>Journal of Computational and Applied Mathematics</i> , 1997, 80, 49-70.	2.0	6
31	ADI, LOD and Modern Decomposition Methods for Certain Multiphysics Applications. <i>Journal of Algorithms and Computational Technology</i> , 2015, 9, 105-120.	0.7	6
32	Nonlinear variation of parameter methods for summary difference equations in several independent variables. <i>Applied Mathematics and Computation</i> , 1994, 61, 39-60.	2.2	5
33	A Rectilinear Flow Model Approach to the Simulation of Injection Molding Process. <i>Journal of Reinforced Plastics and Composites</i> , 1997, 16, 1242-1251.	3.1	5
34	On the monotonicity of an adaptive splitting scheme for two-dimensional singular reaction-diffusion equations. <i>International Journal of Computer Mathematics</i> , 2007, 84, 795-806.	1.8	5
35	Description of light focusing by a spherical lens using diffraction integral method. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2007, 7, 1023301-1023302.	0.2	5
36	A short note on the asymptotic stability of an oscillation-free eikonal splitting method. <i>Applied Mathematics Letters</i> , 2012, 25, 1539-1543.	2.7	5

#	ARTICLE	IF	CITATIONS
37	Exponential splitting for n -dimensional paraxial Helmholtz equation with high wavenumbers. Computers and Mathematics With Applications, 2014, 68, 1341-1354.	2.7	5
38	A preservative splitting approximation of the solution of a variable coefficient quenching problem. Computers and Mathematics With Applications, 2021, 100, 62-73.	2.7	5
39	A continuing exploration of a decomposed compact method for highly oscillatory wave problems. Journal of Computational and Applied Mathematics, 2016, 299, 207-220.	2.0	4
40	Two energy-preserving numerical models for a multi-fractional extension of the Klein-Gordon-Zakharov system. Journal of Computational and Applied Mathematics, 2022, 406, 114023.	2.0	4
41	Asymptotic stability of a dual-scale compact method for approximating highly oscillatory Helmholtz solutions. Journal of Computational Physics, 2019, 392, 403-418.	3.8	3
42	Convergence of an Operator Splitting Scheme for Abstract Stochastic Evolution Equations. Advances in Mechanics and Mathematics, 2019, , 163-179.	0.7	3
43	Explorations and Expectations of Equidistribution Adaptations for Nonlinear Quenching Problems. Advances in Applied Mathematics and Mechanics, 2013, 5, 407-422.	1.2	3
44	Stability of a modified Peaceman-Rachford method for the paraxial Helmholtz equation on adaptive grids. Journal of Computational Physics, 2016, 325, 259-271.	3.8	2
45	A nonlinear discrete model for approximating a conservative multi-fractional Zakharov system: Analysis and computational simulations. Mathematics and Computers in Simulation, 2022, , .	4.4	2
46	The Legacy of ADI and LOD Methods and an Operator Splitting Algorithm for Solving Highly Oscillatory Wave Problems. Springer Proceedings in Mathematics and Statistics, 2016, , 215-230.	0.2	1
47	Numerical stabilities study of a decomposed compact method for highly oscillatory Helmholtz equations. Journal of Computational and Applied Mathematics, 2019, 354, 334-347.	2.0	1
48	An Exploration of a Balanced Up-Downwind Scheme for Solving Heston Volatility Model Equations on Variable Grids. Algorithms, 2019, 12, 30.	2.1	1
49	A series representation of the discrete fractional Laplace operator of arbitrary order. Journal of Mathematical Analysis and Applications, 2021, 504, 125323.	1.0	1
50	Discrete Dynamics of Fractional Systems: Theory and Numerical Techniques. Discrete Dynamics in Nature and Society, 2018, 2018, 1-1.	0.9	0
51	Discrete Dynamics of Nonlinear Systems in Nature and Society. Discrete Dynamics in Nature and Society, 2019, 2019, 1-2.	0.9	0
52	Second-Order Semi-Discretized Schemes for Solving Stochastic Quenching Models on Arbitrary Spatial Grids. Discrete Dynamics in Nature and Society, 2021, 2021, 1-19.	0.9	0