

Zhiyue Zhang

List of Publications by Year in descending order

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papers

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all docs

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times ranked

294
citing authors

#	ARTICLE	IF	CITATIONS
1	Conditional Nonlinear Optimal Perturbations of a Two-Dimensional Quasigeostrophic Model. <i>Journals of the Atmospheric Sciences</i> , 2006, 63, 1587-1604.	1.7	80
2	Some new Simpson's type inequalities for coordinated convex functions in quantum calculus. <i>Mathematical Methods in the Applied Sciences</i> , 2021, 44, 4515-4540.	2.3	61
3	Some New Newton's Type Integral Inequalities for Co-Ordinated Convex Functions in Quantum Calculus. <i>Symmetry</i> , 2020, 12, 1476.	2.2	55
4	Energy-preserving finite volume element method for the improved Boussinesq equation. <i>Journal of Computational Physics</i> , 2014, 270, 58-69.	3.8	51
5	The High Order Augmented Finite Volume Methods Based on Series Expansion for Nonlinear Degenerate Parabolic Equations. <i>Journal of Scientific Computing</i> , 2021, 88, 1.	2.3	48
6	On some new quantum midpoint-type inequalities for twice quantum differentiable convex functions. <i>Open Mathematics</i> , 2021, 19, 427-439.	1.0	33
7	Bilinear immersed finite volume element method for solving matrix coefficient elliptic interface problems with non-homogeneous jump conditions. <i>Computers and Mathematics With Applications</i> , 2021, 86, 1-15.	2.7	28
8	New energy-preserving schemes using Hamiltonian Boundary Value and Fourier pseudospectral methods for the numerical solution of the "good" Boussinesq equation. <i>Computer Physics Communications</i> , 2016, 201, 33-42.	7.5	27
9	Quadratic finite volume element method for the improved Boussinesq equation. <i>Journal of Mathematical Physics</i> , 2012, 53, .	1.1	24
10	An Effective Dissipation-Preserving Fourth-Order Difference Solver for Fractional-in-Space Nonlinear Wave Equations. <i>Journal of Scientific Computing</i> , 2019, 79, 1753-1776.	2.3	24
11	Error estimates of finite volume element method for the pollution in groundwater flow. <i>Numerical Methods for Partial Differential Equations</i> , 2009, 25, 259-274.	3.6	23
12	Immersed finite elements for optimal control problems of elliptic PDEs with interfaces. <i>Journal of Computational Physics</i> , 2015, 298, 305-319.	3.8	21
13	The high-order multistep ADI solver for two-dimensional nonlinear delayed reaction "diffusion equations with variable coefficients. <i>Computers and Mathematics With Applications</i> , 2018, 75, 3558-3570.	2.7	21
14	An immersed finite volume element method for 2D PDEs with discontinuous coefficients and non-homogeneous jump conditions. <i>Computers and Mathematics With Applications</i> , 2015, 70, 89-103.	2.7	17
15	The modified composite Gauss type rules for singular integrals using Puiseux expansions. <i>Mathematics of Computation</i> , 2016, 86, 345-373.	2.1	17
16	An economical difference scheme for heat transport equation at the microscale. <i>Numerical Methods for Partial Differential Equations</i> , 2004, 20, 855-863.	3.6	16
17	A Fourier finite volume element method for solving two-dimensional quasi-geostrophic equations on a sphere. <i>Applied Numerical Mathematics</i> , 2013, 71, 1-13.	2.1	16
18	The finite element numerical analysis for a class nonlinear evolution equations. <i>Applied Mathematics and Computation</i> , 2005, 166, 489-500.	2.2	14

#	ARTICLE	IF	CITATIONS
19	Two-grid Methods for Finite Volume Element Approximations of Nonlinear Sobolev Equations. Numerical Functional Analysis and Optimization, 2016, 37, 391-414.	1.4	13
20	High-order energy-preserving schemes for the improved Boussinesq equation. Numerical Methods for Partial Differential Equations, 2018, 34, 1145-1165.	3.6	13
21	An analysis of implicit conservative difference solver for fractional Klein-Gordon-Zakharov system. Applied Mathematics and Computation, 2019, 348, 153-166.	2.2	12
22	A new high-order algorithm for a class of nonlinear evolution equation. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 015202.	2.1	11
23	A stabilized immersed finite volume element method for elliptic interface problems. Applied Numerical Mathematics, 2019, 143, 75-87.	2.1	10
24	Ostrowski and Simpson type inequalities for multiplicative integrals. Proyecciones, 2021, 40, 743-763.	0.3	10
25	A new alternating-direction finite element method for hyperbolic equation. Numerical Methods for Partial Differential Equations, 2007, 23, 1530-1559.	3.6	9
26	Numerical methods for a fluid mixture model. International Journal for Numerical Methods in Fluids, 2013, 71, 1-12.	1.6	9
27	The practical Gauss type rules for Hadamard finite-part integrals using Puiseux expansions. Advances in Computational Mathematics, 2017, 43, 319-350.	1.6	9
28	An algorithm for the inversion of Laplace transforms using Puiseux expansions. Numerical Algorithms, 2018, 78, 107-132.	1.9	9
29	Quadratic finite volume element method for the air pollution model. International Journal of Computer Mathematics, 2010, 87, 2925-2944.	1.8	8
30	A Sparse Grid Stochastic Collocation Method for Elliptic Interface Problems with Random Input. Journal of Scientific Computing, 2016, 67, 262-280.	2.3	8
31	New immersed finite volume element method for elliptic interface problems with non-homogeneous jump conditions. Journal of Computational Physics, 2021, 427, 110075.	3.8	8
32	Convective Heat Transfer Analysis for Aluminum Oxide (Al ₂ O ₃)- and Ferro (Fe ₃ O ₄)-Based Nano-Fluid over a Curved Stretching Sheet. Nanomaterials, 2022, 12, 1152.	4.1	8
33	A characteristic centred finite difference method for a 2D air pollution model. International Journal of Computer Mathematics, 2011, 88, 2178-2198.	1.8	7
34	A new fourth-order energy dissipative difference method for high-dimensional nonlinear fractional generalized wave equations. Communications in Nonlinear Science and Numerical Simulation, 2019, 78, 104850.	3.3	7
35	Immersed finite element method and its analysis for parabolic optimal control problems with interfaces. Applied Numerical Mathematics, 2020, 147, 174-195.	2.1	7
36	The fractional steps domain decomposition method for numerical solution of a class of viscous wave equations. Computational Mathematics and Mathematical Physics, 2013, 53, 1013-1025.	0.8	6

#	ARTICLE	IF	CITATIONS
37	A conservative splitting difference scheme for the fractional-in-space Boussinesq equation. Applied Numerical Mathematics, 2019, 143, 61-74.	2.1	6
38	Two novel energy dissipative difference schemes for the strongly coupled nonlinear space fractional wave equations with damping. Applied Numerical Mathematics, 2020, 157, 178-209.	2.1	6
39	The Puiseux Expansion and Numerical Integration to Nonlinear Weakly Singular Volterra Integral Equations of the Second Kind. Journal of Scientific Computing, 2020, 82, 1.	2.3	6
40	A hybrid asymptotic and augmented compact finite volume method for nonlinear singular two point boundary value problems. Applied Mathematics and Computation, 2021, 392, 125745.	2.2	6
41	New Second-Order Finite Difference Scheme for the Problem of Contaminant in Groundwater Flow. Journal of Applied Mathematics, 2012, 2012, 1-13.	0.9	5
42	Numerical simulation of the stochastic damped improved Boussinesq equation. Journal of Mathematical Physics, 2013, 54, 013503.	1.1	5
43	Physical properties preserving numerical simulation of stochastic fractional nonlinear wave equation. Communications in Nonlinear Science and Numerical Simulation, 2021, 99, 105832.	3.3	5
44	A new extension of quantum Simpson's and quantum Newton's type inequalities for quantum differentiable convex functions. Mathematical Methods in the Applied Sciences, 2022, 45, 1845-1863.	2.3	5
45	The alternating group explicit parallel algorithms for convection dominated diffusion problem of variable coefficient. International Journal of Computer Mathematics, 2004, 81, 823-834.	1.8	4
46	A compact finite volume method and its extrapolation for elliptic equations with third boundary conditions. Applied Mathematics and Computation, 2015, 264, 258-271.	2.2	4
47	New conservative finite volume element schemes for the modified Korteweg-de Vries equation. Mathematical Methods in the Applied Sciences, 2016, 39, 5149-5161.	2.3	4
48	A new efficient energy-preserving finite volume element scheme for the improved Boussinesq equation. Applied Mathematical Modelling, 2020, 87, 20-41.	4.2	4
49	Energy-preserving local mesh-refined splitting FDTD schemes for two dimensional Maxwell's equations. Journal of Computational Physics, 2021, 425, 109896.	3.8	4
50	A fourth-order finite difference solver for nerve conduction equation in rectangular domains. Journal of Mathematical Physics, 2008, 49, .	1.1	3
51	High-order upwind finite volume element schemes for modelling of neuronal firing. International Journal of Computer Mathematics, 2014, 91, 625-640.	1.8	3
52	New Conservative Finite Volume Element Schemes for the Modified Regularized Long Wave Equation. Advances in Applied Mathematics and Mechanics, 2017, 9, 250-271.	1.2	3
53	Linear implicit finite difference methods with energy conservation property for space fractional Klein-Gordon-Zakharov system. Applied Numerical Mathematics, 2021, 167, 389-419.	2.1	3
54	Semi-decoupling hybrid asymptotic and augmented finite volume method for nonlinear singular interface problems. Journal of Computational and Applied Mathematics, 2021, 396, 113606.	2.0	3

#	ARTICLE	IF	CITATIONS
55	Dynamics of Jovian atmospheres with applications of nonlinear singular vector method. International Journal for Numerical Methods in Fluids, 2007, 55, 713-721.	1.6	2
56	Finite Volume Element Approximation for the Elliptic Equation with Distributed Control. International Journal of Differential Equations, 2018, 2018, 1-11.	0.8	2
57	Fourier Finite Volume Element Method for Two Classes of Optimal Control Problems Governed by Elliptic PDEs on Complex Connected Domain. Numerical Functional Analysis and Optimization, 2020, 41, 379-412.	1.4	2
58	Unfitted finite element for optimal control problem of the temperature in composite media with contact resistance. Numerical Algorithms, 2020, 84, 165-180.	1.9	2
59	Efficient linear energy dissipative difference schemes for the coupled nonlinear damped space fractional wave equations. Communications in Nonlinear Science and Numerical Simulation, 2020, 90, 105291.	3.3	2
60	Fractional Hermite interpolation for non-smooth functions. Electronic Transactions on Numerical Analysis, 0, 52, 113-131.	0.0	2
61	A MODIFIED IMMERSSED FINITE VOLUME ELEMENT METHOD FOR ELLIPTIC INTERFACE PROBLEMS. ANZIAM Journal, 2020, 62, 42-61.	0.2	2
62	The multistep finite difference fractional steps method for a class of viscous wave equations. Mathematical Methods in the Applied Sciences, 2011, 34, n/a-n/a.	2.3	1
63	A Characteristic Finite Volume Element Method for the Air Pollution Model. Numerical Functional Analysis and Optimization, 2013, 34, 664-694.	1.4	1
64	Nonconforming immersed finite element method for solving elliptic optimal control problems with interfaces. Applicable Analysis, 2020, , 1-20.	1.3	1
65	Highly efficient difference methods for stochastic space fractional wave equation driven by additive and multiplicative noise. Applied Mathematics Letters, 2021, 116, 106988.	2.7	1
66	A hybrid augmented compact finite volume method for the Thomasâ€™Fermi equation. Mathematics and Computers in Simulation, 2021, 190, 760-773.	4.4	1
67	High-order upwind finite volume element method for first-order hyperbolic optimal control problems. ANZIAM Journal, 0, 57, 482.	0.0	1
68	HIGH-ORDER UPWIND FINITE VOLUME ELEMENT METHOD FOR FIRST-ORDER HYPERBOLIC OPTIMAL CONTROL PROBLEMS. ANZIAM Journal, 2016, 57, 482-498.	0.2	0
69	On some inequalities for submultiplicative functions. Journal of Analysis, 2021, 29, 861-872.	0.6	0