

Zhi Zhou

List of Publications by Year in descending order

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papers

2,227
citations

304743

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times ranked

765
citing authors

#	ARTICLE	IF	CITATIONS
1	Arbitrarily High-Order Maximum Bound Preserving Schemes with Cut-off Postprocessing for Allen-Cahn Equations. <i>Journal of Scientific Computing</i> , 2022, 90, .	2.3	17
2	Reconstruction of a Space-Time-Dependent Source in Subdiffusion Models via a Perturbation Approach. <i>SIAM Journal on Mathematical Analysis</i> , 2021, 53, 4445-4473.	1.9	12
3	The Energy Technique for the Six-Step BDF Method. <i>SIAM Journal on Numerical Analysis</i> , 2021, 59, 2449-2472.	2.3	10
4	Numerical Estimation of a Diffusion Coefficient in Subdiffusion. <i>SIAM Journal on Control and Optimization</i> , 2021, 59, 1466-1496.	2.1	6
5	Backward Difference Formulae: The Energy Technique for Subdiffusion Equation. <i>Journal of Scientific Computing</i> , 2021, 87, 1.	2.3	2
6	Recovering the potential and order in one-dimensional time-fractional diffusion with unknown initial condition and source \ast . <i>Inverse Problems</i> , 2021, 37, 105009.	2.0	8
7	Error Analysis of Finite Element Approximations of Diffusion Coefficient Identification for Elliptic and Parabolic Problems. <i>SIAM Journal on Numerical Analysis</i> , 2021, 59, 119-142.	2.3	9
8	An inverse potential problem for subdiffusion: stability and reconstruction \ast . <i>Inverse Problems</i> , 2021, 37, 015006.	2.0	12
9	A Parallel-in-Time Algorithm for High-Order BDF Methods for Diffusion and Subdiffusion Equations. <i>SIAM Journal of Scientific Computing</i> , 2021, 43, A3627-A3656.	2.8	4
10	Pointwise-in-time error estimates for an optimal control problem with subdiffusion constraint. <i>IMA Journal of Numerical Analysis</i> , 2020, 40, 377-404.	2.9	20
11	Stochastic representation of solution to nonlocal-in-time diffusion. <i>Stochastic Processes and Their Applications</i> , 2020, 130, 2058-2085.	0.9	13
12	Multigrid Methods for Time-Fractional Evolution Equations: A Numerical Study. <i>Communications on Applied Mathematics and Computation</i> , 2020, 2, 163-177.	1.7	1
13	Long-time Accurate Symmetrized Implicit-explicit BDF Methods for a Class of Parabolic Equations with Non-self-adjoint Operators. <i>SIAM Journal on Numerical Analysis</i> , 2020, 58, 189-210.	2.3	8
14	High-order Time Stepping Schemes for Semilinear Subdiffusion Equations. <i>SIAM Journal on Numerical Analysis</i> , 2020, 58, 3226-3250.	2.3	14
15	Arbitrarily High-Order Exponential Cut-Off Methods for Preserving Maximum Principle of Parabolic Equations. <i>SIAM Journal of Scientific Computing</i> , 2020, 42, A3957-A3978.	2.8	39
16	Time-Fractional Allen-Cahn Equations: Analysis and Numerical Methods. <i>Journal of Scientific Computing</i> , 2020, 85, 1.	2.3	49
17	A Spectrally Accurate Approximation to Subdiffusion Equations Using the Log Orthogonal Functions. <i>SIAM Journal of Scientific Computing</i> , 2020, 42, A849-A877.	2.8	24
18	Subdiffusion with time-dependent coefficients: improved regularity and second-order time stepping. <i>Numerische Mathematik</i> , 2020, 145, 883-913.	1.9	18

#	ARTICLE	IF	CITATIONS
19	Incomplete iterative solution of subdiffusion. <i>Numerische Mathematik</i> , 2020, 145, 693-725.	1.9	4
20	Numerical methods for nonlocal and fractional models. <i>Acta Numerica</i> , 2020, 29, 1-124.	10.7	101
21	Numerical analysis of backward subdiffusion problems. <i>Inverse Problems</i> , 2020, 36, 105006.	2.0	7
22	Numerical approximation of stochastic time-fractional diffusion. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2019, 53, 1245-1268.	1.9	28
23	Subdiffusion with a time-dependent coefficient: Analysis and numerical solution. <i>Mathematics of Computation</i> , 2019, 88, 2157-2186.	2.1	65
24	Numerical methods for time-fractional evolution equations with nonsmooth data: A concise overview. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 346, 332-358.	6.6	109
25	An analysis of the Crank-Nicolson method for subdiffusion. <i>IMA Journal of Numerical Analysis</i> , 2018, 38, 518-541.	2.9	57
26	Visualizing ion diffusion in battery systems by fluorescence microscopy: A case study on the dissolution of LiMn ₂ O ₄ . <i>Nano Energy</i> , 2018, 45, 68-74.	16.0	25
27	Numerical Analysis of Nonlinear Subdiffusion Equations. <i>SIAM Journal on Numerical Analysis</i> , 2018, 56, 1-23.	2.3	164
28	Space-Time Petrov-Galerkin FEM for Fractional Diffusion Problems. <i>Computational Methods in Applied Mathematics</i> , 2018, 18, 1-20.	0.8	15
29	Discrete maximal regularity of time-stepping schemes for fractional evolution equations. <i>Numerische Mathematik</i> , 2018, 138, 101-131.	1.9	57
30	Asymptotically compatible schemes for space-time nonlocal diffusion equations. <i>Chaos, Solitons and Fractals</i> , 2017, 102, 361-371.	5.1	14
31	An analysis of galerkin proper orthogonal decomposition for subdiffusion. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2017, 51, 89-113.	1.9	18
32	Recovering the potential term in a fractional diffusion equation. <i>IMA Journal of Applied Mathematics</i> , 2017, 82, 579-600.	1.6	24
33	Correction of High-Order BDF Convolution Quadrature for Fractional Evolution Equations. <i>SIAM Journal of Scientific Computing</i> , 2017, 39, A3129-A3152.	2.8	130
34	Analysis of a nonlocal-in-time parabolic equation. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2017, 22, 339-368.	0.9	22
35	On nonnegativity preservation in finite element methods for subdiffusion equations. <i>Mathematics of Computation</i> , 2016, 86, 2239-2260.	2.1	14
36	A simple finite element method for boundary value problems with a Riemann-Liouville derivative. <i>Journal of Computational and Applied Mathematics</i> , 2016, 293, 94-111.	2.0	25

#	ARTICLE	IF	CITATIONS
37	Two Fully Discrete Schemes for Fractional Diffusion and Diffusion-Wave Equations with Nonsmooth Data. SIAM Journal of Scientific Computing, 2016, 38, A146-A170.	2.8	186
38	Error estimates for approximations of distributed order time fractional diffusion with nonsmooth data. Fractional Calculus and Applied Analysis, 2016, 19, 69-93.	2.2	47
39	A Petrov–Galerkin Finite Element Method for Fractional Convection-Diffusion Equations. SIAM Journal on Numerical Analysis, 2016, 54, 481-503.	2.3	45
40	A Finite Element Method with Singularity Reconstruction for Fractional Boundary Value Problems. ESAIM: Mathematical Modelling and Numerical Analysis, 2015, 49, 1261-1283.	1.9	23
41	An analysis of the Rayleigh–Stokes problem for a generalized second-grade fluid. Numerische Mathematik, 2015, 131, 1-31.	1.9	110
42	The Galerkin finite element method for a multi-term time-fractional diffusion equation. Journal of Computational Physics, 2015, 281, 825-843.	3.8	214
43	Error analysis of semidiscrete finite element methods for inhomogeneous time-fractional diffusion. IMA Journal of Numerical Analysis, 2015, 35, 561-582.	2.9	99
44	Error Analysis of a Finite Element Method for the Space-Fractional Parabolic Equation. SIAM Journal on Numerical Analysis, 2014, 52, 2272-2294.	2.3	73
45	Error Estimates for a Semidiscrete Finite Element Method for Fractional Order Parabolic Equations. SIAM Journal on Numerical Analysis, 2013, 51, 445-466.	2.3	230
46	Galerkin FEM for Fractional Order Parabolic Equations with Initial Data in H^1 . Lecture Notes in Computer Science, 2013, , 24-37.	1.3	3
47	An analysis of the L1 scheme for the subdiffusion equation with nonsmooth data. IMA Journal of Numerical Analysis, 0, , dru063.	2.9	52