

Jun Zou

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4698355/publications.pdf>

Version: 2024-02-01

71
papers

1,608
citations

471477

17
h-index

302107

39
g-index

71
all docs

71
docs citations

71
times ranked

755
citing authors

#	ARTICLE	IF	CITATIONS
1	Finite element methods and their convergence for elliptic and parabolic interface problems. <i>Numerische Mathematik</i> , 1998, 79, 175-202.	1.9	406
2	Fully discrete finite element approaches for time-dependent Maxwell's equations. <i>Numerische Mathematik</i> , 1999, 82, 193-219.	1.9	162
3	Finite Element Methods with Matching and Nonmatching Meshes for Maxwell Equations with Discontinuous Coefficients. <i>SIAM Journal on Numerical Analysis</i> , 2000, 37, 1542-1570.	2.3	151
4	Optimal a priori estimates for higher order finite elements for elliptic interface problems. <i>Applied Numerical Mathematics</i> , 2010, 60, 19-37.	2.1	143
5	Two new variants of nonlinear inexact Uzawa algorithms for saddle-point problems. <i>Numerische Mathematik</i> , 2002, 93, 333-359.	1.9	57
6	Nonlinear Inexact Uzawa Algorithms for Linear and Nonlinear Saddle-point Problems. <i>SIAM Journal on Optimization</i> , 2006, 16, 798-825.	2.0	49
7	Zeros of the Bessel and spherical Bessel functions and their applications for uniqueness in inverse acoustic obstacle scattering. <i>IMA Journal of Applied Mathematics</i> , 2007, 72, 817-831.	1.6	40
8	Convergence analysis of an adaptive edge element method for Maxwell's equations. <i>Applied Numerical Mathematics</i> , 2009, 59, 2950-2969.	2.1	31
9	A Bayesian inference approach to the ill-posed Cauchy problem of steady-state heat conduction. <i>International Journal for Numerical Methods in Engineering</i> , 2008, 76, 521-544.	2.8	29
10	Numerical methods for elliptic inverse problems. <i>International Journal of Computer Mathematics</i> , 1998, 70, 211-232.	1.8	27
11	Some new additive Runge-Kutta methods and their applications. <i>Journal of Computational and Applied Mathematics</i> , 2006, 190, 74-98.	2.0	27
12	A temporal fourth-order scheme for the first-order acoustic wave equations. <i>Geophysical Journal International</i> , 2013, 194, 1473-1485.	2.4	27
13	On nodal and generalized singular structures of Laplacian eigenfunctions and applications to inverse scattering problems. <i>Journal Des Mathematiques Pures Et Appliquees</i> , 2020, 143, 116-161.	1.6	26
14	Inversion of Robin coefficient by a spectral stochastic finite element approach. <i>Journal of Computational Physics</i> , 2008, 227, 3282-3306.	3.8	25
15	Convergence analysis of finite element methods for $H(\text{curl}; \hat{\mathbb{C}})$ -elliptic interface problems. <i>Numerische Mathematik</i> , 2012, 122, 557-578.	1.9	23
16	A convergence theory of multilevel additive Schwarz methods on unstructured meshes. <i>Numerical Algorithms</i> , 1996, 13, 365-398.	1.9	22
17	Two-Level Space-Time Domain Decomposition Methods for Three-Dimensional Unsteady Inverse Source Problems. <i>Journal of Scientific Computing</i> , 2016, 67, 860-882.	2.3	19
18	Minnaert Resonances for Bubbles in Soft Elastic Materials. <i>SIAM Journal on Applied Mathematics</i> , 2022, 82, 119-141.	1.8	17

#	ARTICLE	IF	CITATIONS
19	Studies on some perfectly matched layers for one-dimensional time-dependent systems. <i>Advances in Computational Mathematics</i> , 2009, 30, 1-35.	1.6	16
20	Numerical Estimation of Piecewise Constant Robin Coefficient. <i>SIAM Journal on Control and Optimization</i> , 2009, 48, 1977-2002.	2.1	16
21	A two-stage method for inverse medium scattering. <i>Journal of Computational Physics</i> , 2013, 237, 211-223.	3.8	16
22	A parallel radial bisection algorithm for inverse scattering problems. <i>Inverse Problems in Science and Engineering</i> , 2013, 21, 197-209.	1.2	16
23	Singular Perturbation of Reduced Wave Equation and Scattering from an Embedded Obstacle. <i>Journal of Dynamics and Differential Equations</i> , 2012, 24, 803-821.	1.9	15
24	A numerical method for reconstructing the coefficient in a wave equation. <i>Numerical Methods for Partial Differential Equations</i> , 2015, 31, 289-307.	3.6	15
25	Simultaneous reconstruction of the time-dependent Robin coefficient and heat flux in heat conduction problems. <i>Inverse Problems in Science and Engineering</i> , 2018, 26, 1231-1248.	1.2	15
26	An adaptive inverse iteration for Maxwell eigenvalue problem based on edge elements. <i>Journal of Computational Physics</i> , 2010, 229, 2649-2658.	3.8	13
27	Fourier spectral projection method and nonlinear convergence analysis for Navier-Stokes equations. <i>Journal of Mathematical Analysis and Applications</i> , 2003, 282, 766-791.	1.0	11
28	An adaptive edge element method and its convergence for a Saddle-Point problem from magnetostatics. <i>Numerical Methods for Partial Differential Equations</i> , 2012, 28, 1643-1666.	3.6	11
29	Convergence rates of Tikhonov regularizations for elliptic and parabolic inverse radiativity problems. <i>Inverse Problems</i> , 2020, 36, 075001.	2.0	11
30	Theoretical and numerical analysis on a thermo-elastic system with discontinuities. <i>Journal of Computational and Applied Mathematics</i> , 1998, 92, 37-58.	2.0	10
31	Numerical reconstruction of the spatial component in the source term of a time-fractional diffusion equation. <i>Advances in Computational Mathematics</i> , 2020, 46, 1.	1.6	10
32	Unique continuation from a generalized impedance edge-corner for Maxwell's system and applications to inverse problems. <i>Inverse Problems</i> , 2021, 37, 035004.	2.0	10
33	A new choice rule for regularization parameters in Tikhonov regularization. <i>Applicable Analysis</i> , 2011, 90, 1521-1544.	1.3	9
34	Solving Maxwell equations in 3D prismatic domains. <i>Comptes Rendus Mathematique</i> , 2004, 339, 721-726.	0.3	8
35	A discrete weighted Helmholtz decomposition and its application. <i>Numerische Mathematik</i> , 2013, 125, 153-189.	1.9	8
36	Imaging wave-penetrable objects in a finite depth ocean. <i>Applied Mathematics and Computation</i> , 2014, 235, 364-376.	2.2	8

#	ARTICLE	IF	CITATIONS
37	Some observations on the l_2 convergence of the additive Schwarz preconditioned GMRES method. Numerical Linear Algebra With Applications, 2002, 9, 379-397.	1.6	7
38	An Inexact Uzawa-Type Iterative Method For Solving Saddle Point Problems. International Journal of Computer Mathematics, 2003, 80, 55-64.	1.8	7
39	Direct recovery of wave-penetrable scatterers in a stratified ocean waveguide. Journal of Computational and Applied Mathematics, 2018, 338, 239-257.	2.0	7
40	Regularity and approximation of systems arising in electromagnetic interrogation of dielectric materials. Numerical Functional Analysis and Optimization, 1999, 20, 609-627.	1.4	6
41	New Splitting Methods for Convection-Dominated Diffusion Problems and Navier-Stokes Equations. Communications in Computational Physics, 2014, 16, 1239-1262.	1.7	6
42	Super-resolution in imaging high contrast targets from the perspective of scattering coefficients. Journal Des Mathematiques Pures Et Appliquees, 2018, 111, 191-226.	1.6	6
43	A Direct Sampling Method for Simultaneously Recovering Inhomogeneous Inclusions of Different Nature. SIAM Journal of Scientific Computing, 2021, 43, A2161-A2189.	2.8	6
44	A finite element analysis on fluid motion in librating triaxial ellipsoids. Numerical Methods for Partial Differential Equations, 2014, 30, 1518-1537.	3.6	5
45	Identification of conductivity and permittivity in a pulsed electric field model. Applicable Analysis, 2016, 95, 2736-2749.	1.3	5
46	A Direct Sampling Method for the Inversion of the Radon Transform. SIAM Journal on Imaging Sciences, 2021, 14, 1004-1038.	2.2	5
47	Two single-measurement uniqueness results for inverse scattering problems within polyhedral geometries. Inverse Problems and Imaging, 2022, 16, 1501-1528.	1.1	5
48	Optimal Convergence of the Newton Iterative Crank-Nicolson Finite Element Method for the Nonlinear Schrödinger Equation. Computational Methods in Applied Mathematics, 2022, 22, 591-612.	0.8	5
49	Real interpolation of spaces of differential forms. Mathematische Zeitschrift, 2012, 270, 395-402.	0.9	4
50	Simultaneous identification of Robin coefficient and heat flux in an elliptic system. International Journal of Computer Mathematics, 2017, 94, 185-196.	1.8	4
51	Unique determination of a penetrable scatterer of rectangular type for inverse Maxwell equations by a single incoming wave. Inverse Problems, 2019, 35, 035006.	2.0	4
52	Mixed Finite Element Method with Gauss's Law Enforced for the Maxwell Eigenproblem. SIAM Journal of Scientific Computing, 2021, 43, A3677-A3712.	2.8	4
53	Reconstructing acoustic obstacles by planar and cylindrical waves. Journal of Mathematical Physics, 2012, 53, 103705.	1.1	3
54	A PRIORI STRATEGY IN DISCRETIZATION OF THE TIKHONOV REGULARIZATION. , 2003, , .		3

#	ARTICLE	IF	CITATIONS
55	Stochastic Convergence of Regularized Solutions and Their Finite Element Approximations to Inverse Source Problems. <i>SIAM Journal on Numerical Analysis</i> , 2022, 60, 751-780.	2.3	3
56	Domain Decomposition Methods for Recovering Robin Coefficients in Elliptic and Parabolic Systems. <i>Computational Methods in Applied Mathematics</i> , 2018, 18, 257-274.	0.8	2
57	Preconditioners and their analyses for edge element saddle-point systems arising from time-harmonic Maxwell's equations. <i>Numerical Algorithms</i> , 2021, 86, 281-302.	1.9	2
58	CONDITIONAL STABILITY IN RECONSTRUCTION OF INITIAL TEMPERATURES. , 2009, , .		2
59	On the Saturation Phenomenon of Stochastic Gradient Descent for Linear Inverse Problems. <i>SIAM-ASA Journal on Uncertainty Quantification</i> , 2021, 9, 1553-1588.	2.0	2
60	Construction of explicit extension operators on general finite element grids. <i>Applied Numerical Mathematics</i> , 2002, 43, 211-227.	2.1	1
61	A Lagrangian approach to intrinsic linearized elasticity. <i>Comptes Rendus Mathematique</i> , 2010, 348, 587-592.	0.3	1
62	Spectral Analysis, Properties and Nonsingular Preconditioners for Singular Saddle Point Problems. <i>Computational Methods in Applied Mathematics</i> , 2018, 18, 237-256.	0.8	1
63	Simultaneous identification of convection velocity and source strength in a convection-diffusion equation. <i>Applicable Analysis</i> , 2020, 99, 2170-2189.	1.3	1
64	An adaptive edge element approximation of a quasilinear H(curl)-elliptic problem. <i>Mathematical Models and Methods in Applied Sciences</i> , 2020, 30, 2799-2826.	3.3	1
65	Fully Discrete Finite Element Approximation of the MHD Flow. <i>Computational Methods in Applied Mathematics</i> , 2022, 22, 357-388.	0.8	1
66	Two efficient algorithms for surface construction. <i>Applicable Analysis</i> , 2014, 93, 490-510.	1.3	0
67	Convergence rates of Tikhonov regularization for parameter identification in a Maxwell system. <i>Applicable Analysis</i> , 2015, 94, 360-374.	1.3	0
68	Analysis on block diagonal and triangular preconditioners for a PML system of an electromagnetic scattering problem. <i>Computers and Mathematics With Applications</i> , 2017, 74, 2856-2873.	2.7	0
69	Quadratic convergence of Levenberg-Marquardt method for general nonlinear inverse problems with two parameters. <i>International Journal of Computer Mathematics</i> , 2020, 97, 1949-1966.	1.8	0
70	A reduced basis Landweber method for the identification of piecewise constant Robin coefficient in an elliptic equation. <i>Journal of Inverse and Ill-Posed Problems</i> , 2020, .	1.0	0
71	An analysis of stochastic variance reduced gradient for linear inverse problems *. <i>Inverse Problems</i> , 2022, 38, 025009.	2.0	0