

Hongxing Rui

List of Publications by Year in descending order

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118
papers

1,455
citations

430874

18
h-index

434195

31
g-index

119
all docs

119
docs citations

119
times ranked

542
citing authors

#	ARTICLE	IF	CITATIONS
1	A Block-Centered Finite Difference Method for the Darcy–Forchheimer Model. SIAM Journal on Numerical Analysis, 2012, 50, 2612-2631.	2.3	117
2	A second order characteristic finite element scheme for convection-diffusion problems. Numerische Mathematik, 2002, 92, 161-177.	1.9	91
3	Mixed Element Method for Two-Dimensional Darcy-Forchheimer Model. Journal of Scientific Computing, 2012, 52, 563-587.	2.3	84
4	A unified stabilized mixed finite element method for coupling Stokes and Darcy flows. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 2692-2699.	6.6	73
5	A Two-Grid Block-Centered Finite Difference Method For Darcy–Forchheimer Flow in Porous Media. SIAM Journal on Numerical Analysis, 2015, 53, 1941-1962.	2.3	63
6	A Mass-Conservative Characteristic Finite Element Scheme for Convection-Diffusion Problems. Journal of Scientific Computing, 2010, 43, 416-432.	2.3	45
7	A Priori Error Estimates for Optimal Control Problems Governed by Transient Advection-Diffusion Equations. Journal of Scientific Computing, 2009, 38, 290-315.	2.3	42
8	Block-centered finite difference methods for parabolic equation with time-dependent coefficient. Japan Journal of Industrial and Applied Mathematics, 2013, 30, 681-699.	0.9	35
9	A Two-Grid Block-Centered Finite Difference Method for the Nonlinear Time-Fractional Parabolic Equation. Journal of Scientific Computing, 2017, 72, 863-891.	2.3	34
10	Stability and Superconvergence of MAC Scheme for Stokes Equations on Nonuniform Grids. SIAM Journal on Numerical Analysis, 2017, 55, 1135-1158.	2.3	33
11	A block-centered finite difference method for Darcy-Forchheimer model with variable Forchheimer number. Numerical Methods for Partial Differential Equations, 2015, 31, 1603-1622.	3.6	26
12	Block-Centered Finite Difference Method for Simulating Compressible Wormhole Propagation. Journal of Scientific Computing, 2018, 74, 1115-1145.	2.3	26
13	A coupling of weak Galerkin and mixed finite element methods for poroelasticity. Computers and Mathematics With Applications, 2017, 73, 804-823.	2.7	24
14	Symmetric mixed covolume methods for parabolic problems. Numerical Methods for Partial Differential Equations, 2002, 18, 561-583.	3.6	23
15	A mixed element method for Darcy–Forchheimer incompressible miscible displacement problem. Computer Methods in Applied Mechanics and Engineering, 2013, 264, 1-11.	6.6	22
16	A stabilized mixed finite element method for coupled Stokes and Darcy flows with transport. Computer Methods in Applied Mechanics and Engineering, 2017, 315, 169-189.	6.6	22
17	Split least-squares finite element methods for linear and nonlinear parabolic problems. Journal of Computational and Applied Mathematics, 2009, 223, 938-952.	2.0	21
18	Symmetric modified finite volume element methods for self-adjoint elliptic and parabolic problems. Journal of Computational and Applied Mathematics, 2002, 146, 373-386.	2.0	20

#	ARTICLE	IF	CITATIONS
19	A conservative characteristic finite volume element method for solution of the advection–diffusion equation. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2008, 197, 3862-3869.	6.6	20
20	A two-grid block-centered finite difference method for nonlinear non-Fickian flow model. <i>Applied Mathematics and Computation</i> , 2016, 281, 300-313.	2.2	18
21	A remark on least-squares mixed element methods for reaction–diffusion problems. <i>Journal of Computational and Applied Mathematics</i> , 2007, 202, 230-236.	2.0	17
22	A split least-squares characteristic mixed finite element method for Sobolev equations with convection term. <i>Mathematics and Computers in Simulation</i> , 2009, 80, 341-351.	4.4	16
23	Characteristic block-centred finite difference methods for nonlinear convection-dominated diffusion equation. <i>International Journal of Computer Mathematics</i> , 2017, 94, 386-404.	1.8	16
24	A Block-Centered Finite Difference Method for Slightly Compressible Darcy–Forchheimer Flow in Porous Media. <i>Journal of Scientific Computing</i> , 2017, 73, 70-92.	2.3	15
25	CO ₂ Leakage Behaviors in Typical Caprock–Aquifer System during Geological Storage Process. <i>ACS Omega</i> , 2019, 4, 17874-17879.	3.5	15
26	An expanded mixed covolume method for elliptic problems. <i>Numerical Methods for Partial Differential Equations</i> , 2005, 21, 8-23.	3.6	14
27	Characteristic block-centered finite difference method for simulating incompressible wormhole propagation. <i>Computers and Mathematics With Applications</i> , 2017, 73, 2171-2190.	2.7	14
28	Leakage Mitigation During CO ₂ Geological Storage Process Using CO ₂ Triggered Gelation. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 3395-3406.	3.7	14
29	A locking-free finite difference method on staggered grids for linear elasticity problems. <i>Computers and Mathematics With Applications</i> , 2018, 76, 1301-1320.	2.7	13
30	A stabilized hybrid mixed finite element method for poroelasticity. <i>Computational Geosciences</i> , 2021, 25, 757-774.	2.4	13
31	A characteristic-mixed finite element method for time-dependent convection–diffusion optimal control problem. <i>Applied Mathematics and Computation</i> , 2011, 218, 3430-3440.	2.2	12
32	A MCC finite element approximation of incompressible miscible displacement in porous media. <i>Computers and Mathematics With Applications</i> , 2015, 70, 750-764.	2.7	12
33	Superconvergence of a fully conservative finite difference method on non-uniform staggered grids for simulating wormhole propagation with the Darcy–Brinkman–Forchheimer framework. <i>Journal of Fluid Mechanics</i> , 2019, 872, 438-471.	3.4	12
34	Least-squares Galerkin procedures for pseudohyperbolic equations. <i>Applied Mathematics and Computation</i> , 2007, 189, 425-439.	2.2	11
35	Multigrid Methods for a Mixed Finite Element Method of the Darcy–Forchheimer Model. <i>Journal of Scientific Computing</i> , 2018, 74, 396-411.	2.3	11
36	Superconvergence of Characteristics Marker and Cell Scheme for the Navier–Stokes Equations on Nonuniform Grids. <i>SIAM Journal on Numerical Analysis</i> , 2018, 56, 1313-1337.	2.3	11

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37	A two-grid decoupled algorithm for fracture models. <i>Computers and Mathematics With Applications</i> , 2018, 76, 1161-1173.	2.7	11
38	Two alternating direction implicit spectral methods for two-dimensional distributed-order differential equation. <i>Numerical Algorithms</i> , 2019, 82, 321-347.	1.9	11
39	Numerical analysis of Finite-Difference Time-Domain method for 2D/3D Maxwell's equations in a Cole-Cole dispersive medium. <i>Computers and Mathematics With Applications</i> , 2021, 93, 230-252.	2.7	11
40	Adaptive characteristic finite element approximation of convection-diffusion optimal control problems. <i>Numerical Methods for Partial Differential Equations</i> , 2013, 29, 979-998.	3.6	10
41	Finite volume element approximation of the coupled continuum pipe-flow/Darcy model for flows in karst aquifers. <i>Numerical Methods for Partial Differential Equations</i> , 2014, 30, 376-392.	3.6	10
42	Numerical simulation of the modified regularized long wave equation by split least-squares mixed finite element method. <i>Mathematics and Computers in Simulation</i> , 2015, 109, 64-73.	4.4	10
43	A new MCC-MFE method for compressible miscible displacement in porous media. <i>Journal of Computational and Applied Mathematics</i> , 2016, 302, 139-156.	2.0	10
44	A block-centered finite difference method for the distributed-order time-fractional diffusion-wave equation. <i>Applied Numerical Mathematics</i> , 2018, 131, 123-139.	2.1	10
45	A high-order fully conservative block-centered finite difference method for the time-fractional advection-dispersion equation. <i>Applied Numerical Mathematics</i> , 2018, 124, 89-109.	2.1	10
46	Experimental Study on Kinetic Behaviors of Natural Gas Hydrate Production via Continuous Simulated Seawater Injection. <i>Energy & Fuels</i> , 2019, 33, 8222-8230.	5.1	9
47	A coupling of hybrid mixed and continuous Galerkin finite element methods for poroelasticity. <i>Applied Mathematics and Computation</i> , 2019, 347, 767-784.	2.2	9
48	Superconvergence of a Mixed Covolume Method for Elliptic Problems. <i>Computing (Vienna/New York)</i> , 2003, 71, 247-263.	4.8	8
49	Least-squares Galerkin procedures for parabolic integro-differential equations. <i>Applied Mathematics and Computation</i> , 2004, 150, 749-762.	2.2	8
50	A two-grid algorithm for expanded mixed finite element approximations of semi-linear elliptic equations. <i>Computers and Mathematics With Applications</i> , 2013, 66, 392-402.	2.7	8
51	Development and L2-Analysis of a Single-Step Characteristics Finite Difference Scheme of Second Order in Time for Convection-Diffusion Problems. <i>Journal of Algorithms and Computational Technology</i> , 2013, 7, 343-380.	0.7	8
52	A multipoint flux mixed finite element method for the compressible Darcy-Forchheimer models. <i>Applied Mathematics and Computation</i> , 2017, 315, 259-277.	2.2	8
53	High-order compact difference scheme of 1D nonlinear degenerate convection-reaction-diffusion equation with adaptive algorithm. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2019, 75, 43-66.	0.9	8
54	A fully conservative block-centered finite difference method for simulating Darcy-Forchheimer compressible wormhole propagation. <i>Numerical Algorithms</i> , 2019, 82, 451-478.	1.9	8

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55	A fully conservative block-centered finite difference method for Darcy–Forchheimer incompressible miscible displacement problem. <i>Numerical Methods for Partial Differential Equations</i> , 2020, 36, 66-85.	3.6	8
56	A MAC Scheme for Coupled Stokes–Darcy Equations on Non-uniform Grids. <i>Journal of Scientific Computing</i> , 2020, 82, 1.	2.3	8
57	Analysis on a Finite Volume Element Method for Stokes Problems. <i>Acta Mathematicae Applicatae Sinica</i> , 2005, 21, 359-372.	0.7	7
58	Block-centered finite difference methods for general Darcy–Forchheimer problems. <i>Applied Mathematics and Computation</i> , 2017, 307, 124-140.	2.2	7
59	An efficient FDTD algorithm for 2D/3D time fractional Maxwell’s system. <i>Applied Mathematics Letters</i> , 2021, 116, 106992.	2.7	7
60	A reduced-order finite element method based on POD for the incompressible miscible displacement problem. <i>Computers and Mathematics With Applications</i> , 2021, 98, 99-117.	2.7	7
61	A priori and a posteriori error estimates for the method of lumped masses for parabolic optimal control problems. <i>International Journal of Computer Mathematics</i> , 2011, 88, 2798-2823.	1.8	6
62	Closed-form solutions to the nonhomogeneous Yakubovich-transpose matrix equation. <i>Journal of Computational and Applied Mathematics</i> , 2014, 267, 72-81.	2.0	6
63	Two temporal second-order H1-Galerkin mixed finite element schemes for distributed-order fractional sub-diffusion equations. <i>Numerical Algorithms</i> , 2018, 79, 1107-1130.	1.9	6
64	Numerical simulation for a incompressible miscible displacement problem using a reduced-order finite element method based on POD technique. <i>Computational Geosciences</i> , 2021, 25, 2093-2108.	2.4	6
65	Convergence analysis of an upwind finite volume element method with Crouzeix-Raviart element for non-selfadjoint and indefinite problems. <i>Frontiers of Mathematics in China</i> , 2008, 3, 563-579.	0.7	5
66	The numerical simulation and analysis of three-dimensional seawater intrusion and protection projects in porous media. <i>Science in China Series C: Physics, Mechanics and Astronomy</i> , 2009, 52, 92-107.	0.2	5
67	Stabilized Crouzeix-Raviart element for Darcy-Forchheimer model. <i>Numerical Methods for Partial Differential Equations</i> , 2015, 31, 1568-1588.	3.6	5
68	Characteristic block-centered finite difference method for compressible miscible displacement in porous media. <i>Applied Mathematics and Computation</i> , 2017, 314, 391-407.	2.2	5
69	A node-centered finite volume method for a fracture model on triangulations. <i>Applied Mathematics and Computation</i> , 2018, 327, 55-69.	2.2	5
70	MAC finite difference scheme for Stokes equations with damping on non-uniform grids. <i>Computers and Mathematics With Applications</i> , 2018, 75, 1272-1287.	2.7	5
71	Stability and superconvergence of MAC schemes for time dependent Stokes equations on nonuniform grids. <i>Journal of Mathematical Analysis and Applications</i> , 2018, 466, 1499-1524.	1.0	5
72	Stability and convergence of the mark and cell finite difference scheme for Darcy–Stokes–Brinkman equations on non-uniform grids. <i>Numerical Methods for Partial Differential Equations</i> , 2019, 35, 509-527.	3.6	5

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73	A block-centred finite difference method for the distributed-order differential equation with Neumann boundary condition. <i>International Journal of Computer Mathematics</i> , 2019, 96, 622-639.	1.8	5
74	Stability and convergence based on the finite difference method for the nonlinear fractional cable equation on non-uniform staggered grids. <i>Applied Numerical Mathematics</i> , 2020, 152, 403-421.	2.1	5
75	Superconvergence of MAC Scheme for a Coupled Free Flow-Porous Media System with Heat Transport on Non-uniform Grids. <i>Journal of Scientific Computing</i> , 2022, 90, 1.	2.3	5
76	Uniform convergence of finite volume element method with Crouzeix-Raviart element for non-self-adjoint and indefinite elliptic problems. <i>Journal of Computational and Applied Mathematics</i> , 2007, 200, 555-565.	2.0	4
77	A discontinuous Galerkin method combined with mixed finite element for seawater intrusion problem. <i>Journal of Systems Science and Complexity</i> , 2010, 23, 830-845.	2.8	4
78	Least-squares Galerkin procedure for second-order hyperbolic equations. <i>Journal of Systems Science and Complexity</i> , 2011, 24, 381-393.	2.8	4
79	A mass-conservative characteristic FE scheme for optimal control problems governed by convection-diffusion equations. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2012, 241-244, 82-92.	6.6	4
80	An approximation of incompressible miscible displacement in porous media by mixed finite elements and symmetric finite volume element method of characteristics. <i>Numerical Methods for Partial Differential Equations</i> , 2013, 29, 897-915.	3.6	4
81	Split least-squares finite element methods for non-Fickian flow in porous media. <i>Numerical Methods for Partial Differential Equations</i> , 2013, 29, 916-934.	3.6	4
82	Uniformly Stable Explicitly Solvable Finite Difference Method for Fractional Diffusion Equations. <i>East Asian Journal on Applied Mathematics</i> , 2015, 5, 29-47.	0.9	4
83	A Priori Error Estimate of Splitting Positive Definite Mixed Finite Element Method for Parabolic Optimal Control Problems. <i>Numerical Mathematics</i> , 2016, 9, 215-238.	1.3	4
84	A stabilized Crouzeix-Raviart element method for coupling Stokes and Darcy-Forchheimer flows. <i>Numerical Methods for Partial Differential Equations</i> , 2017, 33, 1070-1094.	3.6	4
85	A two-grid stabilized mixed finite element method for Darcy-Forchheimer model. <i>Numerical Methods for Partial Differential Equations</i> , 2018, 34, 686-704.	3.6	4
86	The finite volume method based on the Crouzeix-Raviart element for a fracture model. <i>Numerical Methods for Partial Differential Equations</i> , 2019, 35, 1904-1927.	3.6	4
87	A Multipoint Flux Mixed Finite Element Method for Darcy-Forchheimer Incompressible Miscible Displacement Problem. <i>Journal of Scientific Computing</i> , 2020, 82, 1.	2.3	4
88	A second-order space-time accurate scheme for Maxwell's equations in a Cole-Cole dispersive medium. <i>Engineering With Computers</i> , 2022, 38, 5153-5172.	6.1	4
89	Numerical simulation for 2D/3D time fractional Maxwell's system based on a fast second-order FDTD algorithm. <i>Journal of Computational and Applied Mathematics</i> , 2022, 416, 114590.	2.0	4
90	An Alternative Direction Iterative Method With Second-Order Upwind Scheme For Convection-Diffusion Equations. <i>International Journal of Computer Mathematics</i> , 2003, 80, 527-533.	1.8	3

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91	A FINITE VOLUME ELEMENT METHOD FOR THERMAL CONVECTION PROBLEMS. <i>Acta Mathematica Scientia</i> , 2004, 24, 129-138.	1.0	3
92	Convergence of an upwind control-volume mixed finite element method for convection–diffusion problems. <i>Computing (Vienna/New York)</i> , 2007, 81, 297-315.	4.8	3
93	A rectangular mixed element method with continuous flux approximation for coupling Stokes and Darcy flows. <i>Applied Mathematics and Computation</i> , 2014, 246, 39-53.	2.2	3
94	Trapezoidal Rule for Computing Supersingular Integral on a Circle. <i>Journal of Scientific Computing</i> , 2016, 66, 740-760.	2.3	3
95	A Stabilized Mixed Finite Element Method for Elliptic Optimal Control Problems. <i>Journal of Scientific Computing</i> , 2016, 66, 968-986.	2.3	3
96	A posteriori error estimates for optimal control problems constrained by convection-diffusion equations. <i>Frontiers of Mathematics in China</i> , 2016, 11, 55-75.	0.7	3
97	Cell-Centered Finite Difference Method for the One-Dimensional Forchheimer Laws. <i>Bulletin of the Malaysian Mathematical Sciences Society</i> , 2017, 40, 545-564.	0.9	3
98	A block–centered finite difference method for fractional Cattaneo equation. <i>Numerical Methods for Partial Differential Equations</i> , 2018, 34, 296-316.	3.6	3
99	A block-centered finite difference method for the nonlinear Sobolev equation on nonuniform rectangular grids. <i>Applied Mathematics and Computation</i> , 2019, 363, 124607.	2.2	3
100	Stability and superconvergence of efficient MAC schemes for fractional Stokes equation on non-uniform grids. <i>Applied Numerical Mathematics</i> , 2019, 138, 30-53.	2.1	3
101	A low-order divergence-free H(div)-conforming finite element method for Stokes flows. <i>IMA Journal of Numerical Analysis</i> , 2022, 42, 3711-3734.	2.9	3
102	A reduced-order characteristic finite element method based on POD for optimal control problem governed by convection–diffusion equation. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2022, 391, 114538.	6.6	3
103	A remark on least-squares Galerkin procedures for pseudohyperbolic equations. <i>Journal of Computational and Applied Mathematics</i> , 2009, 229, 108-119.	2.0	2
104	An optimal-order error estimate for the mass-conservative characteristic finite element scheme. <i>Applied Mathematics and Computation</i> , 2012, 218, 10271-10278.	2.2	2
105	Superconvergence of Hermite rule for hypersingular integrals on interval. <i>International Journal of Computer Mathematics</i> , 2013, 90, 1448-1458.	1.8	2
106	Block-centered local refinement methods for the time-fractional equations. <i>Chaos, Solitons and Fractals</i> , 2021, 152, 111314.	5.1	2
107	A reduced-order Weak Galerkin finite element algorithm based on POD technique for parabolic problem on polytopal mesh. <i>Applied Mathematics Letters</i> , 2022, 127, 107842.	2.7	2
108	The locking-free finite difference method based on staggered grids for the coupled Stokes–Biot problem. <i>International Journal of Computer Mathematics</i> , 2022, 99, 2042-2068.	1.8	2

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109	Galerkin method for the fully coupled quasi-static thermo-poroelastic problem. Computers and Mathematics With Applications, 2022, 118, 95-109.	2.7	2
110	Modified marker and cell schemes for Stokes equations with Dirichlet boundary condition. Mathematical Methods in the Applied Sciences, 2022, 45, 10384-10407.	2.3	1
111	On the accuracy of the mortar finite volume element method with Lagrange multipliers. Applied Mathematics and Computation, 2006, 183, 1386-1398.	2.2	0
112	A Finite Difference Domain Decomposition Algorithm with High Accuracy for the Parabolic Equations. , 2008, , .		0
113	A finite difference non-matching domain decomposition algorithm for the parabolic equation. International Journal of Computer Mathematics, 2010, 87, 2480-2492.	1.8	0
114	A Rectangular Mixed Finite Element Method with a Continuous Flux for an Elliptic Equation Modelling Darcy Flow. Abstract and Applied Analysis, 2013, 2013, 1-10.	0.7	0
115	Stability and convergence of characteristic MAC scheme and post-processing for the Oseen equations on non-uniform grids. Applied Mathematics and Computation, 2019, 342, 94-111.	2.2	0
116	Characteristic methods for thermal convection problems with infinite Prandtl number on nonuniform staggered grids. Journal of Mathematical Analysis and Applications, 2022, 509, 125943.	1.0	0
117	An efficient augmented approach algorithm for incompressible Stokes problems on staggered Cartesian grids. Applied Mathematics Letters, 2022, 128, 107957.	2.7	0
118	A combined stabilized mixed finite element and discontinuous Galerkin method for coupled Stokes and Darcy flows with transport. Computers and Mathematics With Applications, 2022, 120, 92-104.	2.7	0