Yang Liu

List of Publications by Year
in descending order

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77 papers	1,485 citations	394421 19 h-index	345221 36 g-index
77 all docs	77 docs citations	77 times ranked	384 citing authors

#	Article	IF	Citations
1	Finite volume element methods for two-dimensional time fractional reactionâ€“diffusion equations on triangular grids. Applicable Analysis, 2023, 102, 2248-2270.	1.3	3
2	Numerical simulations based on shifted second-order difference/finite element algorithms for the time fractional Maxwellâ€™s system. Engineering With Computers, 2022, 38, 191-205.	6.1	7
3	Efficient shifted fractional trapezoidal rule for subdiffusion problems with nonsmooth solutions on uniform meshes. BIT Numerical Mathematics, 2022, 62, 631-666.	2.0	9
4	Mixed element algorithm based on a second-order time approximation scheme for a two-dimensional nonlinear time fractional coupled sub-diffusion model. Engineering With Computers, 2022, 38, 51-68.	6.1	17
5	A two-grid mixed finite volume element method for nonlinear time fractional reaction-diffusion equations. AIMS Mathematics, 2022, 7, 1941-1970.	1.6	10
6	Efficient time second-order SCQ formula combined with a mixed element method for a nonlinear time fractional wave model. Electronic Research Archive, 2022, 30, 440-458.	0.9	1
7	Local discontinuous Galerkin method combined with the L2 formula for the time fractional Cable model. Journal of Applied Mathematics and Computing, 2022, 68, 4457-4478.	2.5	5
8	Second-Order Time Stepping Scheme Combined with a Mixed Element Method for a 2D Nonlinear Fourth-Order Fractional Integro-Differential Equations. Fractal and Fractional, 2022, 6, 201.	3.3	3
9	Efficient numerical algorithm with the second-order time accuracy for a two-dimensional nonlinear fourth-order fractional wave equation. Results in Applied Mathematics, 2022, 14, 100264.	1.3	4
10	Local discontinuous Galerkin method based on a family of second-order time approximation schemes for fractional mobile/immobile convection-diffusion equations. Applied Numerical Mathematics, 2022, 179, 149-169.	2.1	6
11	A Time Two-Mesh Compact Difference Method for the One-Dimensional Nonlinear SchrÃ¶dinger Equation. Entropy, 2022, 24, 806.	2.2	3
12	TT-M Finite Element Algorithm for the Coupled SchrÃ¶dingerâ€“Boussinesq Equations. Axioms, 2022, 11, 314.	1.9	3
13	A structure preserving difference scheme with fast algorithms for high dimensional nonlinear space-fractional SchrÃ¶dinger equations. Journal of Computational Physics, 2021, 425, 109869.	3.8	18
14	TT-M FE method for a 2D nonlinear time distributed-order and space fractional diffusion equation. Mathematics and Computers in Simulation, 2021, 181, 117-137.	4.4	5
15	Approximation methods for the distributed order calculus using the convolution quadrature. Discrete and Continuous Dynamical Systems - Series B, 2021, 26, 1447-1468.	0.9	7
16	Fast second-order time two-mesh mixed finite element method for a nonlinear distributed-order sub-diffusion model. Numerical Algorithms, 2021, 88, 523-553.	1.9	23
17	A class of efficient time-stepping methods for multi-term time-fractional reaction-diffusion-wave equations. Applied Numerical Mathematics, 2021, 165, 56-82.	2.1	21
18	The Unified Theory of Shifted Convolution Quadrature for Fractional Calculus. Journal of Scientific Computing, 2021, 89, 1.	2.3	17

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19	Fourth-order compact difference schemes for the two-dimensional nonlinear fractional mobile/immobile transport models. Computers and Mathematics With Applications, 2021, 100, 1-10.	2.7	5
20	Mixed finite element algorithm for a nonlinear time fractional wave model. Mathematics and Computers in Simulation, 2021, 188, 60-76.	4.4	7
21	A Mixed Element Algorithm Based on the Modified L1 Crankâ€“Nicolson Scheme for a Nonlinear Fourth-Order Fractional Diffusion-Wave Model. Fractal and Fractional, 2021, 5, 274.	3.3	2
22	A class of shifted high-order numerical methods for the fractional mobile/immobile transport equations. Applied Mathematics and Computation, 2020, 368, 124799.	2.2	33
23	Analysis of a continuous Galerkin method with mesh modification for two-dimensional telegraph equation. Computers and Mathematics With Applications, 2020, 79, 588-602.	2.7	6
24	Fast calculation based on a spatial twoâ€grid finite element algorithm for a nonlinear spaceâ€“time fractional diffusion model. Numerical Methods for Partial Differential Equations, 2020, 36, 1904-1921.	3.6	7
25	Finite volume element method with the WSGD formula for nonlinear fractional mobile/immobile transport equations. Advances in Difference Equations, 2020, 2020, .	3.5	10
26	A Weak Galerkin Finite Element Method for High Dimensional Time-fractional Diffusion Equation. Applied Mathematics and Computation, 2020, 386, 125524.	2.2	5
27	A Crankâ€“Nicolson Finite Volume Element Method for Time Fractional Sobolev Equations on Triangular Grids. Mathematics, 2020, 8, 1591.	2.2	13
28	A Splitting Mixed Covolume Method for Viscoelastic Wave Equations on Triangular Grids. Mediterranean Journal of Mathematics, 2020, 17, 1.	0.8	1
29	TT-M finite element algorithm for a two-dimensional space fractional Grayâ€“Scott model. Computers and Mathematics With Applications, 2020, 80, 1793-1809.	2.7	19
30	A novel finite element method for the distributed-order time fractional Cable equation in two dimensions. Computers and Mathematics With Applications, 2020, 80, 923-939.	2.7	17
31	Necessity of introducing non-integer shifted parameters by constructing high accuracy finite difference algorithms for a two-sided space-fractional advectionâ€“diffusion model. Applied Mathematics Letters, 2020, 105, 106347.	2.7	18
32	Finite Element Methods Based on Two Families of Second-Order Numerical Formulas for the Fractional Cable Model with Smooth Solutions. Journal of Scientific Computing, 2020, 84, 1.	2.3	25
33	Some Second-Order Ïƒ Schemes Combined with an H1-Galerkin MFE Method for a Nonlinear Distributed-Order Sub-Diffusion Equation. Mathematics, 2020, 8, 187.	2.2	7
34	High-Order Local Discontinuous Galerkin Algorithm with Time Second-Order Schemes for the Two-Dimensional Nonlinear Fractional Diffusion Equation. Communications on Applied Mathematics and Computation, 2020, 2, 613-640.	1.7	4
35	Fast algorithm based on the novel approximation formula for the Caputo-Fabrizio fractional derivative. AIMS Mathematics, 2020, 5, 1729-1744.	1.6	12
36	A Mixed Finite Volume Element Method for Time-Fractional Reaction-Diffusion Equations on Triangular Grids. Mathematics, 2019, 7, 600.	2.2	11

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37	TGMFE algorithm combined with some time second-order schemes for nonlinear fourth-order reaction diffusion system. Results in Applied Mathematics, 2019, 4, 100080.	1.3	4
38	Highâ€•order local discontinuous Galerkin method for a fractal mobile/immobile transport equation with the Caputoâ€“Fabrizio fractional derivative. Numerical Methods for Partial Differential Equations, 2019, 35, 1588-1612.	3.6	18
39	Fast algorithm based on TT-M FE system for space fractional Allenâ€“Cahn equations with smooth and non-smooth solutions. Journal of Computational Physics, 2019, 379, 351-372.	3.8	58
40	Some second-order ? schemes combined with finite element method for nonlinear fractional cable equation. Numerical Algorithms, 2019, 80, 533-555.	1.9	66
41	Time second-order finite difference/finite element algorithm for nonlinear time-fractional diffusion problem with fourth-order derivative term. Computers and Mathematics With Applications, 2018, 75, 3521-3536.	2.7	38
42	Crankâ€“Nicolson WSGI difference scheme with finite element method for multi-dimensional time-fractional wave problem. Computational and Applied Mathematics, 2018, 37, 5126-5145.	1.3	11
43	Time two-mesh algorithm combined with finite element method for time fractional water wave model. International Journal of Heat and Mass Transfer, 2018, 120, 1132-1145.	4.8	46
44	Crankâ€“Nicolson Finite Element Scheme and Modified Reduced-Order Scheme for Fractional Sobolev Equation. Numerical Functional Analysis and Optimization, 2018, 39, 1635-1655.	1.4	10
45	FINITE ELEMENT ALGORITHM BASED ON HIGH-ORDER TIME APPROXIMATION FOR TIME FRACTIONAL CONVECTION-DIFFUSION EQUATION. Journal of Applied Analysis and Computation, 2018, 8, 229-249.	0.5	1
46	Local discontinuous Galerkin method for a nonlinear time-fractional fourth-order partial differential equation. Journal of Computational Physics, 2017, 344, 108-126.	3.8	56
47	An expanded mixed covolume element method for integro-differential equation of Sobolev type on triangular grids. Advances in Difference Equations, 2017, 2017, .	3.5	1
48	Second-order approximation scheme combined with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si52.gif" display="inline" overflow="scroll"><mml:msup><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></m MFE method for nonlinear time fractional convectionâ€“diffusion equation. Computers and Mathematics With Applications, 2017, 73, 1182-1196.	2.7	32
49	High-order local discontinuous Galerkin method combined with WSGD-approximation for a fractional subdiffusion equation. Computers and Mathematics With Applications, 2017, 73, 1298-1314.	2.7	51
50	A MFE method combined with L1-approximation for a nonlinear time-fractional coupled diffusion system. International Journal of Modeling, Simulation, and Scientific Computing, 2017, 08, 1750012.	1.4	2
51	A two-grid finite element approximation for a nonlinear time-fractional Cable equation. Nonlinear Dynamics, 2016, 85, 2535-2548.	5.2	94
52	Finite element method combined with second-order time discrete scheme for nonlinear fractional Cable equation. European Physical Journal Plus, 2016, 131, 1.	2.6	37
53	A new fully discrete finite difference/element approximation for fractional cable equation. Journal of Applied Mathematics and Computing, 2016, 52, 345-361.	2.5	27
54	FINITE DIFFERENCE/H¹-GALERKIN MFE PROCEDURE FOR A FRACTIONAL WATER WAVE MODEL. Journal of Applied Analysis and Computation, 2016, 6, 409-428.	0.5	1

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55	Finite difference/finite element method for a nonlinear time-fractional fourth-order reactionâ€“diffusion problem. Computers and Mathematics With Applications, 2015, 70, 573-591.	2.7	129
56	A new expanded mixed method for parabolic integro-differential equations. Applied Mathematics and Computation, 2015, 259, 600-613.	2.2	6
57	A two-grid mixed finite element method for a nonlinear fourth-order reactionâ€“diffusion problem with time-fractional derivative. Computers and Mathematics With Applications, 2015, 70, 2474-2492.	2.7	116
58	An $$H^1$$ H 1 -Galerkin mixed finite element method for time fractional reactionâ€“diffusion equation. Journal of Applied Mathematics and Computing, 2015, 47, 103-117.	2.5	45
59	A New Mixed Element Method for a Class of Time-Fractional Partial Differential Equations. Scientific World Journal, The, 2014, 2014, 1-8.	2.1	9
60	A New Expanded Mixed Element Method for Convection-Dominated Sobolev Equation. Scientific World Journal, The, 2014, 2014, 1-13.	2.1	1
61	Numerical Analysis of an<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="M1"><mml:mrow><mml:msup><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow> Mixed Finite Element Method for Time Fractional Telegraph Equation. Scientific World Journal, The, 2014, 2014, 1-14.	2.1	7
62	The Numerical Analysis and Simulation of a Linearized Crank-Nicolson H¹-GMFEM for Nonlinear Coupled BBM Equations. Applied Mechanics and Materials, 2014, 513-517, 1919-1926.	0.2	1
63	A mixed finite element method for a time-fractional fourth-order partial differential equation. Applied Mathematics and Computation, 2014, 243, 703-717.	2.2	119
64	A new mixed scheme based on variation of constants for Sobolev equation with nonlinear convection term. Applied Mathematics, 2013, 28, 158-172.	1.0	6
65	A coupling method based on new MFE and FE for fourth-order parabolic equation. Journal of Applied Mathematics and Computing, 2013, 43, 249-269.	2.5	5
66	Analysis of mixed finite element methods for fourth-order wave equations. Computers and Mathematics With Applications, 2013, 65, 1-16.	2.7	17
67	Explicit Multistep Mixed Finite Element Method for RLW Equation. Abstract and Applied Analysis, 2013, 2013, 1-12.	0.7	11
68	A Novel Characteristic Expanded Mixed Method for Reaction-Convection-Diffusion Problems. Journal of Applied Mathematics, 2013, 2013, 1-11.	0.9	2
69	A Coupling Method of New EMFE and FE for Fourth-Order Partial Differential Equation of Parabolic Type. Advances in Mathematical Physics, 2013, 2013, 1-14.	0.8	3
70	A New Linearized Crank-Nicolson Mixed Element Scheme for the Extended Fisher-Kolmogorov Equation. Scientific World Journal, The, 2013, 2013, 1-11.	2.1	3
71	A New Positive Definite Expanded Mixed Finite Element Method for Parabolic Integrodifferential Equations. Journal of Applied Mathematics, 2012, 2012, 1-24.	0.9	4
72	A splitting mixed space-time discontinuous Galerkin method for parabolic problems. Procedia Engineering, 2012, 31, 1050-1059.	1.2	1

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73	Splitting positive definite mixed element method for viscoelasticity wave equation. Frontiers of Mathematics in China, 2012, 7, 725-742.	0.7	6
74	Splitting positive definite mixed element methods for pseudoâ€hyperbolic equations. Numerical Methods for Partial Differential Equations, 2012, 28, 670-688.	3.6	15
75	Error estimates of H 1-Galerkin mixed finite element method for SchrÃ¶dinger equation. Applied Mathematics, 2009, 24, 83-89.	1.0	13
76	-Galerkin mixed finite element methods for pseudo-hyperbolic equations. Applied Mathematics and Computation, 2009, 212, 446-457.	2.2	38
77	Mixed time discontinuous space-time finite element method for convection diffusion equations. Applied Mathematics and Mechanics (English Edition), 2008, 29, 1579-1586.	3.6	11