Da Xu

List of Publications by Year
in descending order

83 papers	1,311 citations	304743 22 h-index	454955 30 g-index
83 all docs	83 docs citations	83 times ranked	329 citing authors

#	Article	IF	Citations
1	A formally secondâ€order <scp>backward differentiation formula</scp> Sincâ€collocation method for the Volterra integroâ€differential equation with a weakly singular kernel based on the double exponential transformation. Numerical Methods for Partial Differential Equations, 2022, 38, 830-847.	3.6	19
2	High-order orthogonal spline collocation method with graded meshes for two-dimensional fractional evolution integro-differential equation. International Journal of Computer Mathematics, 2022, 99, 1305-1324.	1.8	2
3	The formally second-order BDF ADI difference/compact difference scheme for the nonlocal evolution problem in three-dimensional space. Applied Numerical Mathematics, 2022, 172, 359-381.	2.1	28
4	Fast ADI difference/compact difference schemes for the nonlocal evolution equation with weakly singular kernels in three dimensions. Mathematics and Computers in Simulation, 2022, 194, 329-347.	4.4	1
5	An efficient Sinc-collocation method via the DE transformation for eighth-order boundary value problems. Journal of Computational and Applied Mathematics, 2022, 408, 114136.	2.0	3
6	A robust error analysis of the OSC method for a multi-term fourth-order sub-diffusion equation. Computers and Mathematics With Applications, 2022, 109, 180-190.	2.7	33
7	An ADI finite difference method for the two-dimensional Volterra integro-differential equation with weakly singular kernel. International Journal of Computer Mathematics, 2022, 99, 2542-2554.	1.8	2
8	Observability Inequalities for Hermite Bi-cubic Orthogonal Spline Collocation Methods of 2-D Integro-differential Equations in the Square Domains. Applied Mathematics and Optimization, 2021, 84, 1341-1372.	1.6	4
9	On the Observability of Time Discrete Integro-differential Systems. Applied Mathematics and Optimization, 2021, 83, 565-637.	1.6	2
10	Unconditional convergence of linearized orthogonal spline collocation algorithm for semilinear subdiffusion equation with nonsmooth solution. Numerical Methods for Partial Differential Equations, 2021, 37, 1361-1373.	3.6	2
11	Numerical solution of the fourth-order partial integro-differential equation with multi-term kernels by the Sinc-collocation method based on the double exponential transformation. Applied Mathematics and Computation, 2021, 392, 125693.	2.2	23
12	The Crank-Nicolson-type Sinc-Galerkin method for the fourth-order partial integro-differential equation with a weakly singular kernel. Applied Numerical Mathematics, 2021, 159, 239-258.	2.1	28
13	Uniform l1 behavior of the first-order interpolant quadrature scheme for some partial integro-differential equations. Applied Mathematics Letters, 2021, 117, 107097.	2.7	2
14	A fast ADI orthogonal spline collocation method with graded meshes for the two-dimensional fractional integro-differential equation. Advances in Computational Mathematics, 2021, 47, 1.	1.6	20
15	Weak Galerkin finite element method for a class of time fractional generalized Burgers' equation. Numerical Methods for Partial Differential Equations, 2021, 37, 732-749.	3.6	11
16	A second-order ADI difference scheme based on non-uniform meshes for the three-dimensional nonlocal evolution problem. Computers and Mathematics With Applications, 2021, 102, 137-145.	2.7	26
17	A formally second order BDF ADI difference scheme for the three-dimensional time-fractional heat equation. International Journal of Computer Mathematics, 2020, 97, 1100-1117.	1.8	16
18	Analytical and numerical solutions of a class of nonlinear integro-differential equations with<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e802" altimg="si5.svg"><mml:msup><mml:mrow><mml:mi>L</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mr Nonlinear Analysis: Real World Applications, 2020, 51, 103002.	1.7	4

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19	A formally second-order BDF finite difference scheme for the integro-differential equations with the multi-term kernels. International Journal of Computer Mathematics, 2020, 97, 2055-2073.	1.8	21
20	Alternating direction implicit difference scheme for the multi-term time-fractional integro-differential equation with a weakly singular kernel. Computers and Mathematics With Applications, 2020, 79, 244-255.	2.7	22
21	A time two-grid algorithm based on finite difference method for the two-dimensional nonlinear time-fractional mobile/immobile transport model. Numerical Algorithms, 2020, 85, 39-58.	1.9	49
22	A compact finite difference scheme for the fourthâ€order timeâ€fractional integroâ€differential equation with a weakly singular kernel. Numerical Methods for Partial Differential Equations, 2020, 36, 439-458.	3.6	43
23	Observability inequality for piecewise Hermite cubic orthogonal spline collocation semiâ€discretization of the waveâ€Petrovsky system with memory. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2020, 100, e201900265.	1.6	2
24	Time two-grid algorithm based on finite difference method for two-dimensional nonlinear fractional evolution equations. Applied Numerical Mathematics, 2020, 152, 169-184.	2.1	18
25	An Efficient Spline Collocation Method for a Nonlinear Fourth-Order Reaction Subdiffusion Equation. Journal of Scientific Computing, 2020, 85, 1.	2.3	15
26	Application of the Crankâ€"Nicolson time integrator to viscoelastic wave equations with boundary feedback damping. IMA Journal of Numerical Analysis, 2020, , .	2.9	1
27	An alternating direction implicit Galerkin finite element method for the distributed-order time-fractional mobileâ€"immobile equation in two dimensions. Computers and Mathematics With Applications, 2020, 80, 3156-3172.	2.7	29
28	An ADI compact difference scheme for the two-dimensional semilinear time-fractional mobileâ€"immobile equation. Computational and Applied Mathematics, 2020, 39, 1.	2.2	16
29	On the observability inequalities of time discrete 2â€D integroâ€differential systems in square domains. Numerical Methods for Partial Differential Equations, 2020, , .	3.6	0
30	Weak Galerkin finite-element method for time-fractional nonlinear integro-differential equations. Computational and Applied Mathematics, 2020, 39, 1.	2.2	4
31	Highâ€order ADI orthogonal spline collocation method for a new 2D fractional integroâ€differential problem. Mathematical Methods in the Applied Sciences, 2020, 43, 5162-5178.	2.3	10
32	A finite difference scheme for the nonlinear timeâ€fractional partial integroâ€differential equation. Mathematical Methods in the Applied Sciences, 2020, 43, 3392-3412.	2.3	23
33	An alternating direction implicit orthogonal spline collocation method for the two dimensional multi-term time fractional integro-differential equation. Applied Numerical Mathematics, 2020, 151, 199-212.	2.1	41
34	Second-order difference approximations for Volterra equations with the completely monotonic kernels. Numerical Algorithms, 2019, 81, 1003-1041.	1.9	4
35	BDF ADI orthogonal spline collocation scheme for the fractional integro-differential equation with two weakly singular kernels. Computers and Mathematics With Applications, 2019, 78, 3807-3820.	2.7	20
36	A high-order numerical scheme using orthogonal spline collocation for solving the two-dimensional fractional reactionâ€"subdiffusion equation. Advances in Difference Equations, 2019, 2019, .	3.5	3

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37	Weak Galerkin finite element method for the parabolic integro-differential equation with weakly singular kernel. Computational and Applied Mathematics, 2019, 38, 1.	2.2	6
38	Numerical analysis of Volterra integro-differential equations for viscoelastic rods and membranes. Applied Mathematics and Computation, 2019, 355, 1-20.	2.2	1
39	A second-order accurate numerical method with graded meshes for an evolution equation with a weakly singular kernel. Journal of Computational and Applied Mathematics, 2019, 356, 152-163.	2.0	32
40	An ADI difference scheme based on fractional trapezoidal rule for fractional integro-differential equation with a weakly singular kernel. Applied Mathematics and Computation, 2019, 354, 103-114.	2.2	22
41	A high-order numerical method for solving the 2D fourth-order reaction-diffusion equation. Numerical Algorithms, 2019, 80, 849-877.	1.9	26
42	Orthogonal spline collocation method for the fourth-order diffusion system. Computers and Mathematics With Applications, 2018, 75, 3172-3185.	2.7	11
43	WSGD-OSC Scheme for Two-Dimensional Distributed Order Fractional Reactionâ€"Diffusion Equation. Journal of Scientific Computing, 2018, 76, 1502-1520.	2.3	28
44	Legendre Wavelets Direct Method for the Numerical Solution of Time-Fractional Order Telegraph Equations. Mediterranean Journal of Mathematics, 2018, 15, 1.	0.8	14
45	Compact Alternating Direction Implicit Scheme for Integro-Differential Equations of Parabolic Type. Journal of Scientific Computing, 2018, 76, 565-582.	2.3	23
46	A backward Euler alternating direction implicit difference scheme for the threeâ€dimensional fractional evolution equation. Numerical Methods for Partial Differential Equations, 2018, 34, 938-958.	3.6	15
47	A semi-discrete scheme for solving fourth-order partial integro-differential equation with a weakly singular kernel using Legendre wavelets method. Computational and Applied Mathematics, 2018, 37, 4145-4168.	1.3	11
48	Boundary Observability of Semi-Discrete Second-Order Integro-Differential Equations Derived from Piecewise Hermite Cubic Orthogonal Spline Collocation Method. Applied Mathematics and Optimization, 2018, 77, 73-97.	1.6	8
49	Orthogonal spline collocation scheme for the multi-term time-fractional diffusion equation. International Journal of Computer Mathematics, 2018, 95, 1478-1493.	1.8	23
50	Legendre wavelets method for approximate solution of fractional-order differential equations under multi-point boundary conditions. International Journal of Computer Mathematics, 2018, 95, 998-1014.	1.8	7
51	Orthogonal spline collocation scheme for multiterm fractional convectionâ€diffusion equation with variable coefficients. Numerical Methods for Partial Differential Equations, 2018, 34, 555-574.	3.6	3
52	Alternating direction implicit OSC scheme for the two-dimensional fractional evolution equation with a weakly singular kernel. Acta Mathematica Scientia, 2018, 38, 1689-1711.	1.0	4
53	Numerical asymptotic stability for the integro-differential equations with the multi-term kernels. Applied Mathematics and Computation, 2017, 309, 107-132.	2.2	16
54	A second order BDF alternating direction implicit difference scheme for the two-dimensional fractional evolution equation. Applied Mathematical Modelling, 2017, 41, 54-67.	4.2	33

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55	Numerical solutions of viscoelastic bending wave equations with two term time kernels by Runge-Kutta convolution quadrature. Discrete and Continuous Dynamical Systems - Series B, 2017, 22, 2389-2416.	0.9	0
56	The time discretization in classes of integro-differential equations with completely monotonic kernels: Weighted asymptotic convergence. Numerical Methods for Partial Differential Equations, 2016, 32, 896-935.	3.6	18
57	A second-order BDF compact difference scheme for fractional-order Volterra equation. International Journal of Computer Mathematics, 2016, 93, 1140-1154.	1.8	40
58	A backward euler orthogonal spline collocation method for the time-fractional Fokker-Planck equation. Numerical Methods for Partial Differential Equations, 2015, 31, 1534-1550.	3.6	22
59	An ADI Crankâ€“Nicolson Orthogonal Spline Collocation Method for the Two-Dimensional Fractional Diffusion-Wave Equation. Journal of Scientific Computing, 2015, 65, 1217-1239.	2.3	42
60	Numerical solution of evolutionary integral equations with completely monotonic kernel by Rungeâ€“Kutta convolution quadrature. Numerical Methods for Partial Differential Equations, 2015, 31, 105-142.	3.6	2
61	An alternating direction implicit fractional trapezoidal rule type difference scheme for the two-dimensional fractional evolution equation. International Journal of Computer Mathematics, 2015, 92, 2178-2197.	1.8	27
62	A compact difference scheme for a partial integro-differential equation with a weakly singular kernel. Applied Mathematical Modelling, 2015, 39, 947-954.	4.2	19
63	Decay Properties for the Numerical Solutions of a Partial Differential Equation with Memory. Journal of Scientific Computing, 2015, 62, 146-178.	2.3	10
64	Quasi Wavelet based numerical method for Volterra integro-differential equations on unbounded spatial domains. Applied Mathematics and Computation, 2014, 227, 509-517.	2.2	3
65	Uniform $$l^{1}$$ behavior in the Crankâ€“Nicolson methods for a linear Volterra equation with convex kernel. Calcolo, 2014, 51, 57-96.	1.1	5
66	Orthogonal spline collocation method for the two-dimensional fractional sub-diffusion equation. Journal of Computational Physics, 2014, 256, 824-837.	3.8	52
67	The long time error analysis in the second order difference type method of an evolutionary integral equation with completely monotonic kernel. Advances in Computational Mathematics, 2014, 40, 881-922.	1.6	4
68	Alternating direction implicit Galerkin finite element method for the two-dimensional fractional diffusion-wave equation. Journal of Computational Physics, 2013, 255, 471-485.	3.8	64
69	The time discretization in classes of integro-differential equations with completely monotonic kernels: Weighted asymptotic stability. Science China Mathematics, 2013, 56, 395-424.	1.7	19
70	Alternating direction implicit-Euler method for the two-dimensional fractional evolution equation. Journal of Computational Physics, 2013, 236, 157-168.	3.8	36
71	Crankâ€“Nicolson/quasi-wavelets method for solving fourth order partial integro-differential equation with a weakly singular kernel. Journal of Computational Physics, 2013, 234, 317-329.	3.8	43
72	Crank-Nicolson Quasi-Wavelet Based Numerical Method for Volterra Integro-Differential Equations on Unbounded Spatial Domains. East Asian Journal on Applied Mathematics, 2013, 3, 283-292.	0.9	1

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73	Uniform $l^{1} $ convergence in the Crank-Nicolson method of a linear integro-differential equation for viscoelastic rods and plates. Mathematics of Computation, 2013, 83, 735-769.	2.1	7
74	Quasi wavelet based numerical method for a class of partial integro-differential equation. Applied Mathematics and Computation, 2012, 218, 11842-11850.	2.2	19
75	Weighted <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mi>l</mml:mi><mml:mn>1</mml:mn></mml:msup></mml:math> Paleyâ€“Wiener Theorem, with applications to stability of the linear multi-step methods for Volterra equations in Hilbert spaces. Journal of Mathematical Analysis and Applications, 2012, 389, 1006-1019.	1.0	4
76	Quasi-wavelet based numerical method for fourth-order partial integro-differential equations with a weakly singular kernel. International Journal of Computer Mathematics, 2011, 88, 3236-3254.	1.8	27
77	The numerical analysis on a Volterra equation with asymptotically periodic solution. Journal of Computational and Applied Mathematics, 2011, 236, 684-698.	2.0	0
78	The Uniform L 2 Behavior for Time Discretization of an Evolution Equation. Acta Mathematica Sinica, English Series, 2003, 19, 127-140.	0.6	2
79	The Asymptotic Behavior for Numerical Solution of a Volterra Equation. Acta Mathematicae Applicatae Sinica, 2003, 19, 47-58.	0.7	1
80	Uniform L1 error bounds for the semidiscrete solution of a Volterra equation with completely monotonic convolution kernel. Computers and Mathematics With Applications, 2002, 43, 1303-1318.	2.7	9
81	Orthogonal spline collocation method for the two-dimensional time fractional mobile-immobile equation. Journal of Applied Mathematics and Computing, 0, , 1.	2.5	3
82	An efficient Sincâ€collocation method by the single exponential transformation for the nonlinear fourthâ€order partial integroâ€differential equation with multiterm kernels. Mathematical Methods in the Applied Sciences, 0, , .	2.3	2
83	A spectral order method for solving the nonlinear fourth-order time-fractional problem. Journal of Applied Mathematics and Computing, 0, , 1.	2.5	0