Tingchun Wang

List of Publications by Year
in descending order

45 papers	1,005 citations	471061 17 h-index	433756 31 g-index
45 all docs	45 docs citations	45 times ranked	343 citing authors

#	Article	IF	Citations
1	Fourth-order compact and energy conservative difference schemes for the nonlinear SchrÃ¶dinger equation in two dimensions. Journal of Computational Physics, 2013, 243, 382-399.	1.9	158
2	Conservative difference methods for the Kleinâ€“Gordonâ€“Zakharov equations. Journal of Computational and Applied Mathematics, 2007, 205, 430-452.	1.1	112
3	New conservative difference schemes for a coupled nonlinear SchrÃ¶dinger system. Applied Mathematics and Computation, 2010, 217, 1604-1619.	1.4	62
4	Analysis of some finite difference schemes for two-dimensional Ginzburg-Landau equation. Numerical Methods for Partial Differential Equations, 2011, 27, 1340-1363.	2.0	53
5	Optimal point-wise error estimate of a compact difference scheme for the Kleinâ€“Gordonâ€“SchrÃ¶dinger equation. Journal of Mathematical Analysis and Applications, 2014, 412, 155-167.	0.5	48
6	Optimal Point-Wise Error Estimate of a Compact Difference Scheme for the Coupled Grossâ€“Pitaevskii Equations in One Dimension. Journal of Scientific Computing, 2014, 59, 158-186.	1.1	47
7	ä¸€ç»´éžç º¿æ€§Schrödinger æ–¹ç¨‹çš„ä¸ä¸ªæ—æ¡ä»¶æ”¶æ•›çš„å®ˆæ’ç´§è‡´å·®åˆ†æ ¼å¼. Scientia Sinica Mathematica, 2011, 4	0.1	42
8	Unconditional and optimal H 2-error estimates of two linear and conservative finite difference schemes for the Klein-Gordon-SchrÃ¶dinger equation in high dimensions. Advances in Computational Mathematics, 2018, 44, 477-503.	0.8	41
9	Optimal l âˆž error estimates of finite difference methods for the coupled Gross-Pitaevskii equations in high dimensions. Science China Mathematics, 2014, 57, 2189-2214.	0.8	37
10	Conservative schemes for the symmetric Regularized Long Wave equations. Applied Mathematics and Computation, 2007, 190, 1063-1080.	1.4	29
11	Point-wise errors of two conservative difference schemes for the Kleinâ€“Gordonâ€“SchrÃ¶dinger equation. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 4565-4575.	1.7	28
12	Analysis of a symplectic difference scheme for a coupled nonlinear SchrÃ¶dinger system. Journal of Computational and Applied Mathematics, 2009, 231, 745-759.	1.1	27
13	A robust semi-explicit difference scheme for the Kuramotoâ€“Tsuzuki equation. Journal of Computational and Applied Mathematics, 2009, 233, 878-888.	1.1	26
14	Maximum norm error bound of a linearized difference scheme for a coupled nonlinear SchrÃ¶dinger equations. Journal of Computational and Applied Mathematics, 2011, 235, 4237-4250.	1.1	25
15	Two completely explicit and unconditionally convergent Fourier pseudo-spectral methods for solving the nonlinear SchrÃ¶dinger equation. Journal of Computational Physics, 2020, 404, 109116.	1.9	20
16	A linearized, decoupled, and energyâ€preserving compact finite difference scheme for the coupled nonlinear SchrÃ¶dinger equations. Numerical Methods for Partial Differential Equations, 2017, 33, 840-867.	2.0	19
17	Uniform point-wise error estimates of semi-implicit compact finite difference methods for the nonlinear SchrÃ¶dinger equation perturbed by wave operator. Journal of Mathematical Analysis and Applications, 2015, 422, 286-308.	0.5	18
18	Optimal Point-Wise Error Estimate of a Compact Finite Difference Scheme for the Coupled Nonlinear SchrÃ¶dinger Equations. Journal of Computational Mathematics, 2014, 32, 58-74.	0.2	17

#	Article	IF	Citations
19	Numerical simulation of a nonlinearly coupled SchrÃ¶dinger system: A linearly uncoupled finite difference scheme. Mathematics and Computers in Simulation, 2008, 79, 607-621.	2.4	16
20	Optimal point-wise error estimate of two conservative fourth-order compact finite difference schemes for the nonlinear Dirac equation. Applied Numerical Mathematics, 2021, 162, 150-170.	1.2	15
21	Convergence of an Eighth-Order Compact Difference Scheme for the Nonlinear SchrÃ¶dinger Equation. Advances in Numerical Analysis, 2012, 2012, 1-24.	0.2	13
22	Two energy-conserving and compact finite difference schemes for two-dimensional SchrÃ¶dinger-Boussinesq equations. Numerical Algorithms, 2020, 85, 1335-1363.	1.1	13
23	Unconditional and optimal H1 error estimate of a Crankâ€"Nicolson finite difference scheme for the Grossâ€"Pitaevskii equation with an angular momentum rotation term. Journal of Mathematical Analysis and Applications, 2018, 459, 945-958.	0.5	11
24	Unconditional $$L^{infty }$$ L âˆž -convergence of two compact conservative finite difference schemes for the nonlinear SchrÃ¶dinger equation in multi-dimensions. Calcolo, 2018, 55, 1.	0.6	11
25	Convergence of an efficient and compact finite difference scheme for the Kleinâ€"Gordonâ€"Zakharov equation. Applied Mathematics and Computation, 2013, 221, 433-443.	1.4	10
26	Numerical computations for N-coupled nonlinear SchrÃ¶dinger equations by split step spectral methods. Applied Mathematics and Computation, 2013, 222, 438-452.	1.4	10
27	Numerical analysis of a multi-symplectic scheme for a strongly coupled SchrÃ¶dinger system. Applied Mathematics and Computation, 2008, 203, 413-431.	1.4	9
28	Optimal error estimate of a compact scheme for nonlinear SchrÃ¶dinger equation. Applied Numerical Mathematics, 2017, 120, 68-81.	1.2	9
29	Unconditional Lâˆž convergence of a conservative compact finite difference scheme for the N-coupled SchrÃ¶dingerâ€"Boussinesq equations. Applied Numerical Mathematics, 2019, 138, 54-77.	1.2	9
30	Analysis of a conservative fourth-order compact finite difference scheme for the Kleinâ€"Gordonâ€"Dirac equation. Computational and Applied Mathematics, 2021, 40, 1.	1.0	9
31	Unconditional convergence of linearized implicit finite difference method for the 2D/3D Gross-Pitaevskii equation with angular momentum rotation. Science China Mathematics, 2019, 62, 1669-1686.	0.8	8
32	SOME TRAVELING WAVE SOLITONS OF THE GREENâ€"NAGHDI SYSTEM. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2011, 21, 575-585.	0.7	6
33	An efficient and accurate Fourier pseudo-spectral method for the nonlinear SchrÃ¶dinger equation with wave operator. International Journal of Computer Mathematics, 2021, 98, 340-356.	1.0	6
34	Convergence of a nonlinear finite difference scheme for the Kuramotoâ€"Tsuzuki equation. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 2620-2627.	1.7	5
35	TRAVELING WAVE SOLUTIONS OF THE GREENâ€"NAGHDI SYSTEM. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2013, 23, 1350087.	0.7	5
36	An efficient and conservative compact finite difference scheme for the coupled Grossâ€"Pitaevskii equations describing spin-1 Boseâ€"Einstein condensate. Applied Mathematics and Computation, 2018, 323, 164-181.	1.4	5

#	Article	IF	Citations
37	Two numerical methods for the Zakharov-Rubenchik equations. Advances in Computational Mathematics, 2019, 45, 1163-1184.	0.8	4
38	A second-order finite difference scheme for the multi-dimensional nonlinear time-fractional SchrÃ¶dinger equation. Numerical Algorithms, 2023, 92, 1153-1182.	1.1	4
39	Optimal error estimates of fourthâ€order compact finite difference methods for the nonlinear <scp>Kleinâ€“Gordon</scp> equation in the nonrelativistic regime. Numerical Methods for Partial Differential Equations, 2021, 37, 2089-2108.	2.0	3
40	A fourth-order compact finite difference scheme for the quantum Zakharov system that perfectly inherits both mass and energy conservation. Applied Numerical Mathematics, 2022, 178, 1-24.	1.2	3
41	Optimal <i>H</i>²â€error estimates of conservative compact difference scheme for the Zakharov equation in twoâ€space dimension. Mathematical Methods in the Applied Sciences, 2019, 42, 3088-3102.	1.2	2
42	A mass and energy conservative fourth-order compact difference scheme for the Klein-Gordon-Dirac equations$$^{star }$$. Calcolo, 2022, 59, 1.	0.6	2
43	Uniform error bound of a conservative fourth-order compact finite difference scheme for the Zakharov system in the subsonic regime. Advances in Computational Mathematics, 2022, 48, .	0.8	2
44	Two Energy-Preserving Compact Finite Difference Schemes for the Nonlinear Fourth-Order Wave Equation. Communications on Applied Mathematics and Computation, 2022, 4, 1509-1530.	0.7	1
45	Existence of generalized heteroclinic solutions of the coupled SchrÃ¶dinger system under a small perturbation. Chinese Annals of Mathematics Series B, 2014, 35, 857-872.	0.2	0