Zhenya Yan

List of Publications by Year
in descending order

81	3,178	101496	161767
papers	citations	36 h-index	54 g-index

82	82	82	727
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Formation, stability, and adiabatic excitation of peakons and double-hump solitons in parity-time-symmetric Dirac- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î´</mml:mi><mml:mo>(</mml:mo><mml:mi>x</mml:mi> -Scarf-II optical potentials. Physical Review E, 2022, 105, 014204.	0.8	17
2	Stability and modulation of optical peakons in self-focusing/defocusing Kerr nonlinear media with PT- Î´ -hyperbolic-function potentials. Chaos, 2022, 32, 023122.	1.0	4
3	Stable dynamics and excitations of single- and double-hump solitons in the Kerr nonlinear media with $$varvec{mathcal {PT}}$$-symmetric HHG potentials. Nonlinear Dynamics, 2022, 108, 4045-4056.	2.7	10
4	Orbital stability of peakon solutions for a generalized higher-order Camassaâ€“Holm equation. Zeitschrift Fur Angewandte Mathematik Und Physik, 2022, 73, .	0.7	4
5	Rogue wave formation and interactions in the defocusing nonlinear SchrÃ¶dinger equation with external potentials. Applied Mathematics Letters, 2021, 111, 106670.	1.5	12
6	Solving forward and inverse problems of the logarithmic nonlinear SchrÃ¶dinger equation with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mi mathvariant="script">PT</mml:mi></mml:math>-symmetric harmonic potential via deep learning. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 387, 127010.	0.9	41
7	An initial-boundary value problem for the general three-component nonlinear SchrÃ¶dinger equations on a finite interval. IMA Journal of Applied Mathematics, 2021, 86, 427-489.	0.8	3
8	Long-Time Asymptotics for the Focusing Hirota Equation with Non-Zero Boundary Conditions at Infinity Via the Deift-Zhou Approach. Mathematical Physics Analysis and Geometry, 2021, 24, 1.	0.4	5
9	Parity-time-symmetric rational vector rogue waves of the n-component nonlinear SchrÃ¶dinger equation. Chaos, 2021, 31, 063120.	1.0	14
10	Data-driven rogue waves and parameter discovery in the defocusing nonlinear SchrÃ¶dinger equation with a potential using the PINN deep learning. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 404, 127408.	0.9	67
11	Multi-component Nonlinear SchrÃ¶dinger Equations with Nonzero Boundary Conditions: Higher-Order Vector Peregrine Solitons and Asymptotic Estimates. Journal of Nonlinear Science, 2021, 31, 1.	1.0	22
12	Rational vector rogue waves for the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1401" altimg="si13.svg"><mml:mi>n</mml:mi></mml:math>-component Hirota equation with non-zero backgrounds. Physica D: Nonlinear Phenomena, 2021, 427, 133005.	1.3	7
13	Focusing and defocusing Hirota equations with non-zero boundary conditions: Inverse scattering transforms and soliton solutions. Communications in Nonlinear Science and Numerical Simulation, 2020, 80, 104927.	1.7	30
14	Numerical analysis of the Hirota equation: Modulational instability, breathers, rogue waves, and interactions. Chaos, 2020, 30, 013114.	1.0	15
15	The Derivative Nonlinear SchrÃ¶dinger Equation with Zero/Nonzero Boundary Conditions: Inverse Scattering Transforms and N-Double-Pole Solutions. Journal of Nonlinear Science, 2020, 30, 3089-3127.	1.0	40
16	Soliton formation and stability under the interplay between parity-time-symmetric generalized Scarf-II potentials and Kerr nonlinearity. Physical Review E, 2020, 102, 012216.	0.8	25
17	Nonlinear self-dual network equations: modulation instability, interactions of higher-order discrete vector rational solitons and dynamical behaviours. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200512.	1.0	10
18	Stable flat-top solitons and peakons in the PT-symmetric Î´ -signum potentials and nonlinear media. Chaos, 2019, 29, 083108.	1.0	25

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19	Attraction centers and parity-time-symmetric delta-functional dipoles in critical and supercritical self-focusing media. Physical Review E, 2019, 99, 052206.	0.8	19
20	The Hirota equation: Darboux transform of the Riemannâ€“Hilbert problem and higher-order rogue waves. Applied Mathematics Letters, 2019, 95, 65-71.	1.5	40
21	The general coupled Hirota equations: modulational instability and higher-order vector rogue wave and multi-dark soliton structures. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20180625.	1.0	25
22	Effect of PT symmetry on nonlinear waves for three-wave interaction models in the quadratic nonlinear media. Chaos, 2018, 28, 043104.	1.0	14
23	Three-component nonlinear SchrÃ¶dinger equations: Modulational instability, N th-order vector rational and semi-rational rogue waves, and dynamics. Communications in Nonlinear Science and Numerical Simulation, 2018, 62, 117-133.	1.7	52
24	Fundamental solitons and dynamical analysis in the defocusing Kerr medium and $$varvec{mathcal {PT}}$$ PT -symmetric rational potential. Nonlinear Dynamics, 2018, 91, 853-861.	2.7	10
25	Three-wave resonant interactions: Multi-dark-dark-dark solitons, breathers, rogue waves, and their interactions and dynamics. Physica D: Nonlinear Phenomena, 2018, 366, 27-42.	1.3	51
26	Modulational instability and dynamics of multi-rogue wave solutions for the discrete Ablowitz-Ladik equation. Journal of Mathematical Physics, 2018, 59, .	0.5	50
27	The n -component nonlinear SchrÃ¶dinger equations: darkâ€“bright mixed N - and high-order solitons and breathers, and dynamics. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20170688.	1.0	24
28	Stability, integrability, and nonlinear dynamics of P T-symmetric optical couplers with cubic cross-interactions or cubic-quintic nonlinearities. Chaos, 2017, 27, 013105.	1.0	5
29	Novel higher-order rational solitons and dynamics of the defocusing integrable nonlocal nonlinear SchrÃ¶dinger equation via the determinants. Applied Mathematics Letters, 2017, 69, 113-120.	1.5	42
30	Stable parity-time-symmetric nonlinear modes and excitations in a derivative nonlinear SchrÃ¶dinger equation. Physical Review E, 2017, 95, 012205.	0.8	26
31	An initial-boundary value problem for the integrable spin-1 Gross-Pitaevskii equations with a 4 Ã— 4 Lax pair on the half-line. Chaos, 2017, 27, 053117.	1.0	43
32	Three-component Gross-Pitaevskii equations in the spin-1 Bose-Einstein condensate: Spin-rotation symmetry, matter-wave solutions, and dynamics. Chaos, 2017, 27, 033118.	1.0	14
33	Multi-rational and semi-rational solitons and interactions for the nonlocal coupled nonlinear SchrÃ¶dinger equations. Europhysics Letters, 2017, 118, 60004.	0.7	20
34	Modulational instability, beak-shaped rogue waves, multi-dark-dark solitons and dynamics in pair-transition-coupled nonlinear SchrÃ¶dinger equations. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20170243.	1.0	39
35	Families of stable solitons and excitations in the PT-symmetric nonlinear SchrÃ¶dinger equations with position-dependent effective masses. Scientific Reports, 2017, 7, 1257.	1.6	43
36	The nonlinear SchrÃ¶dinger equation with generalized nonlinearities and PT-symmetric potentials: Stable solitons, interactions, and excitations. Chaos, 2017, 27, 073114.	1.0	18

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37	Multi-dark-dark solitons of the integrable repulsive AB system via the determinants. Chaos, 2017, 27, 083110.	1.0	25
38	Interactions of localized wave structures and dynamics in the defocusing coupled nonlinear SchrÃ¶dinger equations. Physical Review E, 2017, 95, 042201.	0.8	74
39	Higher-order rational solitons and rogue-like wave solutions of the (2Â+Â1)-dimensional nonlinear fluid mechanics equations. Communications in Nonlinear Science and Numerical Simulation, 2017, 43, 311-329.	1.7	64
40	Solitons and their stability in the nonlocal nonlinear SchrÃ¶dinger equation with PT-symmetric potentials. Chaos, 2017, 27, 053105.	1.0	36
41	Solitonic dynamics and excitations of the nonlinear SchrÃ¶dinger equation with third-order dispersion in non-Hermitian PT-symmetric potentials. Scientific Reports, 2016, 6, 23478.	1.6	42
42	On stable solitons and interactions of the generalized Gross-Pitaevskii equation with PT- and non-PT-symmetric potentials. Chaos, 2016, 26, 083109.	1.0	37
43	Higher-order vector discrete rogue-wave states in the coupled Ablowitz-Ladik equations: Exact solutions and stability. Chaos, 2016, 26, 123110.	1.0	69
44	Dynamics of higher-order rational solitons for the nonlocal nonlinear SchrÃ¶dinger equation with the self-induced parity-time-symmetric potential. Chaos, 2016, 26, 063123.	1.0	126
45	Nonlocal general vector nonlinear SchrÃ¶dinger equations: Integrability, <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:mi mathvariant="script">P</mml:mi><mml:mi mathvariant="script">T</mml:mi></mml:math> symmetribility, and solutions. Applied Mathematics Letters, 2016, 62, 101-109.	1.5	53
46	Spatial solitons and stability in self-focusing and defocusing Kerr nonlinear media with generalized parity-time-symmetric Scarff-II potentials. Physical Review E, 2015, 92, 022913.	0.8	77
47	Solitons in a nonlinear SchrÃ¶dinger equation with<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="script">PT</mml:mi></mml:math>-symmetric potentials and inhomogeneous nonlinearity: Stability and excitation of nonlinear modes. Physical Review A, 2015, 92, .	1.0	76
48	Rogue waves, rational solitons, and modulational instability in an integrable fifth-order nonlinear SchrÃ¶dinger equation. Chaos, 2015, 25, 103112.	1.0	66
49	Modulational instability and higher-order rogue waves with parameters modulation in a coupled integrable AB system via the generalized Darboux transformation. Chaos, 2015, 25, 123115.	1.0	77
50	Controlling temporal solitary waves in the generalized inhomogeneous coupled nonlinear SchrÃ¶dinger equations with varying source terms. Journal of Mathematical Physics, 2015, 56, 053508.	0.5	24
51	Novel wave structures in the two-dimensional cubicâ€“quintic nonlinear SchrÃ¶dinger equation with space-modulated potential and nonlinearities. Nonlinear Dynamics, 2015, 82, 119-129.	2.7	10
52	Integrable <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si19.gif" display="inline" overflow="scroll"><mml:mi mathvariant="script">PT</mml:mi></mml:math>-symmetric local and nonlocal vector nonlinear SchrÃ¶dinger equations: A unified two-parameter model. Applied Mathematics Letters, 2015, 47, 61-68.	1.5	137
53	Optical temporal rogue waves in the generalized inhomogeneous nonlinear SchrÃ¶dinger equation with varying higher-order even and odd terms. Nonlinear Dynamics, 2015, 81, 833-842.	2.7	20
54	Generalized perturbation<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mo>(</mml:mo><mml:mi>n</mml:mi><mml:mo>,</mml:mo><mml:mo>Â	0.8	97
	Darboux transformations and multi-rogue-wave structures for the modified self-steepening nonlinear SchrÃ¶dinger equation. Physical Review E, 2015, 92, 012917.		

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55	Two-dimensional vector rogue wave excitations and controlling parameters in the two-component Grossâ€“Pitaevskii equations with varying potentials. Nonlinear Dynamics, 2015, 79, 2515-2529.	2.7	38
56	Localized Analytical Solutions and Parameters Analysis in the Nonlinear Dispersive Grossâ€“Pitaevskii Meanâ€Field GP (m,n) Model with Spaceâ€Modulated Nonlinearity and Potential. Studies in Applied Mathematics, 2014, 132, 266-284.	1.1	23
57	Optical rogue waves in the generalized inhomogeneous higher-order nonlinear SchrÃ¶dinger equation with modulating coefficients. Journal of Optics (United Kingdom), 2013, 15, 064012.	1.0	69
58	Complex PT -symmetric nonlinear SchrÃ¶dinger equation and Burgers equation. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20120059.	1.6	48
59	Two-dimensional superfluid flows in inhomogeneous Bose-Einstein condensates. Physical Review E, 2012, 85, 016601.	0.8	15
60	Nonautonomous discrete rogue wave solutions and interactions in an inhomogeneous lattice with varying coefficients. Journal of Mathematical Analysis and Applications, 2012, 395, 542-549.	0.5	35
61	Matter-wave solutions in Bose-Einstein condensates with harmonic and Gaussian potentials. Physical Review E, 2012, 85, 056608.	0.8	35
62	Vector financial rogue waves. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 4274-4279.	0.9	282
63	Nonautonomous matter waves in a waveguide. Physical Review A, 2011, 84, .	1.0	48
64	Nonautonomous â€œrogonsâ€•in the inhomogeneous nonlinear SchrÃ¶dinger equation with variable coefficients. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 672-679.	0.9	177
65	Dynamics of inhomogeneous condensates in contact with a surface. Physical Review A, 2010, 81, .	1.0	13
66	Three-dimensional rogue waves in nonstationary parabolic potentials. Physical Review E, 2010, 82, 036610.	0.8	121
67	Analytical three-dimensional bright solitons and soliton pairs in Bose-Einstein condensates with time-space modulation. Physical Review A, 2009, 80, .	1.0	43
68	GLOBALLY EXPONENTIAL HYPERCHAOS (LAG) SYNCHRONIZATION IN A FAMILY OF MODIFIED HYPERCHAOTIC RÃ–SSLER SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 1759-1774.	0.7	15
69	A New Hierarchy of Lax and Liouville Integrable Evolution Equations Associated with an Isospectral Problem in the Loop Algebra Ãƒ2. Journal of Systems Science and Complexity, 2006, 19, 301-306.	1.6	0
70	Q-S (complete or anticipated) synchronization backstepping scheme in a class of discrete-time chaotic (hyperchaotic) systems: A symbolic-numeric computation approach. Chaos, 2006, 16, 013119.	1.0	39
71	Nonclassical potential solutions of partial differential equations. European Journal of Applied Mathematics, 2005, 16, 239-261.	1.4	44
72	A new scheme to generalized (lag, anticipated, and complete) synchronization in chaotic and hyperchaotic systems. Chaos, 2005, 15, 013101.	1.0	25

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73	Q-S (lag or anticipated) synchronization backstepping scheme in a class of continuous-time hyperchaotic systemsâ€"A symbolic-numeric computation approach. Chaos, 2005, 15, 023902.	1.0	72
74	Elliptic Function Solutions of (2+1)-dimensional Longwave â€" Shortwave Resonance Interaction Equation via a sinh-Gordon Expansion Method. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2004, 59, 23-28.	0.7	3
75	Study on New Doubly-periodic Solutions of two Coupled Nonlinear Wave Equations in Complex and Real Fields. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2004, 59, 29-34.	0.7	6
76	Optical Solitary Wave Solutions to Nonlinear SchrÃ¶dinger Equation with Cubicâ€"Quintic Nonlinearity in Non-Kerr Media. Journal of the Physical Society of Japan, 2004, 73, 2397-2401.	0.7	19
77	The multi-triple-pole solitons for the focusing mKdV hierarchy with nonzero boundary conditions. Modern Physics Letters B, 0, , 2150483.	1.0	5
78	The Cauchy problem and wave-breaking phenomenon for a generalized sine-type FORQ/mCH equation. Monatshefte Fur Mathematik, 0, , 1.	0.5	2
79	A sine-type Camassa-Holm equation: local well-posedness, HÃ¶lder continuity, and wave-breaking analysis. Monatshefte Fur Mathematik, 0, , 1.	0.5	1
80	The Cauchy Problem and Multi-peakons for the mCH-Novikov-CH Equation with Quadratic and Cubic Nonlinearities. Journal of Dynamics and Differential Equations, 0, , 1.	1.0	3
81	Wave-breaking analysis and weak multi-peakon solutions for a generalized cubicâ€"quintic Camassaâ€"Holm type equation. Monatshefte Fur Mathematik, 0, , 1.	0.5	1