Tao Xu

List of Publications by Year
in descending order

35 papers	1,009 citations	471509 17 h-index	434195 31 g-index
36 all docs	36 docs citations	36 times ranked	292 citing authors

#	Article	IF	Citations
1	Dark and antidark soliton interactions in the nonlocal nonlinear SchrÃ¶dinger equation with the self-induced parity-time-symmetric potential. Physical Review E, 2015, 91, 033202.	2.1	214
2	Rational Solitons in the Parity-Time-Symmetric Nonlocal Nonlinear SchrÃ¶dinger Model. Journal of the Physical Society of Japan, 2016, 85, 124001.	1.6	95
3	Darboux transformation and analytic solutions of the discrete <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si29.gif" display="inline" overflow="scroll"><mml:mi mathvariant="script">P</mml:mi><mml:mi mathvariant="script">T</mml:mi></mml:math>-symmetric nonlocal nonlinear SchrÃ¶dinger equation. Applied Mathematics Letters, 2017, 63, 88-94.	2.7	83
4	Mixed soliton solutions of the defocusing nonlocal nonlinear SchrÃ¶dinger equation. Physica D: Nonlinear Phenomena, 2019, 390, 47-61.	2.8	66
5	Soliton and breather solutions of the Sasaâ€“Satsuma equation via the Darboux transformation. Physica Scripta, 2014, 89, 075207.	2.5	52
6	Dynamical behaviors and soliton solutions of a generalized higher-order nonlinear SchrÃ¶dinger equation in optical fibers. Nonlinear Dynamics, 2015, 80, 1451-1461.	5.2	52
7	Generation mechanism of rogue waves for the discrete nonlinear SchrÃ¶dinger equation. Applied Mathematics Letters, 2018, 83, 110-115.	2.7	50
8	BrightN-soliton solutions in terms of the triple Wronskian for the coupled nonlinear SchrÃ¶dinger equations in optical fibers. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 245205.	2.1	41
9	Asymptotic Analysis and Soliton Interactions of the Multi-Pole Solutions in the Hirota Equation. Journal of the Physical Society of Japan, 2020, 89, 054004.	1.6	30
10	An extension of the Wronskian technique for the multicomponent Wronskian solution to the vector nonlinear Schrol̂dinger equation. Journal of Mathematical Physics, 2010, 51, 033504.	1.1	29
11	New extension of the tanh-function method and application to the Whithamâ€“Broerâ€“Kaup shallow water model with symbolic computation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 369, 458-463.	2.1	28
12	General stationary solutions of the nonlocal nonlinear SchrÃ¶dinger equation and their relevance to the PT-symmetric system. Chaos, 2019, 29, 123124.	2.5	27
13	New Double Wronskian Solutions of the Whitham-Broer-Kaup System: Asymptotic Analysis and Resonant Soliton Interactions. Journal of Nonlinear Mathematical Physics, 2016, 24, 116.	1.3	24
14	Higher-order interactional solutions and rogue wave pairs for the coupled Lakshmananâ€“Porsezianâ€“Daniel equations. Nonlinear Dynamics, 2019, 98, 1731-1744.	5.2	24
15	Darboux transformation and new solutions for the Whithamâ€“Broerâ€“Kaup equations. Physica Scripta, 2008, 78, 065001.	2.5	23
16	Higher-order algebraic soliton solutions of the Gerdjikovâ€“Ivanov equation: Asymptotic analysis and emergence of rogue waves. Physica D: Nonlinear Phenomena, 2022, 432, 133128.	2.8	21
17	Darboux transformation and soliton solutions of the semi-discrete massive Thirring model. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 125948.	2.1	19
18	Single- and double-hump femtosecond vector solitons in the coupled Sasa-Satsuma system. Physical Review E, 2013, 87, .	2.1	18

#	Article	IF	Citations
19	Nonsingular localized wave solutions for the nonlocal Daveyâ€“Stewartson I equation with zero background. Modern Physics Letters B, 2017, 31, 1750338.	1.9	17
20	Multi-pole solutions and their asymptotic analysis of the focusing Ablowitzâ€“Ladik equation. Physica Scripta, 2020, 95, 055222.	2.5	17
21	The coupled derivative nonlinear SchrÃ¶dinger equation: conservation laws, modulation instability and semirational solutions. Nonlinear Dynamics, 2020, 100, 2823-2837.	5.2	15
22	Fully resonant soliton interactions in the Whithamâ€“Broerâ€“Kaup system based on the double Wronskian solutions. Nonlinear Dynamics, 2013, 73, 485-498.	5.2	12
23	On theNth Iterated Darboux Transformation and Soliton Solutions of a Coherently-Coupled Nonlinear SchrÃ¶dinger System. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2013, 68a, 261-271.	1.5	10
24	Multi-component Wronskian solution to the Kadomtsev-Petviashvili equation. Computational Mathematics and Mathematical Physics, 2014, 54, 97-113.	0.8	9
25	Quantitative analysis on the bifurcations and exact travelling wave solutions of a generalized fourth-order dispersive nonlinear SchrÃ¶dinger equation in Heisenberg spin chain. Chaos, Solitons and Fractals, 2021, 145, 110767.	5.1	7
26	Rational solutions of the defocusing non-local nonlinear SchrÃ¶dinger equation: asymptotic analysis and soliton interactions. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, .	2.1	7
27	Study on the generation mechanism of bright and dark solitary waves and rogue wave for a fourth-order dispersive nonlinear SchrÃ¶dinger equation. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 010502.	0.5	6
28	Binary Darboux transformation and new soliton solutions of the focusing nonlocal nonlinear SchrÃ¶dinger equation. Journal of Mathematical Analysis and Applications, 2022, 516, 126514.	1.0	4
29	Asymptotic behaviors of mixed-type vector double-pole solutions for the discrete coupled nonlinear SchrÃ¶dinger system. European Physical Journal Plus, 2021, 136, 1.	2.6	3
30	Numerical simulation of the soliton solutions for a complex modified Kortewegâ€“de Vries equation by a finite difference method. Communications in Theoretical Physics, 2021, 73, 025005.	2.5	3
31	Ellipticâ€•and hyperbolicâ€function solutions of the nonlocal reverseâ€time and reverseâ€spaceâ€time nonlinear SchrÃ¶dinger equations. Mathematical Methods in the Applied Sciences, 2022, 45, 10877-10890.	2.3	2
32	Approximate bright-soliton solution of the higher-order nonlinear SchrÃ¶dinger equation. European Journal of Physics, 2021, 42, 015301.	0.6	1
33	Approximate analytical description for the nonlinear ${ mathcal P }{ mathcal T }$-symmetric coupled-mode equations. European Journal of Physics, 2020, 41, 025305.	0.6	0
34	The homoclinic breather wave solution, rational wave and n-soliton solution to a nonlinear differential equation. International Journal of Nonlinear Sciences and Numerical Simulation, 2020, .	1.0	0
35	Higher-order semirational solutions and W-shaped solitons for the multi-component AB system. Wave Motion, 2021, 106, 102790.	2.0	0