T Kanna

List of Publications by Year in descending order

44 papers	1,463 citations	430442 18 h-index	315357 38 g-index
44 all docs	44 docs citations	44 times ranked	411 citing authors

#	Article	IF	Citations
1	Exact Soliton Solutions, Shape Changing Collisions, and Partially Coherent Solitons in Coupled Nonlinear SchrÃ¶dinger Equations. Physical Review Letters, 2001, 86, 5043-5046.	2.9	276
2	Exact soliton solutions of coupled nonlinear SchrÃ¶dinger equations: Shape-changing collisions, logic gates, and partially coherent solitons. Physical Review E, 2003, 67, 046617.	0.8	163
3	Soliton collisions with shape change by intensity redistribution in mixed coupled nonlinear SchrÃ¶dinger equations. Physical Review E, 2006, 73, 026604.	0.8	154
4	Bright-dark solitons and their collisions in mixed<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>N</mml:mi></mml:math>-coupled nonlinear SchrÃ¶dinger equations. Physical Review A, 2008, 77, .	1.0	151
5	Coherently coupled bright optical solitons and their collisions. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 434018.	0.7	66
6	Multisoliton solutions and energy sharing collisions in coupled nonlinear SchrÃ¶dinger equations with focusing, defocusing and mixed type nonlinearities. European Physical Journal: Special Topics, 2009, 173, 57-80.	1.2	54
7	Multicomponent coherently coupled and incoherently coupled solitons and their collisions. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 285211.	0.7	50
8	Bright solitons in coherently coupled nonlinear SchrÃ¶dinger equations with alternate signs of nonlinearities. Journal of Mathematical Physics, 2013, 54, .	0.5	44
9	Multicomponent long-waveâ€“short-wave resonance interaction system: Bright solitons, energy-sharing collisions, and resonant solitons. Physical Review E, 2014, 90, 052912.	0.8	39
10	Higher dimensional bright solitons and their collisions in a multicomponent long waveâ€“short wave system. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 115103.	0.7	28
11	General multicomponent Yajima-Oikawa system: PainlevÃ© analysis, soliton solutions, and energy-sharing collisions. Physical Review E, 2013, 88, 062921.	0.8	27
12	Periodic energy switching of bright solitons in mixed coupled nonlinear SchrÃ¶dinger equations with linear self-coupling and cross-coupling terms. Physical Review A, 2007, 76, .	1.0	25
13	Non-autonomous brightâ€“dark solitons and Rabi oscillations in multi-component Boseâ€“Einstein condensates. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 475201.	0.7	24
14	Shape changing collisions of optical solitons, universal logic gates and partially coherent solitons in coupled nonlinear SchrÃ¶dinger equations. Pramana - Journal of Physics, 2001, 57, 885-916.	0.9	23
15	Mixed solitons in a (2+1)-dimensional multicomponent long-waveâ€“short-wave system. Physical Review E, 2014, 90, 042901.	0.8	23
16	Superposed nonlinear waves in coherently coupled Boseâ€“Einstein condensates. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 3244-3252.	0.9	22
17	Nonlocal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>M</mml:mi></mml:math> -component nonlinear SchrÃ¶dinger equations: Bright solitons, energy-sharing collisions, and positons. Physical Review E, 2020, 102, 032201.	0.8	22
18	Nonparaxial elliptic waves and solitary waves in coupled nonlinear Helmholtz equations. Communications in Nonlinear Science and Numerical Simulation, 2016, 39, 134-148.	1.7	21

#	Article	IF	Citations
19	Cubic-quintic nonlinear Helmholtz equation: Modulational instability, chirped elliptic and solitary waves. Chaos, 2019, 29, 063121.	1.0	18
20	Non-autonomous bright matter wave solitons in spinor Boseâ€“Einstein condensates. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 158-170.	0.9	17
21	PainlevÃ© singularity structure analysis of three component Grossâ€“Pitaevskii type equations. Journal of Mathematical Physics, 2009, 50, .	0.5	16
22	Vector rogue waves and dark-bright boomeronic solitons in autonomous and nonautonomous settings. Physical Review E, 2014, 90, 042912.	0.8	14
23	Harnessing energy-sharing collisions of Manakov solitons to implement universal NOR and OR logic gates. Physical Review E, 2018, 97, 060201.	0.8	14
24	Novel energy sharing collisions of multicomponent solitons. Pramana - Journal of Physics, 2015, 85, 881-897.	0.9	13
25	Explicit construction of single inputâ€“single output logic gates from three soliton solution of Manakov system. Communications in Nonlinear Science and Numerical Simulation, 2016, 36, 391-401.	1.7	13
26	Lie symmetry analysis and group invariant solutions of the nonlinear Helmholtz equation. Applied Mathematics and Computation, 2018, 331, 457-472.	1.4	13
27	Dynamics of bright soliton bound states in (2+1)-dimensional multicomponent long wave-short wave system. European Physical Journal: Special Topics, 2013, 222, 641-653.	1.2	12
28	Engineering optical rogue waves and breathers in a coupled nonlinear SchrÃ¶dinger system with four-wave mixing effect. Physica Scripta, 2020, 95, 095202.	1.2	12
29	Elliptic waves in two-component long-waveâ€“short-wave resonance interaction system in one and two dimensions. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 3093-3101.	0.9	11
30	Vector rogue waves in integrable M-coupled nonlinear SchrÃ¶dinger equations. Physica Scripta, 2019, 94, 075205.	1.2	11
31	Effect of phase shift in shape changing collision of solitons in coupled nonlinear SchrÃ¶dinger equations. European Physical Journal B, 2002, 29, 249-254.	0.6	10
32	Multiple double-pole bright-bright and bright-dark solitons and energy-exchanging collision in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>M</mml:mi></mml:math> -component nonlinear SchrÃ¶dinger equations. Physical Review E, 2021, 103, 062214.	0.8	10
33	Manipulation of vector solitons in a system of inhomogeneous coherently coupled nonlinear SchrÃ¶dinger models with variable nonlinearities. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 415701.	0.7	10
34	A study on resonant collision in the two-dimensional multi-component long-waveâ€“short-wave resonance system. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2022, 478, .	1.0	9
35	Higher-order optical rogue waves in spatially inhomogeneous multimode fiber. Physica D: Nonlinear Phenomena, 2022, 435, 133285.	1.3	9
36	Spatially modulated two- and three-component Rabi-coupled Grossâ€“Pitaevskii systems. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 375201.	0.7	8

#	Article	IF	Citations
37	On the integrability aspects of nonparaxial nonlinear SchrÃ¶dinger equation and the dynamics of solitary waves. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126729.	0.9	8
38	Bright-dark and dark-dark solitons in coupled nonlinear SchrÃ¶dinger equation with PT-symmetric potentials. Chaos, 2017, 27, 123102.	1.0	5
39	Non-autonomous bright solitons and their stability in Rabi coupled binary Boseâ€“Einstein condensates. Journal of Physics Communications, 2017, 1, 045005.	0.5	5
40	Reviving modulational instability with third-order dispersion. Physics Letters, Section A: General, Atomic and Solid State Physics, 2022, 422, 127801.	0.9	4
41	Dynamics of solitons in multicomponent long waveâ€“short wave resonance interaction system. Pramana - Journal of Physics, 2015, 84, 327-338.	0.9	3
42	Protocol of networks using energy sharing collisions of bright solitons. Pramana - Journal of Physics, 2015, 85, 1009-1021.	0.9	3
43	Numerical study of bright-bright-dark soliton dynamics in the mixed coupled nonlinear SchrÃ¶dinger system. Optik, 2020, 224, 165633.	1.4	3
44	Formation of Bound Soliton Molecules in Multimode Optical Fiber with Temporally Modulated Nonlinearities. , 2021, , .		0