Paulsamy Muruganandam

List of Publications by Year
in descending order

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81	2,022	304743	254184
papers	citations	22 h-index	43 g-index

81	81	81	812
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fortran programs for the time-dependent Grossâ€“Pitaevskii equation in a fully anisotropic trap. Computer Physics Communications, 2009, 180, 1888-1912.	7.5	332
2	C programs for solving the time-dependent Grossâ€“Pitaevskii equation in a fully anisotropic trap. Computer Physics Communications, 2012, 183, 2021-2025.	7.5	168
3	Bose-Einstein condensation dynamics from the numerical solution of the Gross-Pitaevskii equation. Journal of Physics B: Atomic, Molecular and Optical Physics, 2002, 35, 2831-2843.	1.5	118
4	Boseâ€“Einstein condensation dynamics in three dimensions by the pseudospectral and finite-difference methods. Journal of Physics B: Atomic, Molecular and Optical Physics, 2003, 36, 2501-2513.	1.5	111
5	Fortran and C programs for the time-dependent dipolar Grossâ€“Pitaevskii equation in an anisotropic trap. Computer Physics Communications, 2015, 195, 117-128.	7.5	94
6	Interaction of darkâ€“bright solitons in two-component Boseâ€“Einstein condensates. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 145307.	1.5	62
7	Hybrid OpenMP/MPI programs for solving the time-dependent Grossâ€“Pitaevskii equation in a fully anisotropic trap. Computer Physics Communications, 2016, 200, 411-417.	7.5	61
8	Bright and dark solitons in a quasi-1D Boseâ€“Einstein condensates modelled by 1D Grossâ€“Pitaevskii equation with time-dependent parameters. Physica D: Nonlinear Phenomena, 2010, 239, 366-386.	2.8	52
9	OpenMP Fortran and C programs for solving the time-dependent Grossâ€“Pitaevskii equation in an anisotropic trap. Computer Physics Communications, 2016, 204, 209-213.	7.5	52
10	CUDA programs for solving the time-dependent dipolar Grossâ€“Pitaevskii equation in an anisotropic trap. Computer Physics Communications, 2016, 200, 406-410.	7.5	51
11	Manipulating matter rogue waves and breathers in Bose-Einstein condensates. Physical Review E, 2014, 90, 062905.	2.1	48
12	OpenMP, OpenMP/MPI, and CUDA/MPI C programs for solving the time-dependent dipolar Grossâ€“Pitaevskii equation. Computer Physics Communications, 2016, 209, 190-196.	7.5	39
13	Dynamics of quasi-one-dimensional bright and vortex solitons of a dipolar Boseâ€“Einstein condensate with repulsive atomic interaction. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 101001.	1.5	37
14	Diffusion induced spiral wave chimeras in ecological system. European Physical Journal: Special Topics, 2018, 227, 983-993.	2.6	36
15	Numerical and variational solutions of the dipolar Gross-Pitaevskii equation in reduced dimensions. Laser Physics, 2012, 22, 813-820.	1.2	35
16	Stability of trapless Boseâ€“Einstein condensates with two- and three-body interactions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 125302.	1.5	32
17	Matter wave switching in Boseâ€“Einstein condensates via intensity redistribution soliton interactions. Journal of Mathematical Physics, 2011, 52, .	1.1	30
18	OpenMP GNU and Intel Fortran programs for solving the time-dependent Grossâ€“Pitaevskii equation. Computer Physics Communications, 2017, 220, 503-506.	7.5	30

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19	Manipulating localized matter waves in multicomponent Bose-Einstein condensates. Physical Review E, 2016, 93, 032212.	2.1	29
20	Localization of a dipolar Boseâ€“Einstein condensate in a bichromatic optical lattice. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 205305.	1.5	25
21	Gap solitons in a dipolar Boseâ€“Einstein condensate on a three-dimensional optical lattice. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 121001.	1.5	24
22	Time series analysis for minority game simulations of financial markets. Physica A: Statistical Mechanics and Its Applications, 2003, 321, 619-632.	2.6	22
23	Vortex dynamics of rotating dipolar Boseâ€“Einstein condensates. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 215301.	1.5	22
24	Modulation instability in quasi-two-dimensional spinâ€“orbit coupled Boseâ€“Einstein condensates. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 245301.	1.5	22
25	Miscibility in coupled dipolar and non-dipolar Boseâ€“Einstein condensates. Journal of Physics Communications, 2017, 1, 035012.	1.2	22
26	C and Fortran OpenMP programs for rotating Boseâ€“Einstein condensates. Computer Physics Communications, 2019, 240, 74-82.	7.5	22
27	Chaotic oscillation in an attractive Bose-Einstein condensate under an impulsive force. Physical Review A, 2002, 65, .	2.5	21
28	Dipolar Boseâ€“Einstein condensate soliton on a two-dimensional optical lattice. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 2200-2205.	2.1	21
29	Mean-field model for the interference of matterâ€“waves from a three-dimensional optical trap. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 310, 229-235.	2.1	20
30	Two-dimensional dipolar Boseâ€“Einstein condensate bright and vortex solitons on a one-dimensional optical lattice. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 045301.	1.5	20
31	Characteristic features of the Shannon information entropy of dipolar Bose-Einstein condensates. Journal of Chemical Physics, 2017, 147, 044304.	3.0	20
32	Spin-1 spinâ€“orbit- and Rabi-coupled Boseâ€“Einstein condensate solver. Computer Physics Communications, 2021, 259, 107657.	7.5	20
33	Transition to complete synchronization in phase-coupled oscillators with nearest neighbor coupling. Chaos, 2009, 19, 013103.	2.5	18
34	Anisotropic sound and shock waves in dipolar Boseâ€“Einstein condensate. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 480-483.	2.1	17
35	Bright soliton dynamics in spin orbit-Rabi coupled Bose-Einstein condensates. Communications in Nonlinear Science and Numerical Simulation, 2017, 50, 68-76.	3.3	17
36	Three-dimensional vortex structures in a rotating dipolar Boseâ€“Einstein condensate. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 155301.	1.5	16

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37	Emergence and mitigation of extreme events in a parametrically driven system with velocity-dependent potential. European Physical Journal Plus, 2021, 136, 1.	2.6	13
38	Effect of Rashba spin-orbit and Rabi couplings on the excitation spectrum of binary Bose-Einstein condensates. Physical Review A, 2021, 104, .	2.5	13
39	SPATIOTEMPORAL DYNAMICS OF COUPLED ARRAY OF MURALIâ€“LAKSHMANANâ€“CHUA CIRCUITS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1999, 09, 805-830.	1.7	12
40	Effect of an impulsive force on vortices in a rotating Boseâ€“Einstein condensate. Physics Letters, Section A: General, Atomic and Solid State Physics, 2002, 301, 333-339.	2.1	12
41	Local dimension and finite time prediction in spatiotemporal chaotic systems. Physical Review E, 2003, 67, 066204.	2.1	12
42	Analytical calculation of the transition to complete phase synchronization in coupled oscillators. Pramana - Journal of Physics, 2008, 70, 1143-1151.	1.8	12
43	Dynamical stabilization of two-dimensional trapless Boseâ€“Einstein condensates by three-body interaction and quantum fluctuations. Chaos, Solitons and Fractals, 2017, 103, 232-237.	5.1	12
44	Quenching dynamics of the bright solitons and other localized states in spinâ€“orbit coupled Boseâ€“Einstein condensates. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 195301.	1.5	11
45	Nonstationary excitations in Boseâ€“Einstein condensates under the action of periodically varying scattering length with time dependent frequencies. Physica D: Nonlinear Phenomena, 2007, 227, 1-7.	2.8	9
46	Effect of optical lattice potentials on the vortices in rotating dipolar Bose-Einstein condensates. European Physical Journal D, 2014, 68, 1.	1.3	9
47	Low dimensional behavior in three-dimensional coupled map lattices. Chaos, Solitons and Fractals, 2009, 41, 997-1004.	5.1	8
48	Spotlighting phase separation in Rashba spin-orbit coupled Boseâ€“Einstein condensates in two dimensions. Journal of Physics Communications, 2018, 2, 025008.	1.2	8
49	Asymmetry in initial cluster size favors symmetry in a network of oscillators. Chaos, 2018, 28, 081101.	2.5	8
50	Vortex formation and vortex lattices in a Bose-Einstein condensate with Lee-Huang-Yang (LHY) correction. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 107, 54-59.	2.7	8
51	OpenMP solver for rotating spin-1 spinâ€“orbit- and Rabi-coupled Boseâ€“Einstein condensates. Computer Physics Communications, 2021, 264, 107926.	7.5	8
52	Desynchronized wave patterns in synchronized chaotic regions of coupled map lattices. Physical Review E, 2005, 72, 037205.	2.1	7
53	Amplitude-mediated spiral chimera pattern in a nonlinear reaction-diffusion system. Physical Review E, 2021, 103, 062209.	2.1	7
54	Coreless vortex dipoles and trapped droplets in phase-separated binary condensates. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 055303.	1.5	6

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55	Vortical and fundamental solitons in dipolar Boseâ€“Einstein condensates trapped in isotropic and anisotropic nonlinear potentials. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 175302.	1.5	6
56	Identifying financial crises in real time. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 1386-1392.	2.6	6
57	Formation and stability of coreless vortex dipoles in phase-separated binary condensates. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 378-386.	2.1	6
58	Coherent motion of chaotic attractors. Physical Review E, 2017, 96, 042210.	2.1	6
59	Scaling and synchronization in a ring of diffusively coupled nonlinear oscillators. Physical Review E, 2010, 81, 066219.	2.1	5
60	Influence of Rashba spinâ€“orbit and Rabi couplings on the spin-mixing and ground state phases of binary Boseâ€“Einstein condensates. Journal of Physics B: Atomic, Molecular and Optical Physics, 2021, 54, 225301.	1.5	5
61	Bifurcation analysis of the travelling waveform of FitzHughâ€“Nagumo nerve conduction model equation. Chaos, 1997, 7, 476-487.	2.5	4
62	Local dimension and finite time prediction in coupled map lattices. Pramana - Journal of Physics, 2005, 64, 381-387.	1.8	4
63	Coexistence of synchronized and desynchronized patterns in coupled chaotic dynamical systems. Chaos, Solitons and Fractals, 2008, 36, 991-1018.	5.1	4
64	Position swapping and pinching in Bose-Fermi mixtures with two-color optical Feshbach resonances. Physical Review A, 2011, 83, .	2.5	4
65	Dipolar Bose-Einstein condensates with large scattering length. Physical Review A, 2012, 85, .	2.5	4
66	Numerical studies on vortices in rotating dipolar Bose-Einstein condensates. Journal of Physics: Conference Series, 2014, 497, 012036.	0.4	4
67	Spiral wave chimera-like transient dynamics in three-dimensional grid of diffusive ecological systems. Chaos, 2021, 31, 083125.	2.5	4
68	Comment on â€œIntermittent Synchronization in a Pair of Coupled Chaotic Pendulaâ€• Physical Review Letters, 1999, 83, 1259-1259.	7.8	3
69	Observation of phase-flip transition in delay-coupled Nishio-Inaba circuits. European Physical Journal: Special Topics, 2013, 222, 917-926.	2.6	3
70	Collisionally inhomogeneous Boseâ€“Einstein condensates with binary and three-body interactions in a bichromatic optical lattice. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 155302.	1.5	3
71	Dynamics of trapped interacting vortices in Boseâ€“Einstein condensates: a role of breathing degree of freedom. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 315102.	2.1	2
72	FACt: FORTRAN toolbox for calculating fluctuations in atomic condensates. Computer Physics Communications, 2020, 256, 107288.	7.5	2

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73	Synchronization Dynamics of Modified Relay-coupled Chaotic Systems. Journal of Applied Nonlinear Dynamics, 2018, 7, 11-24.	0.3	2
74	Condensates in double-well potential with synthetic gauge potentials and vortex seeding. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 2376-2381.	2.1	1
75	On the ground state phases in spin-orbit coupled Bose-Einstein condensates with weak repulsive interactions. AIP Conference Proceedings, 2020, , .	0.4	1
76	Ground state phases in Rashba-Dresselhaus spin-orbit-coupled Bose-Einstein condensates. AIP Conference Proceedings, 2020, , .	0.4	1
77	Stability window of trapless polariton Bose-Einstein condensates. Physical Review B, 2022, 105, .	3.2	1
78	Nonlinear time evolution of coherent states with observation of super revivals in a generalized isotonic oscillator. International Journal of Geometric Methods in Modern Physics, 2014, 11, 1450027.	2.0	0
79	Phase-flip transition in coupled time-delayed piecewise linear electronic circuits. , 2014, , .		0
80	Rotational properties of dipolar Bose-Einstein condensates in double-well potential. AIP Conference Proceedings, 2020, , .	0.4	0
81	Matter wave solitons and other localized excitations in Boseâ€“Einstein condensates in atom optics. , 2017, , 253-278.		0