# Paulsamy Muruganandam

List of Publications by Year
in descending order

| | |
|---|---|
| 81 <br> papers | 2,022 <br> citations |

304743
22
h-index

254184
43
g-index

| | |
|---|---|
| 81 <br> all docs | 81 <br> docs citations |

81
times ranked

812
citing authors

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Stability window of trapless polariton Bose-Einstein condensates. Physical Review B, 2022, 105, . | 3.2 | 1 |
| 2 | Spin-1 spin–orbit- and Rabi-coupled Bose–Einstein condensate solver. Computer Physics Communications, 2021, 259, 107657. | 7.5 | 20 |
| 3 | 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 |
| 4 | Amplitude-mediated spiral chimera pattern in a nonlinear reaction-diffusion system. Physical Review E, 2021, 103, 062209. | 2.1 | 7 |
| 5 | OpenMP solver for rotating spin-1 spin–orbit- and Rabi-coupled Bose–Einstein condensates. Computer Physics Communications, 2021, 264, 107926. | 7.5 | 8 |
| 6 | Spiral wave chimera-like transient dynamics in three-dimensional grid of diffusive ecological systems. Chaos, 2021, 31, 083125. | 2.5 | 4 |
| 7 | 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 |
| 8 | Influence of Rashba spin–orbit and Rabi couplings on the spin-mixing and ground state phases of binary Bose–Einstein condensates. Journal of Physics B: Atomic, Molecular and Optical Physics, 2021, 54, 225301. | 1.5 | 5 |
| 9 | Quenching dynamics of the bright solitons and other localized states in spin–orbit coupled Bose–Einstein condensates. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 195301. | 1.5 | 11 |
| 10 | Rotational properties of dipolar Bose-Einstein condensates in double-well potential. AIP Conference Proceedings, 2020, , . | 0.4 | 0 |
| 11 | On the ground state phases in spin-orbit coupled Bose-Einstein condensates with weak repulsive interactions. AIP Conference Proceedings, 2020, , . | 0.4 | 1 |
| 12 | FACt: FORTRAN toolbox for calculating fluctuations in atomic condensates. Computer Physics Communications, 2020, 256, 107288. | 7.5 | 2 |
| 13 | Ground state phases in Rashba-Dresselhaus spin-orbit-coupled Bose-Einstein condensates. AIP Conference Proceedings, 2020, , . | 0.4 | 1 |
| 14 | C and Fortran OpenMP programs for rotating Bose–Einstein condensates. Computer Physics Communications, 2019, 240, 74-82. | 7.5 | 22 |
| 15 | 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 |
| 16 | Spotlighting phase separation in Rashba spin-orbit coupled Bose–Einstein condensates in two dimensions. Journal of Physics Communications, 2018, 2, 025008. | 1.2 | 8 |
| 17 | Diffusion induced spiral wave chimeras in ecological system. European Physical Journal: Special Topics, 2018, 227, 983-993. | 2.6 | 36 |
| 18 | Asymmetry in initial cluster size favors symmetry in a network of oscillators. Chaos, 2018, 28, 081101. | 2.5 | 8 |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 19 | 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 |
| 20 | Synchronization Dynamics of Modified Relay-coupled Chaotic Systems. Journal of Applied Nonlinear Dynamics, 2018, 7, 11-24. | 0.3 | 2 |
| 21 | 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 |
| 22 | Coherent motion of chaotic attractors. Physical Review E, 2017, 96, 042210. | 2.1 | 6 |
| 23 | OpenMP GNU and Intel Fortran programs for solving the time-dependent Grossâ€"Pitaevskii equation. Computer Physics Communications, 2017, 220, 503-506. | 7.5 | 30 |
| 24 | Characteristic features of the Shannon information entropy of dipolar Bose-Einstein condensates. Journal of Chemical Physics, 2017, 147, 044304. | 3.0 | 20 |
| 25 | 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 |
| 26 | Miscibility in coupled dipolar and non-dipolar Boseâ€"Einstein condensates. Journal of Physics Communications, 2017, 1, 035012. | 1.2 | 22 |
| 27 | Matter wave solitons and other localized excitations in Boseâ€"Einstein condensates in atom optics. , 2017, , 253-278. | | 0 |
| 28 | 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 |
| 29 | 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 |
| 30 | 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 |
| 31 | 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 |
| 32 | 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 |
| 33 | Manipulating localized matter waves in multicomponent Bose-Einstein condensates. Physical Review E, 2016, 93, 032212. | 2.1 | 29 |
| 34 | 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 |
| 35 | 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 |
| 36 | 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 |

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|---|---------|----|-----------|
| 37 | Numerical studies on vortices in rotating dipolar Bose-Einstein condensates. Journal of Physics: Conference Series, 2014, 497, 012036. | 0.4 | 4 |
| 38 | Effect of optical lattice potentials on the vortices in rotating dipolar Bose-Einstein condensates. European Physical Journal D, 2014, 68, 1. | 1.3 | 9 |
| 39 | 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 |
| 40 | Manipulating matter rogue waves and breathers in Bose-Einstein condensates. Physical Review E, 2014, 90, 062905. | 2.1 | 48 |
| 41 | Phase-flip transition in coupled time-delayed piecewise linear electronic circuits. , 2014, , . | | 0 |
| 42 | Vortical and fundamental solitons in dipolar Bose–Einstein condensates trapped in isotropic and anisotropic nonlinear potentials. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 175302. | 1.5 | 6 |
| 43 | Observation of phase-flip transition in delay-coupled Nishio-Inaba circuits. European Physical Journal: Special Topics, 2013, 222, 917-926. | 2.6 | 3 |
| 44 | Identifying financial crises in real time. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 1386-1392. | 2.6 | 6 |
| 45 | 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 |
| 46 | Collisionally inhomogeneous Bose–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 |
| 47 | Two-dimensional dipolar Bose–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 |
| 48 | 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 |
| 49 | Vortex dynamics of rotating dipolar Bose–Einstein condensates. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 215301. | 1.5 | 22 |
| 50 | Dipolar Bose-Einstein condensates with large scattering length. Physical Review A, 2012, 85, . | 2.5 | 4 |
| 51 | Dipolar Bose–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 |
| 52 | C programs for solving the time-dependent Gross–Pitaevskii equation in a fully anisotropic trap. Computer Physics Communications, 2012, 183, 2021-2025. | 7.5 | 168 |
| 53 | Anisotropic sound and shock waves in dipolar Bose–Einstein condensate. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 480-483. | 2.1 | 17 |
| 54 | Numerical and variational solutions of the dipolar Gross-Pitaevskii equation in reduced dimensions. Laser Physics, 2012, 22, 813-820. | 1.2 | 35 |

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| 55 | Matter wave switching in Bose–Einstein condensates via intensity redistribution soliton interactions. Journal of Mathematical Physics, 2011, 52, . | 1.1 | 30 |
| 56 | Dynamics of quasi-one-dimensional bright and vortex solitons of a dipolar Bose–Einstein condensate with repulsive atomic interaction. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 101001. | 1.5 | 37 |
| 57 | Position swapping and pinching in Bose-Fermi mixtures with two-color optical Feshbach resonances. Physical Review A, 2011, 83, . | 2.5 | 4 |
| 58 | Gap solitons in a dipolar Bose–Einstein condensate on a three-dimensional optical lattice. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 121001. | 1.5 | 24 |
| 59 | Bright and dark solitons in a quasi-1D Bose–Einstein condensates modelled by 1D Gross–Pitaevskii equation with time-dependent parameters. Physica D: Nonlinear Phenomena, 2010, 239, 366-386. | 2.8 | 52 |
| 60 | Stability of trapless Bose–Einstein condensates with two- and three-body interactions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 125302. | 1.5 | 32 |
| 61 | Scaling and synchronization in a ring of diffusively coupled nonlinear oscillators. Physical Review E, 2010, 81, 066219. | 2.1 | 5 |
| 62 | Localization of a dipolar Bose–Einstein condensate in a bichromatic optical lattice. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 205305. | 1.5 | 25 |
| 63 | Interaction of dark–bright solitons in two-component Bose–Einstein condensates. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 145307. | 1.5 | 62 |
| 64 | Fortran programs for the time-dependent Gross–Pitaevskii equation in a fully anisotropic trap. Computer Physics Communications, 2009, 180, 1888-1912. | 7.5 | 332 |
| 65 | Low dimensional behavior in three-dimensional coupled map lattices. Chaos, Solitons and Fractals, 2009, 41, 997-1004. | 5.1 | 8 |
| 66 | Transition to complete synchronization in phase-coupled oscillators with nearest neighbor coupling. Chaos, 2009, 19, 013103. | 2.5 | 18 |
| 67 | Analytical calculation of the transition to complete phase synchronization in coupled oscillators. Pramana - Journal of Physics, 2008, 70, 1143-1151. | 1.8 | 12 |
| 68 | Coexistence of synchronized and desynchronized patterns in coupled chaotic dynamical systems. Chaos, Solitons and Fractals, 2008, 36, 991-1018. | 5.1 | 4 |
| 69 | Nonstationary excitations in Bose–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 |
| 70 | Local dimension and finite time prediction in coupled map lattices. Pramana - Journal of Physics, 2005, 64, 381-387. | 1.8 | 4 |
| 71 | Desynchronized wave patterns in synchronized chaotic regions of coupled map lattices. Physical Review E, 2005, 72, 037205. | 2.1 | 7 |
| 72 | Mean-field model for the interference of matter–waves from a three-dimensional optical trap. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 310, 229-235. | 2.1 | 20 |

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| 73 | Time series analysis for minority game simulations of financial markets. Physica A: Statistical Mechanics and Its Applications, 2003, 321, 619-632. | 2.6 | 22 |
| 74 | Local dimension and finite time prediction in spatiotemporal chaotic systems. Physical Review E, 2003, 67, 066204. | 2.1 | 12 |
| 75 | Bose–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 |
| 76 | Chaotic oscillation in an attractive Bose-Einstein condensate under an impulsive force. Physical Review A, 2002, 65, . | 2.5 | 21 |
| 77 | 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 |
| 78 | Effect of an impulsive force on vortices in a rotating Bose–Einstein condensate. Physics Letters, Section A: General, Atomic and Solid State Physics, 2002, 301, 333-339. | 2.1 | 12 |
| 79 | SPATIOTEMPORAL DYNAMICS OF COUPLED ARRAY OF MURALI–LAKSHMANAN–CHUA CIRCUITS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1999, 09, 805-830. | 1.7 | 12 |
| 80 | Comment on "Intermittent Synchronization in a Pair of Coupled Chaotic Pendula". Physical Review Letters, 1999, 83, 1259-1259. | 7.8 | 3 |
| 81 | Bifurcation analysis of the travelling waveform of FitzHugh–Nagumo nerve conduction model equation. Chaos, 1997, 7, 476-487. | 2.5 | 4 |