

Quantum dynamics of single trapped ions

Reviews of Modern Physics

75, 281-324

DOI: [10.1103/revmodphys.75.281](https://doi.org/10.1103/revmodphys.75.281)

Citation Report

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 5 | Oxidative Decarboxylation of Carboxylic Acids. Russian Chemical Reviews, 1980, 49, 1119-1134. | 2.5 | 25 |
| 6 | Toward a scalable, silicon-based quantum computing architecture. IEEE Journal of Selected Topics in Quantum Electronics, 2003, 9, 1552-1569. | 1.9 | 60 |
| 7 | Photon statistics: Nonlinear spectroscopy of single quantum systems. Physical Review A, 2003, 68, . | 1.0 | 54 |
| 8 | Selective measurement of quantum coherences in trapped ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2003, 36, 4427-4434. | 0.6 | 1 |
| 9 | Experiments in cavity QED and with trapped ions. , 2004, , 238-262. | | 0 |
| 10 | Coherent manipulation of motional states of trapped ions. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, 269-275. | 1.4 | 4 |
| 11 | Coarse grained and fine dynamics in trapped ion Raman schemes. Journal of Physics A, 2004, 37, 8177-8187. | 1.6 | 4 |
| 12 | The revival-collapse phenomenon in the fluctuations of quadrature field components of the multiphoton Jaynesâ€“Cumplings model. Journal of Physics A, 2004, 37, 9023-9036. | 1.6 | 7 |
| 13 | Distilling angular momentum nonclassical states in trapped ions. Physical Review A, 2004, 70, . | 1.0 | 14 |
| 14 | Laser linewidth effects in quantum state discrimination by electromagnetically induced transparency. Physical Review A, 2004, 70, . | 1.0 | 13 |
| 15 | Simulating quantum Brownian motion with single trapped ions. Physical Review A, 2004, 69, . | 1.0 | 44 |
| 16 | Minimal universal two-qubit controlled-NOT-based circuits. Physical Review A, 2004, 69, . | 1.0 | 177 |
| 17 | Bose-Einstein Condensation and Strong-Correlation Behavior of Phonons in Ion Traps. Physical Review Letters, 2004, 93, 263602. | 2.9 | 113 |
| 18 | Resonance fluorescence of a trapped three-level atom. Physical Review A, 2004, 69, . | 1.0 | 15 |
| 19 | Ion-trap quantum computing in the presence of cooling. Physical Review A, 2004, 69, . | 1.0 | 23 |
| 20 | Zero-point cooling and low heating of trapped Cd+111 ions. Physical Review A, 2004, 70, . | 1.0 | 90 |
| 21 | Ions, Atoms, and Bits: An Architectural Approach to Quantum Computing. Advances in Computers, 2004, 61, 275-318. | 1.2 | 0 |
| 22 | Course 5 Quantum information processing in ion traps I. Les Houches Summer School Proceedings, 2004, 79, 223-260. | 0.2 | 3 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 23 | Course 6 Quantum information processing in ion traps II. Les Houches Summer School Proceedings, 2004, 79, 261-293. | 0.2 | 3 |
| 24 | A single-photon source based on a single Ca ⁺ ion. New Journal of Physics, 2004, 6, 94-94. | 1.2 | 42 |
| 25 | Double-EIT ground-state laser cooling without blue-sideband heating. Europhysics Letters, 2004, 68, 370-376. | 0.7 | 41 |
| 26 | Coherent dynamics of a flux qubit coupled to a harmonic oscillator. Nature, 2004, 431, 159-162. | 13.7 | 647 |
| 27 | Ion Trap Quantum Computing with Ca ⁺ Ions. Quantum Information Processing, 2004, 3, 61-73. | 1.0 | 18 |
| 28 | Planar ion trap geometry for microfabrication. Applied Physics B: Lasers and Optics, 2004, 78, 639-651. | 1.1 | 77 |
| 29 | Optical detection methods for mass spectrometry of macroions. Mass Spectrometry Reviews, 2004, 23, 443-465. | 2.8 | 33 |
| 30 | Effective damping in the Raman cooling of trapped ions. Optics Communications, 2004, 230, 393-400. | 1.0 | 12 |
| 31 | Towards an understanding of decoherence in ion traps. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 329, 409-413. | 0.9 | 1 |
| 32 | Engineering superpositions of displaced number states of a trapped ion. Physica A: Statistical Mechanics and Its Applications, 2004, 337, 89-108. | 1.2 | 16 |
| 33 | Laser Cooling of a Nanomechanical Resonator Mode to its Quantum Ground State. Physical Review Letters, 2004, 92, 075507. | 2.9 | 324 |
| 34 | Effective Quantum Spin Systems with Trapped Ions. Physical Review Letters, 2004, 92, 207901. | 2.9 | 700 |
| 35 | Course 2 Mesoscopic state superpositions and decoherence in quantum optics. Les Houches Summer School Proceedings, 2004, , 55-159. | 0.2 | 0 |
| 36 | Generation of squeezed states of nanomechanical resonators by reservoir engineering. Physical Review B, 2004, 70, . | 1.1 | 127 |
| 37 | Coupled Ion-Nanomechanical Systems. Physical Review Letters, 2004, 93, 266403. | 2.9 | 155 |
| 38 | New Frontiers in Quantum Information With Atoms and Ions. Physics Today, 2004, 57, 38-44. | 0.3 | 96 |
| 39 | Method for generating maximally entangled states of multiple three-level atoms in cavity QED. Physical Review A, 2004, 69, . | 1.0 | 15 |
| 40 | Generation of Schrödinger Cats in Trapped Ions. European Physical Journal A, 2004, 20, 253-259. | 0.2 | 3 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 41 | Coherence-Preserving Trap Architecture for Long-Term Control of Giant Ryberg Atoms. Physical Review Letters, 2004, 93, 103001. | 2.9 | 61 |
| 42 | Interfacing Quantum-Optical and Solid-State Qubits. Physical Review Letters, 2004, 92, 247902. | 2.9 | 123 |
| 43 | Ground-state cooling of mechanical resonators. Physical Review B, 2004, 69, . | 1.1 | 157 |
| 44 | Strong coupling of a single photon to a superconducting qubit using circuit quantum electrodynamics. Nature, 2004, 431, 162-167. | 13.7 | 3,195 |
| 45 | QUANTUM OPTICS Laser Cooling of Ions. , 2005, , 264-271. | | 0 |
| 46 | Teleportation with trapped ions in a magnetic field gradient. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 344, 97-103. | 0.9 | 3 |
| 47 | Non-linear parametric processes in quantum information. Progress in Quantum Electronics, 2005, 29, 165-256. | 3.5 | 38 |
| 48 | Scalable ion trap quantum computing without moving ions. European Physical Journal D, 2005, 32, 201-208. | 0.6 | 6 |
| 49 | Generation and decoherence of mesoscopic superposition states in a strongly driven micromaser. European Physical Journal D, 2005, 36, 123-128. | 0.6 | 8 |
| 50 | A Solvable Open Quantum System: The Strongly Driven Micromaser. Optics and Spectroscopy (English) Tj ETQq1 1,0,784314,rgBT /Ove | 0.2 | 3 |
| 51 | Governing Survival Probability to Distill Quantum States. Optics and Spectroscopy (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 342 T | 0.2 | 3 |
| 52 | Phase entropy of a single trapped ion interacting with a laser field. Laser Physics Letters, 2005, 2, 208-213. | 0.6 | 7 |
| 53 | Quantum information processing with cold atoms and trapped ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2005, 38, S567-S578. | 0.6 | 62 |
| 54 | Ion Trap Quantum Computing with Ca+ Ions. , 2005, , 61-73. | | 0 |
| 55 | Generations of macroscopic quantum states of a single trapped ion beyond the Lambâ€“Dicke limit. Journal of Optics B: Quantum and Semiclassical Optics, 2005, 7, 5-9. | 1.4 | 3 |
| 56 | Single trapped cold ions: a testing ground for quantum mechanics. Journal of Optics B: Quantum and Semiclassical Optics, 2005, 7, R1-R17. | 1.4 | 5 |
| 57 | Atomic correlations and cavity field decoherence in a strongly driven micromaser. Journal of Optics B: Quantum and Semiclassical Optics, 2005, 7, S437-S444. | 1.4 | 4 |
| 58 | The revivalâ€“collapse phenomenon in the higher-order fluctuations of quadrature field components of the multiphoton Jaynesâ€“Cummings model. Journal of Physics A, 2005, 38, 5557-5564. | 1.6 | 10 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 59 | The revivalâ€“collapse phenomenon in the quadrature field components of the two-mode multiphoton Jaynesâ€“Cummings model. <i>Journal of Optics B: Quantum and Semiclassical Optics</i> , 2005, 7, 341-349. | 1.4 | 6 |
| 60 | Experimental and theoretical study of the 3d ² â€“level lifetimes of Ca ⁺⁴⁰ . <i>Physical Review A</i> , 2005, 71, . | 1.0 | 81 |
| 61 | Effective cross-Kerr nonlinearity and robust phase gates with trapped ions. <i>Physical Review A</i> , 2005, 72, . | 1.0 | 24 |
| 62 | Array of planar Penning traps as a nuclear magnetic resonance molecule for quantum computation. <i>Physical Review A</i> , 2005, 72, . | 1.0 | 18 |
| 63 | Quantum computing with trapped ions. , 0, , . | | 2 |
| 64 | Steering distillation processes through quantum Zeno dynamics. <i>Physical Review A</i> , 2005, 71, . | 1.0 | 8 |
| 65 | Vibrational coherent quantum computation. <i>Physical Review A</i> , 2005, 71, . | 1.0 | 36 |
| 66 | Control of finite-dimensional quantum systems: Application to a spin-1/2 particle coupled with a finite quantum harmonic oscillator. <i>Journal of Mathematical Physics</i> , 2005, 46, 032106. | 0.5 | 10 |
| 67 | Universal and Deterministic Manipulation of the Quantum State of Harmonic Oscillators: A Route to Unitary Gates for Fock State Qubits. <i>Physical Review Letters</i> , 2005, 95, 010504. | 2.9 | 29 |
| 68 | Selective interactions in trapped ions: State reconstruction and quantum logic. <i>Physical Review A</i> , 2005, 71, . | 1.0 | 22 |
| 69 | Multiquantum eigenstates of a linear chain of coupled qubits. <i>Physical Review A</i> , 2005, 71, . | 1.0 | 6 |
| 70 | Ion trap transducers for quantum electromechanical oscillators. <i>Physical Review A</i> , 2005, 72, . | 1.0 | 107 |
| 71 | Effective boson-spin model for nuclei-ensemble-based universal quantum memory. <i>Physical Review B</i> , 2005, 71, . | 1.1 | 18 |
| 72 | Generation of entangled photons by trapped ions in microcavities under a magnetic field gradient. <i>Physical Review A</i> , 2005, 72, . | 1.0 | 10 |
| 73 | Nondestructive Rydberg Atom Counting with Mesoscopic Fields in a Cavity. <i>Physical Review Letters</i> , 2005, 94, 113601. | 2.9 | 49 |
| 74 | Minimizing the required trap depth in optical lattice clocks. , 0, , . | | 0 |
| 75 | Ion Trap Simulations of Quantum Fields in an Expanding Universe. <i>Physical Review Letters</i> , 2005, 94, 220401. | 2.9 | 63 |
| 76 | Optical lattice clock with atoms confined in a shallow trap. <i>Physical Review A</i> , 2005, 72, . | 1.0 | 88 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 77 | Entanglement of trapped-ion clock states. <i>Physical Review A</i> , 2005, 72, . | 1.0 | 88 |
| 78 | Detecting Vacuum Entanglement in a Linear Ion Trap. <i>Physical Review Letters</i> , 2005, 94, 050504. | 2.9 | 86 |
| 79 | Quantum chaos and order based on classically moving reference frames. <i>Physical Review A</i> , 2005, 72, . | 1.0 | 20 |
| 80 | NMR techniques for quantum control and computation. <i>Reviews of Modern Physics</i> , 2005, 76, 1037-1069. | 16.4 | 919 |
| 81 | Effective spin quantum phases in systems of trapped ions. <i>Physical Review A</i> , 2005, 72, . | 1.0 | 150 |
| 82 | Spin-Dependent Forces on Trapped Ions for Phase-Stable Quantum Gates and Entangled States of Spin and Motion. <i>Physical Review Letters</i> , 2005, 94, 153602. | 2.9 | 115 |
| 83 | Analysis of a quantum logic device based on dipole-dipole interactions of optically trapped Rydberg atoms. <i>Physical Review A</i> , 2005, 72, . | 1.0 | 219 |
| 84 | Simulating Open Quantum Systems with Trapped Ions. <i>European Physical Journal A</i> , 2005, 23, 67-74. | 0.2 | 1 |
| 85 | Geometric Phase Accumulation-Based Effects in the Quantum Dynamics of an Anisotropically Trapped Ion. <i>European Physical Journal A</i> , 2005, 23, 125-134. | 0.2 | 0 |
| 86 | Quantum feedback cooling of a single trapped ion in front of a mirror. <i>Physical Review A</i> , 2005, 72, . | 1.0 | 26 |
| 87 | Coherent-state superpositions in cavity quantum electrodynamics with trapped ions. <i>Physical Review A</i> , 2005, 71, . | 1.0 | 14 |
| 88 | Modeling of Coupled Neutral and Ion Transport in Quadrupole Interface Flows. , 2005, , . | | 0 |
| 89 | Single-photon sources. <i>Contemporary Physics</i> , 2005, 46, 173-206. | 0.8 | 84 |
| 90 | Vacuum Rabi Oscillations in a Macroscopic Superconducting QubitLC Oscillator System. <i>Physical Review Letters</i> , 2006, 96, 127006. | 2.9 | 217 |
| 91 | Quantum computation by communication. <i>New Journal of Physics</i> , 2006, 8, 30-30. | 1.2 | 188 |
| 92 | Overdamping of coherently driven quantum systems. <i>Contemporary Physics</i> , 2006, 47, 341-362. | 0.8 | 11 |
| 93 | Controlling quantum motions of a trapped and driven electron: an exact analytic treatment. <i>Journal of Physics A</i> , 2006, 39, 401-415. | 1.6 | 11 |
| 94 | Quantum-information processing via a lossy bus. <i>Physical Review A</i> , 2006, 74, . | 1.0 | 56 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 95 | Broadband laser cooling of trapped atoms with ultrafast pulses. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2006, 23, 1170. | 0.9 | 22 |
| 97 | Optimization of segmented linear Paul traps and transport of stored particles. <i>Fortschritte Der Physik</i> , 2006, 54, 648-665. | 1.5 | 66 |
| 98 | Ion trap in a semiconductor chip. <i>Nature Physics</i> , 2006, 2, 36-39. | 6.5 | 194 |
| 99 | Two-photon revival-collapse phenomenon in the evolution of the quadrature squeezing of the four-photon Jaynes-Cummings model. <i>Optics Communications</i> , 2006, 263, 235-238. | 1.0 | 1 |
| 100 | High-accuracy mass spectrometry with stored ions. <i>Physics Reports</i> , 2006, 425, 1-78. | 10.3 | 610 |
| 101 | Design and prototyping of Stark atom chip for electric trapping of laser-cooled atoms. <i>Precision Engineering</i> , 2006, 30, 387-395. | 1.8 | 0 |
| 102 | Entanglement of a three-level trapped atom in the presence of another three-level trapped atom. <i>Optics Communications</i> , 2006, 265, 551-558. | 1.0 | 7 |
| 103 | Cold atoms in optical lattices as qubits for a quantum computer. <i>Russian Microelectronics</i> , 2006, 35, 74-77. | 0.1 | 3 |
| 104 | Quantum signatures in the dynamics of two dipole-dipole interacting soft dimers. <i>European Physical Journal B</i> , 2006, 50, 419-423. | 0.6 | 6 |
| 105 | Continuous variable encoding by ponderomotive interaction. <i>European Physical Journal D</i> , 2006, 37, 283-290. | 0.6 | 31 |
| 106 | Instantaneous measurement of field quadrature moments and entanglement. <i>European Physical Journal D</i> , 2006, 38, 423-426. | 0.6 | 19 |
| 107 | Anisotropy-Induced Effects in the Dynamics of an Ion Confined in a Two-Dimensional Paul Trap. <i>Open Systems and Information Dynamics</i> , 2006, 13, 315-321. | 0.5 | 1 |
| 108 | Entanglement, Decoherence and Correlations in a Strongly Driven Jaynes-Cummings System. <i>Open Systems and Information Dynamics</i> , 2006, 13, 437-444. | 0.5 | 4 |
| 109 | Phonon Superfluids in Sets of Trapped Ions. <i>Foundations of Physics</i> , 2006, 36, 465-476. | 0.6 | 3 |
| 110 | Generation of long-living entanglement using cold trapped ions with pair cat states. <i>Applied Physics B: Lasers and Optics</i> , 2006, 84, 471-478. | 1.1 | 8 |
| 111 | Monolithic microfabricated ion trap chip design for scaleable quantum processors. <i>New Journal of Physics</i> , 2006, 8, 232-232. | 1.2 | 32 |
| 112 | Quantum metrology at the Heisenberg limit with ion trap motional compass states. <i>New Journal of Physics</i> , 2006, 8, 276-276. | 1.2 | 40 |
| 113 | Laser Controlling Wavepacket Trains of a Paul Trapped Ion. <i>Communications in Theoretical Physics</i> , 2006, 45, 1089-1096. | 1.1 | 4 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 114 | Generating continuous variable quantum codewords in the near-field atomic lithography. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, 997-1009. | 0.6 | 24 |
| 115 | Encoding a qubit into multilevel subspaces. New Journal of Physics, 2006, 8, 35-35. | 1.2 | 30 |
| 116 | PHYSICS: Microwave Cooling of an Artificial Atom. Science, 2006, 314, 1549-1550. | 6.0 | 3 |
| 117 | Laser controlled quantum motion of two Paul trapped ions. Chinese Physics B, 2006, 15, 2275-2287. | 1.3 | 6 |
| 118 | Applications of nanophotonics to classical and quantum information technology. , 2006, , . | | 1 |
| 119 | Optical Atomic Coherence at the 1-Second Time Scale. Science, 2006, 314, 1430-1433. | 6.0 | 141 |
| 120 | Measure of phonon-number moments and motional quadratures through infinitesimal-time probing of trapped ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, 685-693. | 0.6 | 14 |
| 121 | Electrodynamic Trapping of Spinless Neutral Atoms with an Atom Chip. Physical Review Letters, 2006, 96, 123001. | 2.9 | 18 |
| 122 | Photodetachment of ColdOH ⁺ in a Multipole Ion Trap. Physical Review Letters, 2006, 97, 193003. | 2.9 | 56 |
| 123 | Accurate Optical Lattice Clock with Sr87 Atoms. Physical Review Letters, 2006, 97, 130801. | 2.9 | 112 |
| 124 | Hyperpolarizability effects and accuracy evaluation of a 87Sr optical lattice clock. , 2006, , . | | 0 |
| 125 | Inelastic scattering of light by a cold trapped atom: Effects of the quantum center-of-mass motion. Physical Review A, 2006, 73, . | 1.0 | 5 |
| 126 | Dynamic nuclear Stark shift in superintense laser fields. Physical Review C, 2006, 74, . | 1.1 | 28 |
| 127 | Microwave-Induced Cooling of a Superconducting Qubit. Science, 2006, 314, 1589-1592. | 6.0 | 126 |
| 128 | Feedback Cooling of a Single Trapped Ion. Physical Review Letters, 2006, 96, 043003. | 2.9 | 158 |
| 129 | Cooling to the Ground State of Axial Motion for One Atom Strongly Coupled to an Optical Cavity. Physical Review Letters, 2006, 97, 083602. | 2.9 | 139 |
| 130 | Engineering phonon-photon interactions with a driven trapped ion in a cavity. Physical Review A, 2006, 74, . | 1.0 | 7 |
| 131 | Preparation of ultralow atomic velocities by transforming bound states into tunneling resonances. Physical Review A, 2006, 74, . | 1.0 | 7 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 132 | Solution of the Lindblad equation in the Kraus representation. <i>Physical Review A</i> , 2006, 74, . | 1.0 | 32 |
| 133 | Single observable concurrence measurement without simultaneous copies. <i>Physical Review A</i> , 2006, 74, . | 1.0 | 10 |
| 134 | Single cold atom as efficient stationary source of EPR-entangled light. <i>Physical Review A</i> , 2006, 74, . | 1.0 | 31 |
| 135 | Laser excitation of transverse modes in an atomic waveguide. <i>Physical Review A</i> , 2006, 74, . | 1.0 | 5 |
| 136 | Exact coherent states of a noninteracting Fermi gas in a harmonic trap. <i>Physical Review A</i> , 2006, 74, . | 1.0 | 4 |
| 137 | Tailoring of motional states in double-well potentials by time-dependent processes. <i>Physical Review A</i> , 2006, 74, . | 1.0 | 9 |
| 138 | Driven harmonic oscillator as a quantum simulator for open systems. <i>Physical Review A</i> , 2006, 74, . | 1.0 | 25 |
| 139 | Fast Ground State Manipulation of Neutral Atoms in Microscopic Optical Traps. <i>Physical Review Letters</i> , 2006, 96, 063001. | 2.9 | 140 |
| 140 | Nonadiabatic tunneling in ponderomotive barriers. <i>Physical Review E</i> , 2006, 74, 056404. | 0.8 | 11 |
| 141 | Nondestructive measurement of electron spins in a quantum dot. <i>Physical Review B</i> , 2006, 74, . | 1.1 | 41 |
| 142 | Parametric coupling for superconducting qubits. <i>Physical Review B</i> , 2006, 73, . | 1.1 | 92 |
| 143 | Three-mode two-boson Jaynes-Cummings model in trapped ions. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2007, 40, 533-543. | 0.7 | 2 |
| 144 | Coherent population trapping in a finite-size buffer-less cell. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2007, 40, 3851-3860. | 0.6 | 21 |
| 145 | A short history of Cavity Quantum Electrodynamics. , 2007, , CTuF2. | | 4 |
| 146 | Sub-half-wavelength localization of an atom via trichromatic phase control. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2007, 40, 1451-1459. | 0.6 | 25 |
| 147 | Crossover from weak- to strong-coupling regime in dispersive circuit QED. <i>Europhysics Letters</i> , 2007, 80, 40011. | 0.7 | 9 |
| 148 | Coherence-Like States of Two Coulomb-Correlated Ions Confined in a Paul Trap. <i>Chinese Physics Letters</i> , 2007, 24, 851-854. | 1.3 | 2 |
| 149 | Practical scheme for quantum dense coding between three parties using microwave radiation in trapped ions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2007, 40, 1245-1252. | 0.6 | 17 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 150 | Optimization of Doppler Cooling of a Single $^{40}\text{Ca}^+$ Ion. Japanese Journal of Applied Physics, 2007, 46, 1713-1716. | 0.8 | 3 |
| 151 | Time-dependent perturbation treatment of independent Raman schemes. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 4847-4862. | 0.7 | 2 |
| 152 | Decoherence of multicomponent symmetrical superpositions of displaced quantum states. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 13955-13974. | 0.7 | 3 |
| 153 | Experimental procedures for entanglement verification. Physical Review A, 2007, 75, . | 1.0 | 79 |
| 154 | Motional frequency shifts of trapped ions in the Lamb-Dicke regime. Physical Review A, 2007, 76, . | 1.0 | 13 |
| 155 | Fast quantum state control of a single trapped neutral atom. Physical Review A, 2007, 75, . | 1.0 | 76 |
| 156 | Effective quantum dynamics of interacting systems with inhomogeneous coupling. Physical Review A, 2007, 75, . | 1.0 | 21 |
| 157 | Influence of dissipation on the extraction of quantum states via repeated measurements. Physical Review A, 2007, 76, . | 1.0 | 11 |
| 158 | Entanglement in the dispersive interaction of trapped ions with a quantized field. Physical Review A, 2007, 75, . | 1.0 | 8 |
| 159 | Photoionization and photoelectric loading of barium ion traps. Physical Review A, 2007, 75, . | 1.0 | 26 |
| 160 | Particle motion in rapidly oscillating potentials: The role of the potential's initial phase. Physical Review A, 2007, 76, . | 1.0 | 17 |
| 161 | An all-optical ion-loading technique for scalable microtrap architectures. , 2007, , . | | 0 |
| 162 | Sub-half-wavelength atom localization via phase control of a pair of bichromatic fields. Physical Review A, 2007, 76, . | 1.0 | 69 |
| 163 | Initializing a quantum register from Mott-insulator states in optical lattices. Physical Review A, 2007, 75, . | 1.0 | 4 |
| 164 | Controlled collisions of a single atom and an ion guided by movable trapping potentials. Physical Review A, 2007, 76, . | 1.0 | 68 |
| 165 | Noise-Free Measurement of Harmonic Oscillators with Instantaneous Interactions. Physical Review Letters, 2007, 98, 020401. | 2.9 | 11 |
| 166 | Amplitude and phase control of a coherent superposition of degenerate states. I. Theory. Physical Review A, 2007, 75, . | 1.0 | 18 |
| 167 | Optical pumping via incoherent Raman transitions. Physical Review A, 2007, 76, . | 1.0 | 16 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 168 | Single trapped ion as a time-dependent harmonic oscillator. Physical Review A, 2007, 76, . | 1.0 | 27 |
| 169 | Analogue of Cosmological Particle Creation in an Ion Trap. Physical Review Letters, 2007, 99, 201301. | 2.9 | 62 |
| 170 | State Preparation and Dynamics of Ultracold Atoms in Higher Lattice Orbitals. Physical Review Letters, 2007, 99, 200405. | 2.9 | 180 |
| 171 | Direct measurement of concurrence for atomic two-qubit pure states. Physical Review A, 2007, 75, . | 1.0 | 42 |
| 172 | Vibronic Rabi resonances in harmonic and hard-wall ion traps for arbitrary laser intensity and detuning. Physical Review A, 2007, 75, . | 1.0 | 10 |
| 173 | Phase coherent dynamics of a superconducting flux qubit with capacitive bias readout. Physical Review B, 2007, 76, . | 1.1 | 34 |
| 174 | Exact Solution of Quantum Dynamics of a Cantilever Coupling to a Single Trapped Ultracold Ion. Communications in Theoretical Physics, 2007, 47, 561-566. | 1.1 | 3 |
| 175 | Bell States and Two-Qubit Logic Gate with Superconducting Charge Qubits Coupling to a Nanomechanical Resonator. Communications in Theoretical Physics, 2007, 48, 999-1002. | 1.1 | 1 |
| 176 | Dynamics of Jaynes-Cummings Model in the Absence of Rotating-Wave Approximation. Communications in Theoretical Physics, 2007, 47, 781-786. | 1.1 | 4 |
| 177 | Sir Peter Knight and the Jaynes-Cummings model. Journal of Modern Optics, 2007, 54, 2009-2016. | 0.6 | 6 |
| 178 | Tavis-Cummings model and collective multiqubit entanglement in trapped ions. Physical Review A, 2007, 75, . | 1.0 | 74 |
| 179 | Physical implementation of a programmable discriminator for unknown qubit states. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 384. | 0.9 | 10 |
| 180 | Theory of Ground State Cooling of a Mechanical Oscillator Using Dynamical Backaction. Physical Review Letters, 2007, 99, 093901. | 2.9 | 820 |
| 181 | Summary of Einstein's Views. , 2007, , 155-208. | | 0 |
| 182 | Lower ground state due to counter-rotating wave interaction in a trapped ion system. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 1967-1974. | 0.6 | 16 |
| 183 | Dynamics of Two-Level Trapped Ion in a Standing Wave Laser in Noncommutative Space. Communications in Theoretical Physics, 2007, 47, 921-926. | 1.1 | 1 |
| 184 | Gain Narrowing in Few-Atom Systems. Physical Review Letters, 2007, 98, 103601. | 2.9 | 13 |
| 185 | Exact mapping of the Dirac oscillator onto the Jaynes-Cummings model: Ion-trap experimental proposal. Physical Review A, 2007, 76, . | 1.0 | 173 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 186 | Quantum Optics. , 2007, , 1053-1078. | | 3 |
| 187 | Transport quantum logic gates for trapped ions. Physical Review A, 2007, 76, . | 1.0 | 39 |
| 188 | Design, microfabrication, and analysis of micrometer-sized cylindrical ion trap arrays. Review of Scientific Instruments, 2007, 78, 015107. | 0.6 | 28 |
| 189 | Dynamics of the Jaynes-Cummings and Rabi models: old wine in new bottles. Physica Scripta, 2007, 76, 146-160. | 1.2 | 88 |
| 190 | Quantum simulations under translational symmetry. Physical Review A, 2007, 75, . | 1.0 | 10 |
| 191 | Laser-manipulated the multiphoton transitions of a harmonically trapped particle. Chinese Physics B, 2007, 16, 3662-3667. | 1.3 | 0 |
| 192 | Dirac Equation and Quantum Relativistic Effects in a Single Trapped Ion. Physical Review Letters, 2007, 98, 253005. | 2.9 | 254 |
| 193 | Zero-point cooling and heating-rate measurements of a single Sr ⁸⁸ ion. Physical Review A, 2007, 75, . | 1.0 | 13 |
| 194 | Exchange interaction, entanglement, and quantum noise due to a thermal bosonic field. Physical Review B, 2007, 75, . | 1.1 | 33 |
| 195 | Ground state cooling in a bad cavity. Journal of Modern Optics, 2007, 54, 1595-1606. | 0.6 | 7 |
| 196 | Angular dependence of Dicke-narrowed electromagnetically induced transparency resonances. Physical Review A, 2007, 76, . | 1.0 | 36 |
| 197 | A new look at the quantum mechanics of the harmonic oscillator. Annalen Der Physik, 2007, 16, 439-528. | 0.9 | 12 |
| 198 | Exact manipulations to Bloch states of a particle in a double cosine potential. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 367, 445-449. | 0.9 | 5 |
| 199 | Progressive field-state collapse and quantum non-demolition photon counting. Nature, 2007, 448, 889-893. | 13.7 | 401 |
| 200 | Coupling superconducting qubits via a cavity bus. Nature, 2007, 449, 443-447. | 13.7 | 1,109 |
| 201 | Accuracy Evaluation of a ^{87}Sr Optical Lattice Clock. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 336-340. | 2.4 | 3 |
| 202 | Entanglement generation in trapped atoms. European Physical Journal D, 2007, 41, 199-203. | 0.6 | 4 |
| 203 | Two-photon interaction between trapped ions and cavity fields. European Physical Journal D, 2007, 41, 417-423. | 0.6 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 204 | An all-optical ion-loading technique for scalable microtrap architectures. <i>Applied Physics B: Lasers and Optics</i> , 2007, 88, 507-513. | 1.1 | 32 |
| 205 | Effective Generation of Cat and Kitten States. <i>Open Systems and Information Dynamics</i> , 2007, 14, 81-90. | 0.5 | 6 |
| 206 | Squeezed states and uncertainty relations since 1991. <i>Journal of Russian Laser Research</i> , 2007, 28, 404-428. | 0.3 | 8 |
| 207 | Decoherence of multicomponent and multimode generalizations of even/odd coherent states in thermal and phase reservoirs. <i>Journal of Russian Laser Research</i> , 2007, 28, 453-482. | 0.3 | 4 |
| 208 | Quantum kinetic theory of trapped particles in a strong electromagnetic field. <i>Annals of Physics</i> , 2008, 323, 3158-3174. | 1.0 | 5 |
| 209 | Sub-half-wavelength localization of a two-level atom via trichromatic phase manipulation. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2008, 372, 6032-6036. | 0.9 | 17 |
| 210 | Quantum computing with trapped ions. <i>Physics Reports</i> , 2008, 469, 155-203. | 10.3 | 856 |
| 211 | Ion-trap quantum information processing: Experimental status. <i>Frontiers of Physics in China</i> , 2008, 3, 365. | 1.0 | 12 |
| 212 | Quantum many-body phenomena in coupled cavity arrays. <i>Laser and Photonics Reviews</i> , 2008, 2, 527-556. | 4.4 | 399 |
| 213 | Highly Coherent Spectroscopy of Ultracold Atoms and Molecules in Optical Lattices. <i>ChemPhysChem</i> , 2008, 9, 375-382. | 1.0 | 9 |
| 214 | Generation of maximally entangled atom pairs in driven dissipative cavity QED systems. <i>European Physical Journal D</i> , 2008, 46, 165-172. | 0.6 | 6 |
| 215 | Atomic Bell states generation in an open driven cavity QED system. <i>European Physical Journal: Special Topics</i> , 2008, 160, 61-70. | 1.2 | 0 |
| 216 | Ultracold strontium clock: Applications to the measurement of fundamental constant variations. <i>European Physical Journal: Special Topics</i> , 2008, 163, 9-18. | 1.2 | 5 |
| 217 | The symmetry group of the quantum harmonic oscillator in an electric field. <i>Open Physics</i> , 2008, 6, . | 0.8 | 1 |
| 218 | Quasi-probability distribution functions for a single trapped ion interacting with a mixed laser field. <i>Laser Physics</i> , 2008, 18, 1217-1223. | 0.6 | 35 |
| 219 | Coherent population trapping (Electromagnetically induced transparency) resonance in cells of finite sizes. <i>Technical Physics</i> , 2008, 53, 498-503. | 0.2 | 0 |
| 220 | Entangled states of trapped atomic ions. <i>Nature</i> , 2008, 453, 1008-1015. | 13.7 | 923 |
| 221 | Wiring up quantum systems. <i>Nature</i> , 2008, 451, 664-669. | 13.7 | 786 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 222 | Optical lattice clocks with non-interacting bosons and fermions. <i>Nature Physics</i> , 2008, 4, 954-959. | 6.5 | 118 |
| 223 | Resolved-sideband cooling of a micromechanical oscillator. <i>Nature Physics</i> , 2008, 4, 415-419. | 6.5 | 533 |
| 224 | Suppression of Heating Rates in Cryogenic Surface-Electrode Ion Traps. <i>Physical Review Letters</i> , 2008, 100, 013001. | 2.9 | 177 |
| 225 | Analytic model for electrostatic fields in surface-electrode ion traps. <i>Physical Review A</i> , 2008, 78, . | 1.0 | 85 |
| 226 | Quantum State Engineering and Precision Metrology Using State-Insensitive Light Traps. <i>Science</i> , 2008, 320, 1734-1738. | 6.0 | 343 |
| 227 | Coherent manipulations of atoms using laser light. <i>Acta Physica Slovaca</i> , 2008, 58, . | 1.4 | 61 |
| 228 | Chemical applications of laser- and sympathetically-cooled ions in ion traps. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 7200. | 1.3 | 127 |
| 229 | Robust control of quantized motional states of a chain of trapped ions by collective adiabatic passage. <i>Physical Review A</i> , 2008, 77, . | 1.0 | 7 |
| 230 | Decoherence-free preparation of Dicke states of trapped ions by collective stimulated Raman adiabatic passage. <i>Physical Review A</i> , 2008, 77, . | 1.0 | 25 |
| 231 | Intrinsic dissipation in nanomechanical resonators due to phonon tunneling. <i>Physical Review B</i> , 2008, 77, . | 1.1 | 119 |
| 232 | Two-qubit state transfer between trapped ions using electromagnetic cavities coupled by an optical fibre. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008, 41, 045503. | 0.6 | 8 |
| 233 | Enhanced entanglement and squeezing of two-mode field from a double-ladder four-level atom. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008, 41, 155502. | 0.6 | 5 |
| 234 | Doppler-free, multiwavelength acousto-optic deflector for two-photon addressing arrays of Rb atoms in a quantum information processor. <i>Applied Optics</i> , 2008, 47, 1816. | 2.1 | 11 |
| 235 | Cavity Optomechanics: Back-Action at the Mesoscale. <i>Science</i> , 2008, 321, 1172-1176. | 6.0 | 1,638 |
| 236 | Decay and survivability of entanglement in two-dimensional ionic motions. <i>Journal of Modern Optics</i> , 2008, 55, 89-97. | 0.6 | 2 |
| 237 | Optical lattice clocks with non-interacting bosons and fermions. , 2008, , . | | 0 |
| 238 | Quantum phases of interacting phonons in ion traps. <i>Physical Review A</i> , 2008, 77, . | 1.0 | 45 |
| 239 | Sr Lattice Clock at $1 \text{ } \mu\text{m}$ — 10^{-16} Fractional Uncertainty by Remote Optical Evaluation with a Ca Clock. <i>Science</i> , 2008, 319, 1805-1808. | 6.0 | 500 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 240 | Nondestructive Probing of Rabi Oscillations on the Cesium Clock Transition near the Standard Quantum Limit. <i>Physical Review Letters</i> , 2008, 100, 103601. | 2.9 | 56 |
| 241 | Experimental investigation of the dynamics of entanglement: Sudden death, complementarity, and continuous monitoring of the environment. <i>Physical Review A</i> , 2008, 78, . | 1.0 | 219 |
| 242 | Monitoring atom-atom entanglement and decoherence in a solvable tripartite open system in cavity QED. <i>Physical Review A</i> , 2008, 77, . | 1.0 | 22 |
| 243 | On the quantum core of an optical vortex. <i>Journal of Modern Optics</i> , 2008, 55, 2279-2292. | 0.6 | 15 |
| 244 | Energy Level of Three-Mode Harmonic Oscillator for Coordinate Operators Satisfying Cyclic Commutative Relations Obtained by IEO Method. <i>Communications in Theoretical Physics</i> , 2008, 50, 1348-1350. | 1.1 | 2 |
| 245 | WEHRL ENTROPY AND ENTANGLEMENT OF A TIME-DEPENDENT TWO-LEVEL TRAPPED ION INTERACTING WITH A LASER FIELD. <i>International Journal of Quantum Information</i> , 2008, 06, 331-339. | 0.6 | 1 |
| 246 | Detecting unambiguously non-Abelian geometric phases with trapped ions. <i>New Journal of Physics</i> , 2008, 10, 043031. | 1.2 | 14 |
| 247 | Entanglement sudden birth of two trapped ions interacting with a time-dependent laser field. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008, 41, 235503. | 0.6 | 20 |
| 248 | ENGINEERING MACROSCOPIC QUANTUM STATES OF A SINGLE TRAPPED ION: HIGHER-ORDER LAMBâ€“DICKE APPROXIMATIONS. <i>Modern Physics Letters B</i> , 2008, 22, 139-146. | 1.0 | 1 |
| 249 | ACCELERATING THE REVIVAL OF A TRAPPED-ION SYSTEM. <i>Modern Physics Letters B</i> , 2008, 22, 467-474. | 1.0 | 1 |
| 250 | Trapped Rydberg ions: from spin chains to fast quantum gates. <i>New Journal of Physics</i> , 2008, 10, 093009. | 1.2 | 81 |
| 251 | Deep Optical Trap for Cold Calcium Atoms. <i>AIP Conference Proceedings</i> , 2008, , . | 0.3 | 0 |
| 252 | Quantum phases of trapped ions in an optical lattice. <i>New Journal of Physics</i> , 2008, 10, 045017. | 1.2 | 51 |
| 253 | The absolute frequency of the ⁸⁷ Sr optical clock transition. <i>Metrologia</i> , 2008, 45, 539-548. | 0.6 | 139 |
| 254 | Coupled gas and ion transport in quadrupole interfaces. <i>Journal Physics D: Applied Physics</i> , 2008, 41, 025205. | 1.3 | 15 |
| 255 | Parametric coupling between macroscopic quantum resonators. <i>New Journal of Physics</i> , 2008, 10, 115001. | 1.2 | 65 |
| 256 | Cavity-assisted backaction cooling of mechanical resonators. <i>New Journal of Physics</i> , 2008, 10, 095007. | 1.2 | 114 |
| 257 | Phase Evolution of Coherent Light in a Simple Polariton Model. <i>Chinese Physics Letters</i> , 2008, 25, 821-824. | 1.3 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 258 | Engineering Two-Mode Squeezed Vacuum Motional State of a Single Intracavity Trapped Ion. Chinese Physics Letters, 2008, 25, 945-948. | 1.3 | 1 |
| 259 | Scalable Generation of Cluster State for Multiple Hot Trapped Ions. Chinese Physics Letters, 2008, 25, 1198-1201. | 1.3 | 1 |
| 260 | A molecular dynamics simulation study on trapping ions in a nanoscale Paul trap. Nanotechnology, 2008, 19, 195702. | 1.3 | 19 |
| 261 | Rabi oscillations in a quantum dot-cavity system coupled to a nonzero temperature phonon bath. Physica Scripta, 2008, 77, 065704. | 1.2 | 5 |
| 262 | Ion trap quantum gates with amplitude-modulated laser beams. New Journal of Physics, 2008, 10, 013002. | 1.2 | 98 |
| 263 | Monitoring a single ion's motion by second-order photon correlations. New Journal of Physics, 2008, 10, 043011. | 1.2 | 17 |
| 264 | Theory of cavity-assisted microwave cooling of polar molecules. New Journal of Physics, 2008, 10, 063005. | 1.2 | 12 |
| 265 | Probing the quantum coherence of a nanomechanical resonator using a superconducting qubit: I. Echo scheme. New Journal of Physics, 2008, 10, 095004. | 1.2 | 40 |
| 266 | Hyper-entanglement in a relativistic two-body system. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 485302. | 0.7 | 9 |
| 267 | Dephasing-assisted transport: quantum networks and biomolecules. New Journal of Physics, 2008, 10, 113019. | 1.2 | 762 |
| 268 | Chirality quantum phase transition in the Dirac oscillator. Physical Review A, 2008, 77, . | 1.0 | 80 |
| 269 | Decoherence and dissipation of a quantum harmonic oscillator coupled to two-level systems. Physical Review A, 2008, 77, . | 1.0 | 40 |
| 270 | Limitations of the modulation method to smooth wire-guide roughness. Physical Review A, 2008, 77, . | 1.0 | 11 |
| 271 | Mesoscopic spin-boson models of trapped ions. Physical Review A, 2008, 78, . | 1.0 | 99 |
| 272 | Doppler cooling of calcium ions using a dipole-forbidden transition. Physical Review A, 2008, 77, . | 1.0 | 23 |
| 273 | Scheme for tunable quantum phase gate and effective preparation of graph-state entanglement. Physical Review A, 2008, 77, . | 1.0 | 17 |
| 274 | Nonrelativistic limit in the Dirac oscillator: A Ramsey-interferometry effect. Physical Review A, 2008, 77, . | 1.0 | 62 |
| 275 | Physical Review A, 2008, 77, . | 1.0 | 62 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 276 | Vibrational Bloch-Siegert effect in trapped ions. <i>Physical Review A</i> , 2008, 77, . | 1.0 | 8 |
| 277 | Quantum interference structures in trapped-ion dynamics beyond the Lamb-Dicke and rotating wave approximations. <i>Physical Review A</i> , 2008, 77, . | 1.0 | 18 |
| 278 | Wave-packet Rabi oscillations from phase-space flow in mesoscopic cavity QED. <i>Physical Review A</i> , 2008, 77, . | 1.0 | 4 |
| 279 | Anisotropy-dependent circular polarization spectroscopy. <i>Physical Review A</i> , 2008, 78, . | 1.0 | 2 |
| 280 | Theory of Raman transitions in cavity QED. <i>Physical Review A</i> , 2008, 78, . | 1.0 | 2 |
| 281 | One-way quantum computing in optical lattices with many-atom addressing. <i>Physical Review A</i> , 2008, 78, . | 1.0 | 6 |
| 282 | Numerical analysis of optimized coherent control pulses. <i>Physical Review A</i> , 2008, 78, . | 1.0 | 15 |
| 283 | Strong Tunable Coupling between a Superconducting Charge and Phase Qubit. <i>Physical Review Letters</i> , 2008, 100, 187003. | 2.9 | 34 |
| 284 | Simultaneous Cooling of an Artificial Atom and Its Neighboring Quantum System. <i>Physical Review Letters</i> , 2008, 100, 047001. | 2.9 | 73 |
| 285 | Quantum trajectory analysis of single-photon control from a single-molecule source. <i>Journal of Chemical Physics</i> , 2008, 128, 054104. | 1.2 | 1 |
| 286 | Manipulating and probing microwave fields in a cavity by quantum non-demolition photon counting. <i>Physica Scripta</i> , 2009, T137, 014014. | 1.2 | 1 |
| 287 | Integrated atom detector: Single atoms and photon statistics. <i>Physical Review A</i> , 2009, 79, . | 1.0 | 17 |
| 288 | Jahn-Teller-induced Berry phase in spin-orbit-coupled Bose-Einstein condensates. <i>Physical Review A</i> , 2009, 79, . | 1.0 | 58 |
| 289 | Nonequilibrium thermodynamic analysis of squeezing. <i>Physical Review A</i> , 2009, 79, . | 1.0 | 28 |
| 290 | Manipulation of quantum particles in rapidly oscillating potentials by inducing phase hops. <i>Physical Review A</i> , 2009, 79, . | 1.0 | 16 |
| 291 | Quantum Walk on a Line for a Trapped Ion. <i>Physical Review Letters</i> , 2009, 103, 183602. | 2.9 | 81 |
| 292 | Optimal Surface-Electrode Trap Lattices for Quantum Simulation with Trapped Ions. <i>Physical Review Letters</i> , 2009, 102, 233002. | 2.9 | 87 |
| 293 | Cooling mechanisms in molecular conduction junctions. <i>Physical Review B</i> , 2009, 80, . | 1.1 | 85 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 294 | Power-Law Distributions for a Trapped Ion Interacting with a Classical Buffer Gas. <i>Physical Review Letters</i> , 2009, 102, 063001. | 2.9 | 169 |
| 295 | Rabi spectroscopy and excitation inhomogeneity in a one-dimensional optical lattice clock. <i>Physical Review A</i> , 2009, 80, . | 1.0 | 124 |
| 296 | Dicke model and environment-induced entanglement in ion-cavity QED. <i>Physical Review A</i> , 2009, 80, . | 1.0 | 35 |
| 297 | Trap-assisted creation of giant molecules and Rydberg-mediated coherent charge transfer in a Penning trap. <i>Physical Review A</i> , 2009, 79, . | 1.0 | 4 |
| 298 | Quantum manipulation of low-frequency fluctuators by superconducting resonator. <i>Physical Review B</i> , 2009, 79, . | 1.1 | 6 |
| 299 | Tuning the Gap of a Superconducting Flux Qubit. <i>Physical Review Letters</i> , 2009, 102, 090501. | 2.9 | 153 |
| 300 | Phase control of the Pancharatnam phase. <i>Physical Review A</i> , 2009, 79, . | 1.0 | 14 |
| 301 | Electric field noise above surfaces: A model for heating-rate scaling law in ion traps. <i>Physical Review A</i> , 2009, 80, . | 1.0 | 45 |
| 302 | Ground State Cooling of a Nanomechanical Resonator in the Nonresolved Regime via Quantum Interference. <i>Physical Review Letters</i> , 2009, 103, 227203. | 2.9 | 59 |
| 303 | Quantum router based on ac control of qubit chains. <i>Physical Review A</i> , 2009, 80, . | 1.0 | 59 |
| 304 | Generation of Schrödinger cat state of a single trapped cold ion. <i>Chinese Physics B</i> , 2009, 18, 1049-1053. | 0.7 | 0 |
| 305 | A quantum parametric oscillator in a radiofrequency trap. <i>Physica Scripta</i> , 2009, T135, 014006. | 1.2 | 10 |
| 306 | Chapter 2 Quantum Effects in Optomechanical Systems. <i>Advances in Atomic, Molecular and Optical Physics</i> , 2009, 57, 33-86. | 2.3 | 159 |
| 307 | Large-scale quantum computation in an anharmonic linear ion trap. <i>Europhysics Letters</i> , 2009, 86, 60004. | 0.7 | 121 |
| 308 | Quantum communication between trapped ions through a dissipative environment. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2009, 42, 182001. | 0.7 | 3 |
| 309 | Barium Ions for Quantum Computation. , 2009, , . | | 2 |
| 310 | Cooling down quantum bits on ultrashort time scales. <i>New Journal of Physics</i> , 2009, 11, 123025. | 1.2 | 38 |
| 311 | Squeezing and broadening effects in mechanical oscillators. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2009, 42, 055307. | 0.7 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 312 | Radiofrequency multipole traps: tools for spectroscopy and dynamics of cold molecular ions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2009, 42, 154001. | 0.6 | 124 |
| 313 | Solution to the satisfiability problem using a complete Grover search with trapped ions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2009, 42, 145503. | 0.6 | 3 |
| 314 | Wiring up trapped ions to study aspects of quantum information. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2009, 42, 154012. | 0.6 | 30 |
| 315 | Practical recipes for the model order reduction, dynamical simulation and compressive sampling of large-scale open quantum systems. <i>New Journal of Physics</i> , 2009, 11, 065002. | 1.2 | 2 |
| 316 | Quantum Optical Heating in Sonoluminescence Experiments. , 2009, , . | | 0 |
| 317 | Coherence of Spin-Polarized Fermions Interacting with a Clock Laser in a Stark-Shift-Free Optical Lattice. <i>Journal of the Physical Society of Japan</i> , 2009, 78, 013301. | 0.7 | 12 |
| 318 | Probing Interactions Between Ultracold Fermions. <i>Science</i> , 2009, 324, 360-363. | 6.0 | 99 |
| 319 | Cooling atoms into entangled states. <i>New Journal of Physics</i> , 2009, 11, 083008. | 1.2 | 58 |
| 320 | Ground State of Jaynes-Cummings Model: Comparison of Solutions with and without the Rotating-Wave Approximation. <i>Chinese Physics Letters</i> , 2009, 26, 044212. | 1.3 | 5 |
| 321 | Application of quantum algorithms to direct measurement of concurrence of a two-qubit pure state. <i>Chinese Physics B</i> , 2009, 18, 2642-2648. | 0.7 | 9 |
| 322 | Sonoluminescence and quantum optical heating. <i>New Journal of Physics</i> , 2009, 11, 053001. | 1.2 | 12 |
| 323 | Two-photon cooling of a nonlinear quantum oscillator. <i>Optics Communications</i> , 2009, 282, 3930-3933. | 1.0 | 2 |
| 324 | Entanglement of three-level trapped ions with phonon trap modes. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2009, 373, 2420-2427. | 0.9 | 9 |
| 325 | Entanglement detection. <i>Physics Reports</i> , 2009, 474, 1-75. | 10.3 | 1,668 |
| 326 | Quantum state control, entanglement, and readout of the Josephson persistent-current qubit. <i>Quantum Information Processing</i> , 2009, 8, 199-215. | 1.0 | 5 |
| 327 | Spin-resolved quantum-dot resonance fluorescence. <i>Nature Physics</i> , 2009, 5, 198-202. | 6.5 | 251 |
| 328 | Quantum computation and quantum-state engineering driven by dissipation. <i>Nature Physics</i> , 2009, 5, 633-636. | 6.5 | 1,092 |
| 329 | A phonon laser. <i>Nature Physics</i> , 2009, 5, 682-686. | 6.5 | 180 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 330 | Simplified approach to generate controlled-NOT gates with single trapped ions for arbitrary Lamb-Dicke parameters. Optics Communications, 2009, 282, 1948-1951. | 1.0 | 2 |
| 331 | Polarization spectroscopy to determine alignment depolarization of the atoms using a pump-probe laser technique. Optics Communications, 2009, 282, 1567-1573. | 1.0 | 4 |
| 332 | Creation and manipulation of entanglement in spin chains far from equilibrium. European Physical Journal: Special Topics, 2009, 180, 237-246. | 1.2 | 10 |
| 333 | High contrast electromagnetically induced transparency in a nitrogen filled Rb vapour cell. Laser Physics, 2009, 19, 2008-2013. | 0.6 | 7 |
| 334 | Competing many-body interactions in systems of trapped ions. Physical Review A, 2009, 79, . | 1.0 | 42 |
| 335 | Simple integrated single-atom detector. Optics Letters, 2009, 34, 259. | 1.7 | 22 |
| 336 | THE TRAPPED-ION QUBIT: COHERENT CONTROL IN INFINITE-DIMENSIONAL QUANTUM SYSTEMS. Modern Physics Letters A, 2009, 24, 2565-2578. | 0.5 | 1 |
| 337 | Quantum Computing with Trapped Ions. , 2009, , 7218-7249. | | 0 |
| 338 | Prospects for Optical Clocks with a Blue-Detuned Lattice. Physical Review Letters, 2009, 102, 063002. | 2.9 | 43 |
| 339 | Quantum search in a nonclassical database of trapped ions. Physical Review A, 2009, 79, . | 1.0 | 11 |
| 340 | Quantum information processing and quantum control with trapped atomic ions. Physica Scripta, 2009, T137, 014007. | 1.2 | 17 |
| 341 | Ca+quantum bits for quantum information processing. Physica Scripta, 2009, T137, 014008. | 1.2 | 4 |
| 342 | Quantum system under the actions of two counteracting baths: A model for the attenuation-amplification interplay. Physical Review A, 2009, 80, . | 1.0 | 2 |
| 343 | Hybrid quantum devices and quantum engineering. Physica Scripta, 2009, T137, 014001. | 1.2 | 243 |
| 344 | A bead on a hoop rotating about a horizontal axis: A one-dimensional ponderomotive trap. American Journal of Physics, 2009, 77, 1039-1048. | 0.3 | 9 |
| 345 | Motions of ions in a nanoscale Paul trap from molecular dynamics. Molecular Simulation, 2009, 35, 812-821. | 0.9 | 1 |
| 346 | Jaynes-Cummings models with trapped electrons on liquid helium. Physical Review A, 2009, 80, . | 1.0 | 13 |
| 347 | Quantum simulations based on measurements and feedback control. Physical Review A, 2009, 79, . | 1.0 | 8 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 348 | Photodetection of propagating quantum microwaves in circuit QED. Physica Scripta, 2009, T137, 014004. | 1.2 | 33 |
| 349 | Entanglement in a continuously measured two-level system coupled to a harmonic oscillator. Physical Review A, 2009, 79, . | 1.0 | 1 |
| 350 | Trapping and Manipulation of Isolated Atoms Using Nanoscale Plasmonic Structures. Physical Review Letters, 2009, 103, 123004. | 2.9 | 96 |
| 351 | Quantum billiards in optical lattices. Europhysics Letters, 2009, 88, 30006. | 0.7 | 12 |
| 352 | Adiabatic passage methods in cooling trapped molecular ions. Proceedings of SPIE, 2010, , . | 0.8 | 0 |
| 353 | Nonlinear ion trap stability analysis. Physica Scripta, 2010, T140, 014057. | 1.2 | 5 |
| 354 | Nonlinear harmonic boson oscillator. Physica Scripta, 2010, T140, 014056. | 1.2 | 3 |
| 355 | Noise suppression in an atomic system under the action of a field in a squeezed coherent state. Journal of Experimental and Theoretical Physics, 2010, 110, 551-560. | 0.2 | 1 |
| 356 | Multipartite entangled states with two bosonic modes and qubits. European Physical Journal D, 2010, 59, 509-519. | 0.6 | 7 |
| 357 | Entanglement generation in planar Penning traps. Physical Review A, 2010, 82, . | 1.0 | 0 |
| 358 | Sensitivity of the population and the Pancharatnam phase for a trapped ion with Stark shift. Physical Review A, 2010, 82, . | 1.0 | 8 |
| 359 | Energy concentration in composite quantum systems. Physical Review A, 2010, 81, . | 1.0 | 21 |
| 360 | Generation of hyperentangled states between remote noninteracting atomic ions. Physical Review A, 2010, 82, . | 1.0 | 11 |
| 361 | Optimization of γ fluorescence and hyperfine-qubit detection. Physical Review A, 2010, 82, . | 1.0 | 23 |
| 362 | Quantum work statistics of linear and nonlinear parametric oscillators. Chemical Physics, 2010, 375, 200-208. | 0.9 | 61 |
| 363 | Kramers barrier crossing as a cooling machine. Chemical Physics, 2010, 375, 399-402. | 0.9 | 6 |
| 364 | Entangled coherent states under dissipation. Optics Communications, 2010, 283, 3825-3829. | 1.0 | 5 |
| 365 | A cloud of laser cooled 40Ca^+ in a linear ion trap. Science Bulletin, 2010, 55, 3094-3097. | 1.7 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 366 | Radium ion: a candidate for measuring atomic parity violation. <i>Hyperfine Interactions</i> , 2010, 196, 261-267. | 0.2 | 7 |
| 367 | Rotating wave approximation and entropy. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2010, 374, 3726-3732. | 0.9 | 10 |
| 368 | Quantum computers. <i>Nature</i> , 2010, 464, 45-53. | 13.7 | 2,613 |
| 369 | Quantum simulation of frustrated Ising spins with trapped ions. <i>Nature</i> , 2010, 465, 590-593. | 13.7 | 642 |
| 370 | Observation of spin-dependent quantum jumps via quantum dot resonance fluorescence. <i>Nature</i> , 2010, 467, 297-300. | 13.7 | 133 |
| 371 | Optical trapping of an ion. <i>Nature Photonics</i> , 2010, 4, 772-775. | 15.6 | 108 |
| 372 | Fast generation of cluster states in a linear ion trap. <i>Chinese Physics B</i> , 2010, 19, 090317. | 0.7 | 5 |
| 373 | A New Approach to Measurement of Heating Rate of Trapped Ions. <i>Communications in Theoretical Physics</i> , 2010, 54, 460-462. | 1.1 | 0 |
| 374 | Validity of Lamb-Dicke Approximations in Ion-Trap Systems. <i>Chinese Physics Letters</i> , 2010, 27, 010304. | 1.3 | 0 |
| 375 | Control of a Cloud of Laser-Cooled 40Ca^+ in a Linear Ion Trap. <i>Chinese Physics Letters</i> , 2010, 27, 043201. | 1.3 | 5 |
| 376 | Strings of Ion Crystals in a Linear Trap for Quantum Information Processing. <i>Chinese Physics Letters</i> , 2010, 27, 123203. | 1.3 | 8 |
| 377 | Entanglement of two atoms interacting with a dissipative coherent cavity field without rotating wave approximation. <i>Chinese Physics B</i> , 2010, 19, 110303. | 0.7 | 3 |
| 378 | Nanotechnology for Electronics, Photonics, and Renewable Energy. <i>Nanostructure Science and Technology</i> , 2010, , . | 0.1 | 11 |
| 379 | How "cold" can a Markovian dissipative cavity QED system be?. <i>Physica Scripta</i> , 2010, 82, 038102. | 1.2 | 6 |
| 380 | Reversible Measurement on Quantum States of Trapped-Ion Qubits. <i>Communications in Theoretical Physics</i> , 2010, 53, 469-472. | 1.1 | 5 |
| 381 | Superfast Laser Cooling. <i>Physical Review Letters</i> , 2010, 104, 183001. | 2.9 | 33 |
| 382 | Quantum computation with doped silicon cavities. <i>Physical Review B</i> , 2010, 81, . | 1.1 | 11 |
| 383 | Mesoscopic shelving readout of superconducting qubits in circuit quantum electrodynamics. <i>Physical Review B</i> , 2010, 81, . | 1.1 | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 384 | Single-ion nonlinear mechanical oscillator. <i>Physical Review A</i> , 2010, 82, . | 1.0 | 34 |
| 385 | Cavity quantum electrodynamics with a Rydberg-blocked atomic ensemble. <i>Physical Review A</i> , 2010, 82, . | 1.0 | 68 |
| 386 | Nonperturbative analysis of entanglement dynamics and control for three qubits in a common lossy cavity. <i>Physical Review A</i> , 2010, 82, . | 1.0 | 38 |
| 387 | Short-time-interaction quantum measurement through an incoherent mediator. <i>Physical Review A</i> , 2010, 81, . | 1.0 | 2 |
| 388 | Ion-induced density bubble in a strongly correlated one-dimensional gas. <i>Physical Review A</i> , 2010, 81, . | 1.0 | 30 |
| 389 | Observing different phases for the dynamics of entanglement in an ion trap. <i>Physical Review A</i> , 2010, 81, . | 1.0 | 12 |
| 390 | Molecular heat pump for rotational states. <i>Physical Review A</i> , 2010, 81, . | 1.0 | 7 |
| 391 | Atom-ion quantum gate. <i>Physical Review A</i> , 2010, 81, . | 1.0 | 86 |
| 392 | Temperature-Driven Structural Phase Transition for Trapped Ions and a Proposal for its Experimental Detection. <i>Physical Review Letters</i> , 2010, 105, 265703. | 2.9 | 25 |
| 393 | Inelastic scattering and heating in a molecular spin pump. <i>Physical Review B</i> , 2010, 81, . | 1.1 | 31 |
| 394 | Resonant quantum gates in circuit quantum electrodynamics. <i>Physical Review B</i> , 2010, 82, . | 1.1 | 45 |
| 395 | Precision measurement of fermionic collisions using an ^{87}Sr optical lattice clock with $1\text{ Å}^{-10^{-16}}$ inaccuracy. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2010, 57, 574-582. | 1.7 | 9 |
| 396 | A single-atom detector integrated on an atom chip: fabrication, characterization and application. <i>New Journal of Physics</i> , 2010, 12, 095005. | 1.2 | 25 |
| 397 | A long DNA segment in a linear nanoscale Paul trap. <i>Nanotechnology</i> , 2010, 21, 015103. | 1.3 | 18 |
| 398 | Electrostatics of gapped and finite surface electrodes. <i>New Journal of Physics</i> , 2010, 12, 023038. | 1.2 | 30 |
| 399 | Quasi-perfect state transfer in a bosonic dissipative network. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2010, 43, 105503. | 0.6 | 7 |
| 400 | Simulating quantum effects of cosmological expansion using a static ion trap. <i>New Journal of Physics</i> , 2010, 12, 095019. | 1.2 | 24 |
| 401 | Quantum control of a Paul-trapped ion via double radio-frequency driving. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2010, 43, 455302. | 0.7 | 4 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 402 | Superpositions of Degenerate Quantum States: Preparation and Detection in Atomic Beams. <i>Advances in Atomic, Molecular and Optical Physics</i> , 2010, 58, 113-172. | 2.3 | 8 |
| 403 | The localization of phonons in ion traps with controlled quantum disorder. <i>New Journal of Physics</i> , 2010, 12, 123016. | 1.2 | 24 |
| 404 | Quantum simulation and phase diagram of the transverse-field Ising model with three atomic spins. <i>Physical Review B</i> , 2010, 82, . | 1.1 | 87 |
| 405 | Zitterbewegung of relativistic electrons in a magnetic field and its simulation by trapped ions. <i>Physical Review D</i> , 2010, 82, . | 1.6 | 29 |
| 406 | Sudden vanishing of spin squeezing under decoherence. <i>Physical Review A</i> , 2010, 81, . | 1.0 | 81 |
| 407 | Strong couplings between artificial atoms and terahertz cavities. <i>Optics Letters</i> , 2010, 35, 1686. | 1.7 | 6 |
| 408 | Quantum optomechanicsâ€”throwing a glance [Invited]. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2010, 27, A189. | 0.9 | 247 |
| 409 | Continuous-variable entanglement purification with atomic systems. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2010, 27, A198. | 0.9 | 5 |
| 410 | Information encoding of a qubit into a multilevel environment. <i>Physical Review A</i> , 2010, 81, . | 1.0 | 8 |
| 411 | Cooling a quantum circuit via coupling to a multiqubit system. <i>Physical Review A</i> , 2010, 81, . | 1.0 | 8 |
| 412 | Cavity opto-mechanics using an optically levitated nanosphere. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 1005-1010. | 3.3 | 493 |
| 413 | Protection of quantum information and optimal singlet conversion through higher-dimensional quantum systems and environment monitoring. <i>Physical Review A</i> , 2010, 81, . | 1.0 | 14 |
| 414 | <i>Colloquium</i>: Trapped ions as quantum bits: Essential numerical tools. <i>Reviews of Modern Physics</i> , 2010, 82, 2609-2632. | 16.4 | 105 |
| 415 | Cavity Optomechanics with Whispering-Gallery Mode Optical Micro-Resonators. <i>Advances in Atomic, Molecular and Optical Physics</i> , 2010, 58, 207-323. | 2.3 | 84 |
| 416 | Deep Strong Coupling Regime of the Jaynes-Cummings Model. <i>Physical Review Letters</i> , 2010, 105, 263603. | 2.9 | 439 |
| 417 | Nanoelectronics for DNA Sensing. <i>Nanostructure Science and Technology</i> , 2010, , 193-209. | 0.1 | 1 |
| 418 | Quantum Electrodynamics of One-Photon Wave Packets. <i>Advances in Quantum Chemistry</i> , 2010, , 457-483. | 0.4 | 4 |
| 419 | Phonon-mediated entanglement for trapped ion quantum computing. <i>Reports on Progress in Physics</i> , 2010, 73, 036401. | 8.1 | 22 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 420 | Number-operatorâ€™annihilation-operator uncertainty as an alternative for the number-phase uncertainty relation. Physical Review A, 2010, 81, . | 1.0 | 21 |
| 421 | Symmetry principles in quantum system theory of multi-qubit systems made simple. , 2010, , . | | 1 |
| 422 | Efficient Fiber Optic Detection of Trapped Ion Fluorescence. Physical Review Letters, 2010, 105, 023001. | 2.9 | 70 |
| 423 | Cooling of mechanical motion with a two-level system: The high-temperature regime. Physical Review B, 2010, 82, . | 1.1 | 51 |
| 424 | Correlations in phase space and the creation of focusing wave packets. Journal of Modern Optics, 2010, 57, 1437-1444. | 0.6 | 6 |
| 425 | Errors in zero-excitation state preparation due to anti-rotating terms in two-atom Markovian cavity QED. Physica Scripta, 2010, 82, 055401. | 1.2 | 1 |
| 426 | Quantum simulation of the transverse Ising model with trapped ions. New Journal of Physics, 2011, 13, 105003. | 1.2 | 92 |
| 427 | Pulsed quantum optomechanics. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 16182-16187. | 3.3 | 231 |
| 428 | Zitterbewegung (trembling motion) of electrons in semiconductors: a review. Journal of Physics Condensed Matter, 2011, 23, 143201. | 0.7 | 107 |
| 429 | Efficient controlled-phase gate for single-spin qubits in quantum dots. Physical Review B, 2011, 83, . | 1.1 | 75 |
| 430 | Equivalence between Redfield- and master-equation approaches for a time-dependent quantum system and coherence control. Physical Review A, 2011, 83, . | 1.0 | 17 |
| 431 | Efficient algorithms for optimal control of quantum dynamics: the Krotov method unencumbered. New Journal of Physics, 2011, 13, 073029. | 1.2 | 45 |
| 432 | Tripartite nonlocality and continuous-variable entanglement in thermal states of trapped ions. Physical Review A, 2011, 84, . | 1.0 | 15 |
| 433 | Deterministic Entanglement of Photons in Two Superconducting Microwave Resonators. Physical Review Letters, 2011, 106, 060401. | 2.9 | 170 |
| 434 | Quantum superpositions of crystalline structures. Physical Review A, 2011, 84, . | 1.0 | 27 |
| 435 | Fano-Doppler Laser Cooling of Hybrid Nanostructures. ACS Nano, 2011, 5, 7354-7361. | 7.3 | 27 |
| 436 | Generation of Kerr non-Gaussian motional states of trapped ions. Europhysics Letters, 2011, 94, 54002. | 0.7 | 13 |
| 437 | Microwave quantum logic gates for trapped ions. Nature, 2011, 476, 181-184. | 13.7 | 268 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 438 | Pattern Formation with Trapped Ions. <i>Physical Review Letters</i> , 2011, 106, 143001. | 2.9 | 30 |
| 439 | Symmetry principles in quantum systems theory. <i>Journal of Mathematical Physics</i> , 2011, 52, . | 0.5 | 46 |
| 440 | Simple trapped-ion architecture for high-fidelity Toffoli gates. <i>Physical Review A</i> , 2011, 84, . | 1.0 | 12 |
| 441 | Asymmetric Cooper pair transistor in parallel to a dc SQUID: Two coupled quantum systems. <i>Physical Review B</i> , 2011, 83, . | 1.1 | 5 |
| 442 | Generators of nonclassical states by a combination of linear coupling of boson modes, Kerr nonlinearity, and strong linear losses. <i>Physical Review A</i> , 2011, 84, . | 1.0 | 3 |
| 443 | Disorder overtakes order in information concentration over quantum networks. <i>Physical Review A</i> , 2011, 84, . | 1.0 | 26 |
| 444 | An Optimum Method for a Grooved 2D Planar Ion Trap Design. <i>Chinese Physics Letters</i> , 2011, 28, 073701. | 1.3 | 3 |
| 445 | Sideband excitation of trapped ions by rapid adiabatic passage for manipulation of motional states. <i>Physical Review A</i> , 2011, 84, . | 1.0 | 11 |
| 446 | Fidelity of structured amplitude-damping channels. <i>Physica Scripta</i> , 2011, 83, 045008. | 1.2 | 1 |
| 447 | Exact treatment for the entanglement of the multiphoton two-qubit system with the single-mode thermal field. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2011, 28, 2087. | 0.9 | 3 |
| 448 | Generation of entanglement density within a reservoir. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2011, 44, 065505. | 0.6 | 8 |
| 449 | Decoherence in crystals of quantum molecular magnets. <i>Nature</i> , 2011, 476, 76-79. | 13.7 | 192 |
| 450 | Integrability of the Rabi Model. <i>Physical Review Letters</i> , 2011, 107, 100401. | 2.9 | 615 |
| 451 | Wavelength-scale imaging of trapped ions using a phase Fresnel lens. <i>Optics Letters</i> , 2011, 36, 1371. | 1.7 | 39 |
| 452 | Intense-field-stimulated multiphoton transitions in a two-level system. <i>Physical Review A</i> , 2011, 84, . | 1.0 | 1 |
| 453 | Measurement of the internal state of a single atom without energy exchange. <i>Nature</i> , 2011, 475, 210-213. | 13.7 | 93 |
| 454 | Nonlinear coherent loss for generating non-classical states. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2011, 44, 325307. | 0.7 | 5 |
| 455 | Zitterbewegung (Trembling Motion) of Electrons in Graphene. , 0, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 456 | An Introduction to Quantum Optomechanics. Acta Physica Slovaca, 2011, 61, . | 1.4 | 56 |
| 457 | Even and odd combinations of nonlinear coherent states. Journal of Physics: Conference Series, 2011, 274, 012142. | 0.3 | 0 |
| 458 | Heralded single-photon absorption by a single atom. Nature Physics, 2011, 7, 17-20. | 6.5 | 89 |
| 459 | Coupled quantized mechanical oscillators. Nature, 2011, 471, 196-199. | 13.7 | 219 |
| 460 | Trapped-ion antennae for the transmission of quantum information. Nature, 2011, 471, 200-203. | 13.7 | 136 |
| 461 | Quantum informatics with single atoms. Russian Microelectronics, 2011, 40, 237-244. | 0.1 | 2 |
| 462 | Quantum computers: Achievements, implementation difficulties, and prospects. Russian Microelectronics, 2011, 40, 225-236. | 0.1 | 9 |
| 463 | Quantum jumps induced by the center-of-mass motion of a trapped atom. European Physical Journal D, 2011, 61, 21-32. | 0.6 | 2 |
| 464 | Macroscopic quantum control of exact many-body coherent states. European Physical Journal D, 2011, 61, 431-435. | 0.6 | 6 |
| 465 | State-dependent lattices for quantum computing with alkaline-earth-metal atoms. European Physical Journal D, 2011, 65, 207-217. | 0.6 | 23 |
| 466 | Atomic Wehrl entropy and negativity as entanglement measures for qudit pure states in a trapped ion. Journal of Russian Laser Research, 2011, 32, 287-297. | 0.3 | 28 |
| 467 | Quantum computing and quantum simulation with group-II atoms. Quantum Information Processing, 2011, 10, 865-884. | 1.0 | 73 |
| 468 | A single laser system for ground-state cooling of $^{25}\text{Mg}^+$. Applied Physics B: Lasers and Optics, 2011, 104, 583-590. | 1.1 | 29 |
| 469 | All-optical ion generation for ion trap loading. Applied Physics B: Lasers and Optics, 2011, 104, 755-761. | 1.1 | 15 |
| 470 | A single trapped ion in a finite range trap. Annals of Physics, 2011, 326, 968-978. | 1.0 | 6 |
| 471 | Gas-Phase Fluorescence Excitation and Emission Spectroscopy of Three Xanthene Dyes (Rhodamine 575,) Tj ETQq1 1 0.784314 rgBT American Society for Mass Spectrometry, 2011, 22, 93-109. | 1.2 | 71 |
| 472 | Quantum information processing and metrology with trapped ions. Laser Physics Letters, 2011, 8, 175-188. | 0.6 | 80 |
| 473 | Fabrication and heating rate study of microscopic surface electrode ion traps. New Journal of Physics, 2011, 13, 013032. | 1.2 | 80 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 474 | Normal modes of trapped ions in the presence of anharmonic trap potentials. <i>New Journal of Physics</i> , 2011, 13, 073026. | 1.2 | 59 |
| 475 | Realization of Fast Rabi Oscillations in Radio Frequency Magnetic Resonance of Ground Zeeman States of $^{40}\text{Ca}^+$. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 122801. | 0.8 | 1 |
| 476 | Correlations and pair emission in the escape dynamics of ions from one-dimensional traps. <i>New Journal of Physics</i> , 2011, 13, 023006. | 1.2 | 2 |
| 477 | Influence of the vibrational modes in the transmission of electronic states of trapped ions in different coupled cavities. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2011, 44, 115507. | 0.6 | 0 |
| 478 | Equilibration and temperature distribution in a driven ion chain. <i>New Journal of Physics</i> , 2011, 13, 075015. | 1.2 | 26 |
| 479 | Kinetics of a single trapped ion in an ultracold buffer gas. <i>New Journal of Physics</i> , 2011, 13, 053020. | 1.2 | 54 |
| 480 | Rydberg excitation of trapped cold ions: a detailed case study. <i>New Journal of Physics</i> , 2011, 13, 075014. | 1.2 | 37 |
| 481 | Relativistic quantum mechanics with trapped ions. <i>New Journal of Physics</i> , 2011, 13, 095003. | 1.2 | 64 |
| 482 | Non-locality of two ultracold trapped atoms. <i>New Journal of Physics</i> , 2011, 13, 023016. | 1.2 | 7 |
| 483 | The Fermi problem in discrete systems. <i>New Journal of Physics</i> , 2011, 13, 075016. | 1.2 | 8 |
| 484 | Synthetic Gauge Fields for Vibrational Excitations of Trapped Ions. <i>Physical Review Letters</i> , 2011, 107, 150501. | 2.9 | 109 |
| 485 | Rapid and Robust Spin State Amplification. <i>Physical Review Letters</i> , 2011, 106, 167204. | 2.9 | 8 |
| 486 | Detecting ground-state qubit self-excitations in circuit QED: A slow quantum anti-Zeno effect. <i>Physical Review B</i> , 2011, 84, . | 1.1 | 6 |
| 487 | Ultrahigh-resolution spectroscopy with atomic or molecular dark resonances: Exact steady-state line shapes and asymptotic profiles in the adiabatic pulsed regime. <i>Physical Review A</i> , 2011, 84, . | 1.0 | 35 |
| 488 | Nonlocality of Foldy-Wouthuysen and related transformations for the Dirac equation. <i>Physical Review A</i> , 2011, 84, . | 1.0 | 5 |
| 489 | Feasibility of loophole-free nonlocality tests with a single photon. <i>Physical Review A</i> , 2011, 84, . | 1.0 | 21 |
| 490 | Propagator for the general time-dependent harmonic oscillator with application to an ion trap. <i>Physical Review A</i> , 2011, 84, . | 1.0 | 21 |
| 491 | Single-photon absorption and dynamic control of the exciton energy in a coupled quantum-dot-cavity system. <i>Physical Review A</i> , 2011, 84, . | 1.0 | 18 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 492 | Laser cooling of a trapped particle with increased Rabi frequencies. Physical Review A, 2011, 84, . | 1.0 | 7 |
| 493 | Scavenging quantum information: Multiple observations of quantum systems. Physical Review A, 2011, 84, . | 1.0 | 11 |
| 494 | Scalable uniform construction of highly conditional quantum gates. Physical Review A, 2011, 84, . | 1.0 | 14 |
| 495 | Comparing, optimizing, and benchmarking quantum-control algorithms in a unifying programming framework. Physical Review A, 2011, 84, . | 1.0 | 180 |
| 496 | Nonlinear Bose-Einstein-condensate dynamics induced by a harmonic modulation of the $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -wave scattering length. Physical Review A, 2011, 84, . | 1.0 | 56 |
| 497 | Coherently manipulating cold ions in separated traps by their vibrational couplings. Physical Review A, 2011, 83, . | 1.0 | 2 |
| 498 | Optomechanical sideband cooling of a micromechanical oscillator close to the quantum ground state. Physical Review A, 2011, 83, . | 1.0 | 148 |
| 499 | Hopping of an impurity defect in ion crystals in linear traps. Physical Review A, 2011, 83, . | 1.0 | 5 |
| 500 | Ion-assisted ground-state cooling of a trapped polar molecule. Physical Review A, 2011, 83, . | 1.0 | 10 |
| 501 | Adiabatic coherent control in the anharmonic ion trap: Proposal for the vibrational two-qubit system. Physical Review A, 2011, 83, . | 1.0 | 6 |
| 502 | Potential of electric quadrupole transitions in radium isotopes for single-ion optical frequency standards. Physical Review A, 2011, 83, . | 1.0 | 17 |
| 503 | High-efficiency tomographic reconstruction of quantum states by quantum nondemolition measurements. Physical Review A, 2011, 83, . | 1.0 | 6 |
| 504 | Adiabatic coherent control in the anharmonic ion trap: Numerical analysis of vibrational anharmonicities. Physical Review A, 2011, 83, . | 1.0 | 11 |
| 505 | Quantum Simulation of Quantum Field Theories in Trapped Ions. Physical Review Letters, 2011, 107, 260501. | 2.9 | 72 |
| 506 | Frustrated Quantum Spin Models with Cold Coulomb Crystals. Physical Review Letters, 2011, 107, 207209. | 2.9 | 36 |
| 507 | Realization of robust single-qubit operations with purely geometric phase factors. , 2011, , . | | 0 |
| 508 | Ion Crystal Transducer for Strong Coupling between Single Ions and Single Photons. Physical Review Letters, 2011, 107, 030501. | 2.9 | 30 |
| 509 | Microwave Guiding of Electrons on a Chip. Physical Review Letters, 2011, 106, 193001. | 2.9 | 31 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 510 | Lattice-Induced Frequency Shifts in Sr Optical Lattice Clocks at the 10^{17} level. Physical Review Letters, 2011, 106, 210801. | 2.9 | 113 |
| 511 | Trapped ions in optical lattices for probing oscillator chain models. New Journal of Physics, 2011, 13, 075012. | 1.2 | 86 |
| 513 | Probing quantum cores of optical vortices with atoms. Proceedings of SPIE, 2011, , . | 0.8 | 1 |
| 514 | Asymptotic mean excitation numbers due to anti-rotating term (AMENDART) in Markovian circuit QED. Journal of Physics: Conference Series, 2011, 274, 012137. | 0.3 | 4 |
| 515 | Entangling a Series of Trapped Ions by Moving Cavity Bus. Chinese Physics Letters, 2011, 28, 064213. | 1.3 | 0 |
| 516 | Planar microwave structures for electron guiding. New Journal of Physics, 2011, 13, 095012. | 1.2 | 9 |
| 517 | Two-dimensional arrays of radio-frequency ion traps with addressable interactions. New Journal of Physics, 2011, 13, 073043. | 1.2 | 50 |
| 518 | Nonlinear dynamics of two coupled nano-electromechanical resonators. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 215402. | 0.6 | 14 |
| 519 | The trapped-ion qubit tool box. Contemporary Physics, 2011, 52, 531-550. | 0.8 | 33 |
| 520 | Time-dependent density functional theory of open quantum systems in the linear-response regime. Journal of Chemical Physics, 2011, 134, 074116. | 1.2 | 22 |
| 521 | Nonlinear resonances caused by coherent, optical pumping and saturating effects in the presence of three laser fields for the $^{85}\text{Rb-D}_{2}$ line. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 115501. | 0.6 | 13 |
| 522 | Experimental simulation and limitations of quantum walks with trapped ions. New Journal of Physics, 2012, 14, 035012. | 1.2 | 25 |
| 523 | Controlling trapping potentials and stray electric fields in a microfabricated ion trap through design and compensation. New Journal of Physics, 2012, 14, 073012. | 1.2 | 58 |
| 524 | Phonon-induced entanglement dynamics of two donor-based charge quantum bits. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 015503. | 0.6 | 1 |
| 526 | Modes of oscillation in radiofrequency Paul traps. New Journal of Physics, 2012, 14, 093023. | 1.2 | 53 |
| 527 | Quantum simulation of spin models on an arbitrary lattice with trapped ions. New Journal of Physics, 2012, 14, 095024. | 1.2 | 106 |
| 528 | A confined system with Rashba coupling in a constant magnetic field. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 505306. | 0.7 | 0 |
| 529 | Optimal time-resolved photon number distribution reconstruction of a cavity field by maximum likelihood. New Journal of Physics, 2012, 14, 115007. | 1.2 | 11 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 530 | Quantum state preparation and control of single molecular ions. <i>New Journal of Physics</i> , 2012, 14, 023029. | 1.2 | 39 |
| 531 | Quantum magnetism of spin-ladder compounds with trapped-ion crystals. <i>New Journal of Physics</i> , 2012, 14, 093042. | 1.2 | 21 |
| 532 | Construction of time-dependent dynamical invariants: A new approach. <i>Journal of Mathematical Physics</i> , 2012, 53, . | 0.5 | 13 |
| 533 | Combining red and blue-detuned optical potentials to form a Lamb-Dicke trap for a single neutral atom. <i>Optics Express</i> , 2012, 20, 3711. | 1.7 | 18 |
| 534 | An apparatus for immersing trapped ions into an ultracold gas of neutral atoms. <i>Review of Scientific Instruments</i> , 2012, 83, 053108. | 0.6 | 32 |
| 535 | Quantum Simulation of Small-Polaron Formation with Trapped Ions. <i>Physical Review Letters</i> , 2012, 109, 250501. | 2.9 | 41 |
| 536 | Digital Quantum Simulation of the Holstein Model in Trapped Ions. <i>Physical Review Letters</i> , 2012, 109, 200501. | 2.9 | 61 |
| 537 | Micromotion-Induced Limit to Atom-Ion Sympathetic Cooling in Paul Traps. <i>Physical Review Letters</i> , 2012, 109, 253201. | 2.9 | 121 |
| 538 | Interaction Enhanced Imaging of Individual Rydberg Atoms in Dense Gases. <i>Physical Review Letters</i> , 2012, 108, 013002. | 2.9 | 85 |
| 539 | Ultrafast Quantum Gates in Circuit QED. <i>Physical Review Letters</i> , 2012, 108, 120501. | 2.9 | 170 |
| 540 | Controlling Fast Transport of Cold Trapped Ions. <i>Physical Review Letters</i> , 2012, 109, 080501. | 2.9 | 193 |
| 541 | Quantum Simulation of Interacting Fermion Lattice Models in Trapped Ions. <i>Physical Review Letters</i> , 2012, 108, 190502. | 2.9 | 98 |
| 542 | Cooling by heating in the quantum optics domain. <i>Physical Review A</i> , 2012, 86, . | 1.0 | 6 |
| 543 | Dark-state suppression and optimization of laser cooling and fluorescence in a trapped alkaline-earth-metal single ion. <i>Physical Review A</i> , 2012, 86, . | 1.0 | 15 |
| 544 | Robust multipartite quantum correlations without complex encodings. <i>Physical Review A</i> , 2012, 86, . | 1.0 | 17 |
| 545 | Loading of a surface-electrode ion trap from a remote, precooled source. <i>Physical Review A</i> , 2012, 86, . | 1.0 | 34 |
| 546 | Preparation and entanglement purification through two-step measurements. <i>Physical Review A</i> , 2012, 86, . | 1.0 | 4 |
| 547 | Nonequilibrium phonon dynamics in trapped-ion systems. <i>Physical Review A</i> , 2012, 85, . | 1.0 | 6 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 548 | Adiabatic Mach-Zehnder interferometer via an array of trapped ions. <i>Physical Review A</i> , 2012, 85, . | 1.0 | 10 |
| 549 | Reconstructing the quantum state of oscillator networks with a single qubit. <i>Physical Review A</i> , 2012, 85, . | 1.0 | 16 |
| 550 | Sub-millikelvin spatial thermometry of a single Doppler-cooled ion in a Paul trap. <i>Physical Review A</i> , 2012, 85, . | 1.0 | 25 |
| 551 | Simulating accelerated atoms coupled to a quantum field. <i>Physical Review A</i> , 2012, 85, . | 1.0 | 22 |
| 552 | Temperature-independent quantum logic for molecular spectroscopy. <i>Physical Review A</i> , 2012, 85, . | 1.0 | 41 |
| 553 | Detection and decoherence of level-crossing resonances of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:msup} \langle \text{mml:mrow} / \rangle \langle \text{mml:mn} \rangle 8 \langle \text{mml:mn} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:math} \rangle \text{Li} \text{ in Cu. } \langle \text{mml:math} \rangle$ Li in Cu. <i>Physical Review B</i> , 2012, 85, . | 1.1 | 6 |
| 554 | Coherent Frequency Conversion in a Superconducting Artificial Atom with Two Internal Degrees of Freedom. <i>Physical Review Letters</i> , 2012, 108, 107001. | 2.9 | 13 |
| 555 | Cryogenic linear Paul trap for cold highly charged ion experiments. <i>Review of Scientific Instruments</i> , 2012, 83, 083115. | 0.6 | 62 |
| 556 | Energy transport in closed quantum systems. <i>Physical Review E</i> , 2012, 85, 031109. | 0.8 | 7 |
| 557 | A monolithic array of three-dimensional ion traps fabricated with conventional semiconductor technology. <i>Nature Nanotechnology</i> , 2012, 7, 572-576. | 15.6 | 46 |
| 558 | Quantum Gate Implementations in the Separated Ion-Traps by Fast Laser Pulses. <i>Chinese Physics Letters</i> , 2012, 29, 080301. | 1.3 | 4 |
| 559 | High NOON states in trapped ions. <i>Physica Scripta</i> , 2012, T147, 014028. | 1.2 | 3 |
| 560 | Non-locality of energy separating transformations for Dirac electrons in a magnetic field. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2012, 45, 315301. | 0.7 | 1 |
| 561 | The nonrelativistic limit of the Majorana equation and its simulation in trapped ions. <i>Physica Scripta</i> , 2012, T147, 014017. | 1.2 | 7 |
| 562 | Control aspects of quantum computing using pure and mixed states. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2012, 370, 4651-4670. | 1.6 | 15 |
| 563 | Entanglement resonances of driven multi-partite quantum systems. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2012, 45, 154011. | 0.6 | 15 |
| 564 | Cooling a Single Atom in an Optical Tweezer to Its Quantum Ground State. <i>Physical Review X</i> , 2012, 2, . | 2.8 | 198 |
| 565 | Precise Experimental Investigation of Eigenmodes in a Planar Ion Crystal. <i>Physical Review Letters</i> , 2012, 109, 263003. | 2.9 | 49 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 566 | Colloquium: Multiparticle quantum superpositions and the quantum-to-classical transition. <i>Reviews of Modern Physics</i> , 2012, 84, 1765-1789. | 16.4 | 24 |
| 567 | Quantum quenches of ion Coulomb crystals across structural instabilities. <i>Physical Review A</i> , 2012, 86, . | 1.0 | 25 |
| 568 | Operating a ⁸⁷ Sr optical lattice clock with high precision and at high density. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2012, 59, 416-425. | 1.7 | 34 |
| 569 | Quantum tomography in position and momentum space. <i>European Physical Journal D</i> , 2012, 66, 1. | 0.6 | 8 |
| 570 | Surface codes: Towards practical large-scale quantum computation. <i>Physical Review A</i> , 2012, 86, . | 1.0 | 1,607 |
| 571 | Cavity cooling of a trapped atom using electromagnetically induced transparency. <i>New Journal of Physics</i> , 2012, 14, 023002. | 1.2 | 33 |
| 572 | Quantum optomechanics. <i>Physics Today</i> , 2012, 65, 29-35. | 0.3 | 504 |
| 573 | Experimental quantum simulations of many-body physics with trapped ions. <i>Reports on Progress in Physics</i> , 2012, 75, 024401. | 8.1 | 270 |
| 574 | Tunable ion-photon entanglement in an optical cavity. <i>Nature</i> , 2012, 485, 482-485. | 13.7 | 178 |
| 575 | Quantum Zeno dynamics of a field in a cavity. <i>Physical Review A</i> , 2012, 86, . | 1.0 | 78 |
| 576 | <i>Quantum Optics</i> , 2012, , 1305-1333. | | 3 |
| 577 | Translational Effects on Electronic and Nuclear Ring Currents. <i>Journal of Physical Chemistry A</i> , 2012, 116, 11283-11303. | 1.1 | 4 |
| 578 | Space-Time Crystals of Trapped Ions. <i>Physical Review Letters</i> , 2012, 109, 163001. | 2.9 | 137 |
| 579 | Coherent Diabatic Ion Transport and Separation in a Multizone Trap Array. <i>Physical Review Letters</i> , 2012, 109, 080502. | 2.9 | 194 |
| 580 | Zitterbewegung study in Dirac oscillator with laser pulse. <i>European Physical Journal B</i> , 2012, 85, 1. | 0.6 | 17 |
| 581 | The coherent interaction between matter and radiation. <i>European Physical Journal: Special Topics</i> , 2012, 203, 163-183. | 1.2 | 13 |
| 582 | Quantum decoherence under phase damping in non-inertial frames. <i>Journal of Modern Optics</i> , 2012, 59, 21-25. | 0.6 | 14 |
| 583 | Quantum Simulation of the Cooperative Jahn-Teller Transition in 1D Ion Crystals. <i>Physical Review Letters</i> , 2012, 108, 235701. | 2.9 | 31 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 584 | Cosmological inflation and the quantum measurement problem. <i>Physical Review D</i> , 2012, 86, . | 1.6 | 104 |
| 585 | Robust two-dimensional subrecoil Raman cooling by adiabatic transfer in a tripod atomic system. <i>Physical Review A</i> , 2012, 86, . | 1.0 | 0 |
| 586 | Cooling the motion of a trapped atom with a cavity field. <i>Physical Review A</i> , 2012, 86, . | 1.0 | 14 |
| 587 | Quantum Interface between an Electrical Circuit and a Single Atom. <i>Physical Review Letters</i> , 2012, 108, 130504. | 2.9 | 30 |
| 588 | Multipartite entanglement generation assisted by inhomogeneous coupling. <i>Physical Review A</i> , 2012, 85, . | 1.0 | 6 |
| 589 | Single-Ion Heat Engine at Maximum Power. <i>Physical Review Letters</i> , 2012, 109, 203006. | 2.9 | 362 |
| 590 | Coulomb-crystallised molecular ions in traps: methods, applications, prospects. <i>International Reviews in Physical Chemistry</i> , 2012, 31, 175-199. | 0.9 | 102 |
| 591 | Collective strong coupling between ion Coulomb crystals and an optical cavity field: Theory and experiment. <i>Physical Review A</i> , 2012, 85, . | 1.0 | 17 |
| 592 | Interferometric thermometry of a single sub-Doppler-cooled atom. <i>Physical Review A</i> , 2012, 85, . | 1.0 | 21 |
| 593 | Classical and quantum modes of coupled Mathieu equations. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2012, 45, 455305. | 0.7 | 29 |
| 594 | Stability of an aqueous quadrupole micro-trap. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 164208. | 0.7 | 5 |
| 595 | Dynamical Recurrence and the Quantum Control of Coupled Oscillators. <i>Physical Review Letters</i> , 2012, 108, 150501. | 2.9 | 17 |
| 596 | Massless Dirac fermions in an electromagnetic field. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2012, 2012, P01021. | 0.9 | 9 |
| 597 | Exploring Frontiers of the Mind-Brain Relationship. , 2012, , . | | 10 |
| 598 | Subnatural Linewidth Single Photons from a Quantum Dot. <i>Physical Review Letters</i> , 2012, 108, 093602. | 2.9 | 214 |
| 599 | Algebraic treatment of the time-dependent Jaynes-Cummings Hamiltonian including nonlinear terms. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2012, 45, 385303. | 0.7 | 21 |
| 600 | Large two dimensional Coulomb crystals in a radio frequency surface ion trap. <i>Applied Physics Letters</i> , 2012, 100, . | 1.5 | 26 |
| 601 | Entanglement of formation for a family of $(2\tilde{S}-d)$ -dimensional systems. <i>Physical Review A</i> , 2012, 85, . | 1.0 | 17 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 602 | Robust trapped-ion quantum logic gates by continuous dynamical decoupling. <i>Physical Review A</i> , 2012, 85, . | 1.0 | 80 |
| 603 | Fundamental quantum optics experiments conceivable with satellites“reaching relativistic distances and velocities. <i>Classical and Quantum Gravity</i> , 2012, 29, 224011. | 1.5 | 131 |
| 604 | Resonance fluorescence from a single quantum dot. , 0, , 86-102. | | 0 |
| 605 | Ultracold Atoms and Molecules in Optical Lattices. <i>Contemporary Concepts of Condensed Matter Science</i> , 2012, 5, 121-156. | 0.5 | 1 |
| 606 | Multiphoton entanglement and interferometry. <i>Reviews of Modern Physics</i> , 2012, 84, 777-838. | 16.4 | 1,007 |
| 607 | Time-reversal symmetry in optics*. <i>Physica Scripta</i> , 2012, 85, 058101. | 1.2 | 26 |
| 608 | Quantum simulations with trapped ions. <i>Nature Physics</i> , 2012, 8, 277-284. | 6.5 | 1,135 |
| 609 | Short-time quantum detection: Probing quantum fluctuations. <i>Physical Review A</i> , 2012, 85, . | 1.0 | 5 |
| 610 | Entanglement trapping in a nonstationary structured reservoir. <i>Physical Review A</i> , 2012, 86, . | 1.0 | 23 |
| 611 | Quantum decoherence with the Unruh single-particle state having right and left components. <i>Journal of Modern Optics</i> , 2012, 59, 571-578. | 0.6 | 7 |
| 612 | A steady-state superradiant laser with less than one intracavity photon. <i>Nature</i> , 2012, 484, 78-81. | 13.7 | 362 |
| 613 | Micromotion in trapped atom-ion systems. <i>Physical Review A</i> , 2012, 85, . | 1.0 | 29 |
| 614 | Encoding relativistic potential dynamics into free evolution. <i>Physical Review A</i> , 2012, 85, . | 1.0 | 5 |
| 615 | Dark-state laser cooling of a trapped ion using standing waves. <i>Physical Review A</i> , 2012, 85, . | 1.0 | 19 |
| 616 | Master-equation approach to optomechanics with arbitrary dielectrics. <i>Physical Review A</i> , 2012, 86, . | 1.0 | 40 |
| 617 | Full-trapped three-level ion in the $\lambda \ll d$ limit: analyzing and comparing quantum entanglement measures of two qubits. <i>Journal of Russian Laser Research</i> , 2012, 33, 42-51. | 0.3 | 8 |
| 618 | Single atoms in the ring lattice for quantum information processing and quantum simulation. <i>Science Bulletin</i> , 2012, 57, 1931-1945. | 1.7 | 13 |
| 619 | Recent Progress of Single-Ion Optical Frequency Standards. <i>Mapan - Journal of Metrology Society of India</i> , 2012, 27, 3-7. | 1.0 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 620 | Combined ion and atom trap for low-temperature ion-atom physics. Applied Physics B: Lasers and Optics, 2012, 107, 971-981. | 1.1 | 22 |
| 621 | Quantum control of 88Sr^+ in a miniature linear Paul trap. Applied Physics B: Lasers and Optics, 2012, 107, 1167-1174. | 1.1 | 22 |
| 622 | A quantum sensor for high-performance mass spectrometry. Applied Physics B: Lasers and Optics, 2012, 107, 1031-1042. | 1.1 | 24 |
| 623 | Toward an ion-photon quantum interface in an optical cavity. Applied Physics B: Lasers and Optics, 2012, 107, 1145-1157. | 1.1 | 25 |
| 624 | Background-free detection of trapped ions. Applied Physics B: Lasers and Optics, 2012, 107, 1175-1180. | 1.1 | 7 |
| 625 | Interaction of a laser with a qubit in thermal motion and its application to robust and efficient readout. Applied Physics B: Lasers and Optics, 2012, 107, 1159-1165. | 1.1 | 7 |
| 626 | Synthesis of two-species ion chains for a new optical frequency standard with an indium ion. Applied Physics B: Lasers and Optics, 2012, 107, 965-970. | 1.1 | 16 |
| 627 | Ion-laser interactions: The most complete solution. Physics Reports, 2012, 513, 229-261. | 10.3 | 46 |
| 628 | Optimal quantum estimation of the coupling constant of Jaynes-Cummings interaction. European Physical Journal: Special Topics, 2012, 203, 49-60. | 1.2 | 6 |
| 629 | Solvable model of dissipative dynamics in the deep strong coupling regime. European Physical Journal: Special Topics, 2012, 203, 207-216. | 1.2 | 4 |
| 630 | Exact solution of the ion-laser interaction in all regimes. Annalen Der Physik, 2012, 524, 107-111. | 0.9 | 2 |
| 631 | Characterization of an Electron Ionization Source Trap Operating in the Presence of a Magnetic Field Through Computer Simulation. Journal of the American Society for Mass Spectrometry, 2013, 24, 1130-1136. | 1.2 | 2 |
| 632 | Quantification of Mixed-State Entanglement in a Quantum System Interacting with Two Time-Dependent Lasers. Journal of Russian Laser Research, 2013, 34, 192-202. | 0.3 | 7 |
| 633 | Generation of macroscopic quantum superpositions of optomechanical oscillators by dissipation. Physical Review A, 2013, 88, . | 1.0 | 62 |
| 634 | Joint System Quantum Descriptions Arising from Local Quantumness. Communications in Mathematical Physics, 2013, 322, 501-513. | 1.0 | 1 |
| 635 | The most precise atomic mass measurements in Penning traps. International Journal of Mass Spectrometry, 2013, 349-350, 107-122. | 0.7 | 43 |
| 636 | Quantum dynamics of a three-level trapped ion under a time-dependent interaction with laser beams. European Physical Journal D, 2013, 67, 1. | 0.6 | 8 |
| 637 | Gaussian tripartite entanglement out of equilibrium. Physical Review A, 2013, 88, . | 1.0 | 15 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 638 | Optimal Coherent Control to Counteract Dissipation. <i>Physical Review Letters</i> , 2013, 111, 030405. | 2.9 | 34 |
| 639 | Microwave control of atomic motional states in a spin-dependent optical lattice. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2013, 46, 104006. | 0.6 | 44 |
| 640 | Nobel Lecture: Superposition, entanglement, and raising Schrödinger's cat. <i>Reviews of Modern Physics</i> , 2013, 85, 1103-1114. | 16.4 | 382 |
| 641 | Spin coherent states in NMR quadrupolar system: experimental and theoretical applications. <i>European Physical Journal D</i> , 2013, 67, 1. | 0.6 | 11 |
| 642 | Entangled-state engineering of vibrational modes in a multimembrane optomechanical system. <i>Physical Review A</i> , 2013, 88, . | 1.0 | 68 |
| 643 | Äberlagerungen, Verschränkungen und Schrödingers Katze (Nobel-Aufsatz). <i>Angewandte Chemie</i> , 2013, 125, 10367-10378. | 1.6 | 1 |
| 644 | Superposition, Entanglement, and Raising Schrödinger's Cat (Nobel Lecture). <i>Angewandte Chemie - International Edition</i> , 2013, 52, 10179-10189. | 7.2 | 11 |
| 645 | Motional entanglement with trapped ions and a nanomechanical resonator. <i>Physical Review A</i> , 2013, 88, . | 1.0 | 6 |
| 646 | Heralded Entanglement of Two Ions in an Optical Cavity. <i>Physical Review Letters</i> , 2013, 111, 100505. | 2.9 | 64 |
| 647 | Mesoscopic mean-field theory for spin-boson chains in quantum optical systems. <i>European Physical Journal: Special Topics</i> , 2013, 217, 29-41. | 1.2 | 9 |
| 648 | Two-level system with broken inversion symmetry coupled to a quantum harmonic oscillator. <i>Physical Review A</i> , 2013, 88, . | 1.0 | 6 |
| 649 | Optical trapping and manipulation of nanostructures. <i>Nature Nanotechnology</i> , 2013, 8, 807-819. | 15.6 | 829 |
| 650 | Absolute frequency measurement of $^{1}S_{0}$ ($^{1}F_{1}$) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 267 Td (1/2)â€“¹S₀ one-dimensional optical lattice at KRISS. <i>Metrologia</i> , 2013, 50, 119-128. | 0.6 | 69 |
| 651 | Fundamental limit to qubit control with coherent field. <i>Physical Review A</i> , 2013, 87, . | 1.0 | 3 |
| 652 | Centre-of-mass motion-induced decoherence and entanglement generation in a hybrid quantum repeater. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2013, 46, 235501. | 0.6 | 6 |
| 653 | Quantum Synchronization of Quantum van der Pol Oscillators with Trapped Ions. <i>Physical Review Letters</i> , 2013, 111, 234101. | 2.9 | 206 |
| 654 | Diamond NV centers for quantum computing and quantum networks. <i>MRS Bulletin</i> , 2013, 38, 134-138. | 1.7 | 320 |
| 655 | Two-photon spectroscopy of trapped HD ions in the Lamb-Dicke regime. <i>Physical Review A</i> , 2013, 88, . | 1.0 | 28 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 656 | Generation of steady three- and four-dimensional entangled states via quantum-jump-based feedback. Quantum Information Processing, 2013, 12, 3167-3178. | 1.0 | 15 |
| 657 | Protecting superconducting qubits with a universal quantum degeneracy point. Superconductor Science and Technology, 2013, 26, 114002. | 1.8 | 5 |
| 658 | Cold highly charged ions in a cryogenic Paul trap. Hyperfine Interactions, 2013, 214, 189-194. | 0.2 | 9 |
| 659 | Fabrication of a Monolithic Array of Three Dimensional Si-based Ion Traps. Journal of Microelectromechanical Systems, 2013, 22, 1180-1189. | 1.7 | 9 |
| 660 | Engineering of nonclassical motional states in optomechanical systems. Physical Review A, 2013, 88, . | 1.0 | 44 |
| 662 | Science Librarians Analysis of the 2012 Nobel Prize in Physics: Observing the Quantum. Science and Technology Libraries, 2013, 32, 1-12. | 0.8 | 0 |
| 663 | Analytical eigenstates for the quantum Rabi model. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 415302. | 0.7 | 110 |
| 664 | Controllable quantum correlations of two-photon states generated using classically driven three-level atoms. Annals of Physics, 2013, 331, 97-109. | 1.0 | 11 |
| 665 | Atomic clocks for controlling light fields. Physics Today, 2013, 66, 27-32. | 0.3 | 19 |
| 666 | Quantum Interfaces Between Atomic and Solid-State Systems. Annual Review of Condensed Matter Physics, 2013, 4, 83-112. | 5.2 | 17 |
| 667 | Hybrid circuit cavity quantum electrodynamics with a micromechanical resonator. Nature, 2013, 494, 211-215. | 13.7 | 230 |
| 668 | Chaos-driven dynamics in spin-orbit-coupled atomic gases. Physical Review A, 2013, 87, . | 1.0 | 40 |
| 669 | Controllable Optical Phase Shift Over One Radian from a Single Isolated Atom. Physical Review Letters, 2013, 110, 113605. | 2.9 | 13 |
| 670 | Understanding quantum measurement from the solution of dynamical models. Physics Reports, 2013, 525, 1-166. | 10.3 | 160 |
| 671 | Dynamical correlation functions and the quantum Rabi model. Physical Review A, 2013, 87, . | 1.0 | 41 |
| 672 | Self-Organization of Atoms along a Nanophotonic Waveguide. Physical Review Letters, 2013, 110, 113606. | 2.9 | 117 |
| 673 | Quantum-state transfer from an ion to a photon. Nature Photonics, 2013, 7, 219-222. | 15.6 | 82 |
| 674 | Dissipative dynamics of quantum correlations in the strong-coupling regime. Physical Review A, 2013, 87, . | 1.0 | 27 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 675 | Thermodynamic length for far-from-equilibrium quantum systems. <i>Physical Review E</i> , 2013, 87, 022143. | 0.8 | 42 |
| 676 | Scaling the Ion Trap Quantum Processor. <i>Science</i> , 2013, 339, 1164-1169. | 6.0 | 529 |
| 677 | Laser cooling of externally produced Mg ions in a Penning trap for sympathetic cooling of highly charged ions. <i>Physical Review A</i> , 2013, 87, . | 1.0 | 41 |
| 678 | Entanglement sudden birth and sudden death in a system of two distant atoms coupled via an optical element. <i>Journal of Modern Optics</i> , 2013, 60, 331-341. | 0.6 | 2 |
| 679 | Models of wave-function collapse, underlying theories, and experimental tests. <i>Reviews of Modern Physics</i> , 2013, 85, 471-527. | 16.4 | 775 |
| 680 | Cavity Optomechanics of Levitated Nanodumbbells: Nonequilibrium Phases and Self-Assembly. <i>Physical Review Letters</i> , 2013, 110, 143604. | 2.9 | 33 |
| 681 | Processing Quantum Information with Relativistic Motion of Atoms. <i>Physical Review Letters</i> , 2013, 110, 160501. | 2.9 | 48 |
| 682 | Magnetization-noise-induced collapse and revival of Rabi oscillations in circuit QED. <i>Physical Review A</i> , 2013, 87, . | 1.0 | 7 |
| 683 | Resonances in dissipative optomechanics with nanoparticles: Sorting, speed rectification, and transverse cooling. <i>Physical Review A</i> , 2013, 87, . | 1.0 | 12 |
| 684 | Ground-State Cooling of a Single Atom at the Center of an Optical Cavity. <i>Physical Review Letters</i> , 2013, 110, 223003. | 2.9 | 80 |
| 685 | Progress and trend of narrow-linewidth lasers. <i>Science China Technological Sciences</i> , 2013, 56, 1589-1596. | 2.0 | 7 |
| 686 | The minimum-uncertainty squeezed states for atoms and photons in a cavity. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2013, 46, 104007. | 0.6 | 18 |
| 687 | Nuclear spins keep coming back. <i>Nature Materials</i> , 2013, 12, 469-471. | 13.3 | 4 |
| 688 | Entanglement-enhanced detection of single-photon scattering events. <i>Nature Photonics</i> , 2013, 7, 630-633. | 15.6 | 63 |
| 689 | Extracting Quantum Work Statistics and Fluctuation Theorems by Single-Qubit Interferometry. <i>Physical Review Letters</i> , 2013, 110, 230601. | 2.9 | 247 |
| 690 | Perspective: The glass transition. <i>Journal of Chemical Physics</i> , 2013, 138, 12A301. | 1.2 | 287 |
| 691 | Creation of arbitrary Dicke and NOON states of trapped-ion qubits by global addressing with composite pulses. <i>New Journal of Physics</i> , 2013, 15, 023039. | 1.2 | 19 |
| 692 | Spiral laser beams in inhomogeneous media. <i>Optics Letters</i> , 2013, 38, 2763. | 1.7 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 693 | Emergence and Frustration of Magnetism with Variable-Range Interactions in a Quantum Simulator. <i>Science</i> , 2013, 340, 583-587. | 6.0 | 366 |
| 694 | Spatially uniform single-qubit gate operations with near-field microwaves and composite pulse compensation. <i>New Journal of Physics</i> , 2013, 15, 083053. | 1.2 | 32 |
| 695 | Quantum Simulation of Noncausal Kinematic Transformations. <i>Physical Review Letters</i> , 2013, 111, 090503. | 2.9 | 16 |
| 696 | Dynamics and decoherence in the central spin model in the low-field limit. <i>Physical Review B</i> , 2013, 88, . | 1.1 | 41 |
| 697 | On the solvability of the quantum Rabi model and its 2-photon and two-mode generalizations. <i>Journal of Mathematical Physics</i> , 2013, 54, . | 0.5 | 47 |
| 698 | Structure, dynamics and bifurcations of discrete solitons in trapped ion crystals. <i>New Journal of Physics</i> , 2013, 15, 093003. | 1.2 | 34 |
| 699 | Topological qubits with Majorana fermions in trapped ions. <i>New Journal of Physics</i> , 2013, 15, 033005. | 1.2 | 10 |
| 700 | Hillâ€™s determinant approach to single-mode spin-boson model. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2013, 46, 435303. | 0.7 | 1 |
| 701 | Parallel execution of quantum gates in a long linear ion chain via Rydberg mode shaping. <i>Physical Review A</i> , 2013, 87, . | 1.0 | 20 |
| 702 | Modular cryostat for ion trapping with surface-electrode ion traps. <i>Review of Scientific Instruments</i> , 2013, 84, 043112. | 0.6 | 16 |
| 703 | Entanglement and analytical continuation: an intimate relation told by the Riemann zeta function. <i>New Journal of Physics</i> , 2013, 15, 063009. | 1.2 | 13 |
| 704 | Coupling of nitrogen vacancy centres in nanodiamonds by means of phonons. <i>New Journal of Physics</i> , 2013, 15, 083014. | 1.2 | 52 |
| 705 | New symmetry in the Rabi model. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2013, 46, 265302. | 0.7 | 9 |
| 706 | Driven geometric phase gates with trapped ions. <i>New Journal of Physics</i> , 2013, 15, 083001. | 1.2 | 25 |
| 707 | Emission spectrum of a harmonically trapped $\hat{\nu}$ -type three-level atom. <i>Chinese Physics B</i> , 2013, 22, 054204. | 0.7 | 3 |
| 708 | Entanglement in dissipative dynamics of identical particles. <i>Europhysics Letters</i> , 2013, 104, 40004. | 0.7 | 22 |
| 709 | Experimental creation and analysis of displaced number states. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2013, 46, 104008. | 0.6 | 20 |
| 710 | Mesoscopic entangled coherent states implemented with a circuit quantum electrodynamics system. <i>Chinese Physics B</i> , 2013, 22, 050308. | 0.7 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 711 | Generation of steady four-atom decoherence-free states via quantum-jump-based feedback. Chinese Physics B, 2013, 22, 100308. | 0.7 | 1 |
| 712 | Quantum State Orthogonalization and a Toolset for Quantum Optomechanical Phonon Control. Physical Review Letters, 2013, 110, 010504. | 2.9 | 67 |
| 713 | Deterministic generation of arbitrary symmetric states and entanglement classes. Physical Review A, 2013, 87, . | 1.0 | 16 |
| 714 | Proposal for trapped-ion emulation of the electric dipole moment of neutral relativistic particles. Physical Review A, 2013, 87, . | 1.0 | 11 |
| 715 | Partial decoherence and thermalization through time-domain ergodicity. Physical Review A, 2013, 87, . | 1.0 | 1 |
| 716 | Suppression of Ion Transport due to Long-Lived Subwavelength Localization by an Optical Lattice. Physical Review Letters, 2013, 111, 163002. | 2.9 | 39 |
| 717 | Aberration-corrected quantum temporal imaging system. Physical Review A, 2013, 87, . | 1.0 | 18 |
| 718 | Quantum collapses and revivals of matter wave in dynamics of symmetry breaking. Physical Review B, 2013, 87, . | 1.1 | 0 |
| 719 | Quantum quenches of ion Coulomb crystals across structural instabilities. II. Thermal effects. Physical Review A, 2013, 87, . | 1.0 | 4 |
| 720 | Heralded generation of a micro-macro entangled state. Physical Review A, 2013, 88, . | 1.0 | 27 |
| 721 | Superposition, entanglement, and raising Schrödinger's cat. Annalen Der Physik, 2013, 525, 739-752. | 0.9 | 11 |
| 722 | Nonadiabatic Effects in Ultracold Molecules via Anomalous Linear and Quadratic Zeeman Shifts. Physical Review Letters, 2013, 111, 243003. | 2.9 | 33 |
| 723 | Mollow triplet for cavity-mediated laser cooling. Physical Review A, 2013, 88, . | 1.0 | 4 |
| 724 | Resonant few-photon excitation of a single-ion oscillator. Physical Review A, 2013, 87, . | 1.0 | 9 |
| 725 | Quantum feedback experiments stabilizing Fock states of light in a cavity. Physical Review A, 2013, 87, . | 1.0 | 24 |
| 726 | Pulsed phonon lasing in trapped ions. Physical Review A, 2013, 87, . | 1.0 | 8 |
| 727 | Demonstrating a Driven Reset Protocol for a Superconducting Qubit. Physical Review Letters, 2013, 110, 120501. | 2.9 | 147 |
| 728 | Minimization of ion micromotion using ultracold atomic probes. Applied Physics Letters, 2013, 102, . | 1.5 | 21 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 729 | Ramp Dynamics of Phonons in an Ion Trap: Entanglement Generation and Cooling. <i>Physical Review Letters</i> , 2013, 111, 170406. | 2.9 | 7 |
| 730 | Emulating quantum cubic nonlinearity. <i>Physical Review A</i> , 2013, 88, . | 1.0 | 63 |
| 731 | Parity breaking and scaling behavior in light-matter interaction. <i>Physical Review A</i> , 2013, 88, . | 1.0 | 13 |
| 732 | Background-Free Doppler Cooling of Trapped Ions Using Quadrupole Transition. <i>Chinese Physics Letters</i> , 2013, 30, 033701. | 1.3 | 2 |
| 733 | Unitary decoupling treatment of a quadratic bimodal cavity quantum electrodynamics model. <i>Physica Scripta</i> , 2013, T153, 014032. | 1.2 | 0 |
| 734 | A high-rate source for single photons in a pure quantum state. <i>New Journal of Physics</i> , 2013, 15, 055005. | 1.2 | 20 |
| 735 | Dissipative ground-state preparation of a spin chain by a structured environment. <i>New Journal of Physics</i> , 2013, 15, 073027. | 1.2 | 34 |
| 736 | Unitary Representations of Quantum Superpositions of Two Coherent States and Beyond. <i>Open Systems and Information Dynamics</i> , 2013, 20, 1340004. | 0.5 | 2 |
| 737 | On the possibility of a relativistic correction to the E and B fields around a current-carrying wire. <i>Journal of Physics: Conference Series</i> , 2013, 437, 012013. | 0.3 | 3 |
| 738 | Quantum Networks with Atoms and Photons. <i>Journal of Physics: Conference Series</i> , 2013, 467, 012008. | 0.3 | 2 |
| 739 | No-go theorem for ground state cooling given initial system-thermal bath factorization. <i>Scientific Reports</i> , 2013, 3, 1824. | 1.6 | 23 |
| 740 | Quantum Science and Metrology with Mixed-Species Ion Chains. <i>Advances in Atomic, Molecular and Optical Physics</i> , 2013, 62, 231-277. | 2.3 | 32 |
| 742 | Enhancement of electromagnetically induced transparency cooling by an optical cavity. <i>Chinese Physics B</i> , 2014, 23, 113701. | 0.7 | 0 |
| 743 | Nonequilibrium work equalities in isolated quantum systems. <i>Chinese Physics B</i> , 2014, 23, 070512. | 0.7 | 6 |
| 744 | Reflectivity and transmissivity of a cavity coupled to a nanoparticle. <i>International Journal of Quantum Information</i> , 2014, 12, 1450025. | 0.6 | 0 |
| 745 | Quantum Information and Coherence. , 2014, , . | | 4 |
| 746 | Cavity optomechanics. <i>Reviews of Modern Physics</i> , 2014, 86, 1391-1452. | 16.4 | 4,064 |
| 747 | Quantum gates via relativistic remote control. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2014, 739, 74-82. | 1.5 | 6 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 748 | Hybrid Mechanical Systems. , 2014, , 327-351. | | 53 |
| 749 | Cryogenic surface ion trap based on intrinsic silicon. New Journal of Physics, 2014, 16, 113068. | 1.2 | 37 |
| 750 | Controlling several atoms in a cavity. New Journal of Physics, 2014, 16, 065010. | 1.2 | 18 |
| 751 | Zeeman-splitting-assisted quantum-logic spectroscopy of trapped ions. Physical Review A, 2014, 90, . | 1.0 | 2 |
| 752 | Carrier-free Raman manipulation of trapped neutral atoms. New Journal of Physics, 2014, 16, 113042. | 1.2 | 8 |
| 753 | Energy-level structure of ion cloud and crystal in a linear Paul trap. New Journal of Physics, 2014, 16, 083041. | 1.2 | 0 |
| 754 | Multi-frequency lasing of diode laser (795 nm) for pumping Rb frequency standard. , 2014, , . | | 0 |
| 755 | Fundamental phenomena of quantum mechanics explored with neutron interferometers. Progress of Theoretical and Experimental Physics, 2014, 2014, . | 1.8 | 38 |
| 756 | Single-mode optical fiber for high-power, low-loss UV transmission. Optics Express, 2014, 22, 19783. | 1.7 | 52 |
| 757 | Quantum nondemolition measurement of small photon numbers using stored light. Physical Review A, 2014, 90, . | 1.0 | 7 |
| 758 | Two-mode coupling in a single-ion oscillator via parametric resonance. Physical Review A, 2014, 89, . | 1.0 | 11 |
| 759 | Optically Driven Rabi Oscillations and Adiabatic Passage of Single Electron Spins in Diamond. Physical Review Letters, 2014, 112, 116403. | 2.9 | 65 |
| 760 | Adiabatic approximation for three qubits ultrastrongly coupled to a harmonic oscillator. Physical Review A, 2014, 89, . | 1.0 | 3 |
| 761 | Phase Stabilization of a Frequency Comb using Multipulse Quantum Interferometry. Physical Review Letters, 2014, 112, 073603. | 2.9 | 1 |
| 762 | Nonlinear spectroscopy of trapped ions. Physical Review A, 2014, 90, . | 1.0 | 14 |
| 763 | Phase-Resolved Electron Guiding in Optimized Chip-Based Microwave Potentials. Physical Review Applied, 2014, 2, . | 1.5 | 8 |
| 764 | Fast Quantum Gate via Feshbach-Pauli Blocking in a Nanoplasmonic Trap. Physical Review Letters, 2014, 112, 250502. | 2.9 | 2 |
| 765 | Efficient Quantum Algorithm for Computing $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">n \rangle$ -time Correlation Functions. Physical Review Letters, 2014, 113, 020505. | 2.9 | 45 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 766 | Computational studies of multiple-particle nonlinear dynamics in a spatio-temporally periodic potential. Journal of Applied Physics, 2014, 115, 244908. | 1.1 | 2 |
| 767 | Experimental realization of fast ion separation in segmented Paul traps. Physical Review A, 2014, 90, . | 1.0 | 43 |
| 768 | Genuine-multipartite-entanglement trends in gapless-to-gapped transitions of quantum spin systems. Physical Review A, 2014, 90, . | 1.0 | 39 |
| 769 | Decoherence-Assisted Spectroscopy of a Single Mg Ion. Physical Review Letters, 2014, 112, 113003. | 2.9 | 18 |
| 770 | Quantum gates with phase stability over space and time. Physical Review A, 2014, 90, . | 1.0 | 11 |
| 771 | Quantum electrodynamical time-dependent density-functional theory for many-electron systems on a lattice. Physical Review B, 2014, 90, . | 1.1 | 9 |
| 772 | Insensitivity of the rate of ion motional heating to trap-electrode material over a large temperature range. Physical Review A, 2014, 89, . | 1.0 | 54 |
| 773 | Coherence trapping and information backflow in dephasing qubits. Physical Review A, 2014, 89, . | 1.0 | 76 |
| 774 | Ion traps fabricated in a CMOS foundry. Applied Physics Letters, 2014, 105, . | 1.5 | 44 |
| 775 | Lattice mapping for many-body open quantum systems and its application to atoms in photonic crystals. Physical Review A, 2014, 90, . | 1.0 | 7 |
| 776 | Jaynes-Cummings dynamics in mesoscopic ensembles of Rydberg-blockaded atoms. Physical Review A, 2014, 90, . | 1.0 | 10 |
| 777 | Quantum driving and work. Physical Review E, 2014, 89, 052128. | 0.8 | 26 |
| 778 | Experimental realization of a dynamic squeezing gate. Physical Review A, 2014, 90, . | 1.0 | 38 |
| 779 | Candidate for Laser Cooling of a Negative Ion: Observations of Bound-Bound Transitions in La . Physical Review Letters, 2014, 113, 063001. | 2.9 | 50 |
| 780 | Phonon amplification in two coupled cavities containing one mechanical resonator. Physical Review A, 2014, 90, . | 1.0 | 28 |
| 781 | Robustness of composite pulses to time-dependent control noise. Physical Review A, 2014, 90, . | 1.0 | 71 |
| 782 | Cauchy-Schwarz inequality and particle entanglement. Physical Review A, 2014, 90, . | 1.0 | 17 |
| 783 | Quantum state manipulation of single-Cesium-atom qubit in a micro-optical trap. Frontiers of Physics, 2014, 9, 634-639. | 2.4 | 8 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 784 | Anisotropic Rabi model. <i>Physical Review X</i> , 2014, 4, . | 2.8 | 83 |
| 785 | Quantum channels and memory effects. <i>Reviews of Modern Physics</i> , 2014, 86, 1203-1259. | 16.4 | 232 |
| 786 | Measurement of the Kr ^{84}Kr lifetime at low energy in a unitary Penning trap. <i>Physical Review A</i> , 2014, 89, . | 1.0 | 14 |
| 787 | Thermally induced creation of quantum coherence. <i>Physical Review A</i> , 2014, 90, . | 1.0 | 3 |
| 788 | Microwave-Optical Double-Resonance Spectroscopy Experiment of ^{199}Hg Ground State Hyperfine Splitting in a Linear Ion Trap. <i>Chinese Physics Letters</i> , 2014, 31, 063201. | 1.3 | 6 |
| 789 | Zero-dynamics principle for perfect quantum memory in linear networks. <i>New Journal of Physics</i> , 2014, 16, 073032. | 1.2 | 33 |
| 790 | Coupling Distant Spins of Surface-State Electrons by Manipulating Their Collective Vibrations. <i>Communications in Theoretical Physics</i> , 2014, 61, 131-134. | 1.1 | 0 |
| 791 | Nonclassical light in two-photon Jaynes-Cummings model of a three-level atom with different dipole transitions. <i>Indian Journal of Physics</i> , 2014, 88, 25-30. | 0.9 | 4 |
| 792 | A complicated Duffing oscillator in the surface-electrode ion trap. <i>Applied Physics B: Lasers and Optics</i> , 2014, 114, 81-88. | 1.1 | 3 |
| 793 | Addendum to "Quantum theory of the stability region of an ion in a Paul trap". <i>Physical Review A</i> , 2014, 89, . | 1.0 | 3 |
| 794 | Local detection of quantum correlations with a single trapped ion. <i>Nature Physics</i> , 2014, 10, 105-109. | 6.5 | 82 |
| 795 | Status of the project TRAPSENSOR. <i>Hyperfine Interactions</i> , 2014, 227, 223-237. | 0.2 | 6 |
| 796 | Long-term drifts of stray electric fields in a Paul trap. <i>Applied Physics B: Lasers and Optics</i> , 2014, 114, 275-281. | 1.1 | 25 |
| 797 | Entangling quantum gate in trapped ions via Rydberg blockade. <i>Applied Physics B: Lasers and Optics</i> , 2014, 114, 37-44. | 1.1 | 30 |
| 798 | A thin wire ion-atom collisions built within a Fabry-Perot cavity. <i>Applied Physics B: Lasers and Optics</i> , 2014, 114, 267-273. | 1.1 | 18 |
| 799 | Mode shaping in mixed ion crystals of $^{40}\text{Ca}^{2+}$ and $^{40}\text{Ca}^{+}$. <i>Applied Physics B: Lasers and Optics</i> , 2014, 114, 11-16. | 1.1 | 9 |
| 800 | Sub-micron positioning of trapped ions with respect to the absolute center of a standing-wave cavity field. <i>Applied Physics B: Lasers and Optics</i> , 2014, 114, 295-301. | 1.1 | 5 |
| 801 | Perturbative approach to the dynamics of a trapped ion interacting with a light field. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2014, 47, 075501. | 0.6 | 6 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 802 | Relativistic and Non-Relativistic Quantum Brownian Motion in an Anisotropic Dissipative Medium. International Journal of Theoretical Physics, 2014, 53, 2593-2615. | 0.5 | 5 |
| 803 | Quantum information transfer using photons. Nature Photonics, 2014, 8, 356-363. | 15.6 | 322 |
| 804 | Aharonovâ€™s Bohm effect in the tunnelling of a quantum rotor in a linear Paul trap. Nature Communications, 2014, 5, 3868. | 5.8 | 48 |
| 805 | Non-dispersive, accelerated matter-waves. European Physical Journal D, 2014, 68, 1. | 0.6 | 1 |
| 806 | The dynamics of entanglement in two-atom Tavisâ€™s Cummings model with non-degenerate two-photon transitions for four-qubits initial atom-field entangled states. Optics Communications, 2014, 313, 170-174. | 1.0 | 17 |
| 807 | Nanoscale Heat Engine Beyond the Carnot Limit. Physical Review Letters, 2014, 112, 030602. | 2.9 | 481 |
| 808 | Precision spectroscopy by photon-recoil signal amplification. Nature Communications, 2014, 5, 3096. | 5.8 | 47 |
| 809 | Entanglement analysis of a two-atom nonlinear Jaynesâ€™s Cummings model with nondegenerate two-photon transition, Kerr nonlinearity, and two-mode Stark shift. Laser Physics, 2014, 24, 125203. | 0.6 | 39 |
| 810 | Strain Coupling of a Nitrogen-Vacancy Center Spin to a Diamond Mechanical Oscillator. Physical Review Letters, 2014, 113, 020503. | 2.9 | 251 |
| 811 | Nonlinear spectroscopy of controllable many-body quantum systems. New Journal of Physics, 2014, 16, 092001. | 1.2 | 21 |
| 812 | Cold atomâ€™ion experiments in hybrid traps. Contemporary Physics, 2014, 55, 33-45. | 0.8 | 114 |
| 813 | Cavity-assisted cooling of a trapped atom using cavity-induced transparency. Physical Review A, 2014, 89, . | 1.0 | 14 |
| 814 | Excitations of optomechanically driven Boseâ€™s Einstein condensates in a cavity: Photodetection measurements. Chinese Physics B, 2014, 23, 100305. | 0.7 | 0 |
| 815 | Decoherence-Free Linear Quantum Subsystems. IEEE Transactions on Automatic Control, 2014, 59, 1845-1857. | 3.6 | 20 |
| 816 | Quantum dynamics of the driven and dissipative Rabi model. Physical Review A, 2014, 90, . | 1.0 | 37 |
| 817 | Designing frequency-dependent relaxation rates and Lamb shifts for a giant artificial atom. Physical Review A, 2014, 90, . | 1.0 | 127 |
| 818 | Coherently Opening a High-QCavity. Physical Review Letters, 2014, 112, 133605. | 2.9 | 14 |
| 819 | Quantum reservoirs with ion chains. Physical Review A, 2014, 90, . | 1.0 | 12 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 820 | Optical driving of macroscopic mechanical motion by a single two-level system. <i>Physical Review A</i> , 2014, 90, . | 1.0 | 11 |
| 821 | Energy transport in trapped ion chains. <i>New Journal of Physics</i> , 2014, 16, 063062. | 1.2 | 69 |
| 822 | Quantum trajectories and open many-body quantum systems. <i>Advances in Physics</i> , 2014, 63, 77-149. | 35.9 | 477 |
| 823 | Dynamics and quantum entanglement of two-level atoms in de Sitter spacetime. <i>Annals of Physics</i> , 2014, 350, 1-13. | 1.0 | 24 |
| 824 | Microwave Control of Trapped-Ion Motion Assisted by a Running Optical Lattice. <i>Physical Review Letters</i> , 2014, 113, 073002. | 2.9 | 18 |
| 825 | Witnessing entanglement in hybrid systems. <i>Physical Review A</i> , 2014, 90, . | 1.0 | 3 |
| 826 | Entanglement rebirth of multi-trapped ions with trap phonon modes: entanglement sudden death with recovery. <i>Quantum Information Processing</i> , 2014, 13, 1937-1950. | 1.0 | 2 |
| 827 | Efficient quantum simulation of fermionic and bosonic models in trapped ions. <i>EPJ Quantum Technology</i> , 2014, 1, . | 2.9 | 41 |
| 828 | Cavity quantum electrodynamics with rapidly vibrating atom. <i>Laser Physics Letters</i> , 2014, 11, 025204. | 0.6 | 1 |
| 829 | Optically controlled initialization and read-out of an electron spin bound to a fluorine donor in ZnSe. <i>Current Applied Physics</i> , 2014, 14, 1234-1239. | 1.1 | 6 |
| 830 | Quantum simulation of "Zitterbewegung" in a single trapped ion under conditions of parity-keeping and parity-breaking. <i>Science China: Physics, Mechanics and Astronomy</i> , 2014, 57, 1250-1255. | 2.0 | 4 |
| 831 | Demonstration of motion transduction in a single-ion nonlinear mechanical oscillator. <i>Physical Review A</i> , 2014, 89, . | 1.0 | 8 |
| 832 | Superposition, entanglement, and raising Schrödinger's cat. <i>International Journal of Modern Physics A</i> , 2014, 29, 1430027. | 0.5 | 3 |
| 834 | Preparing single ultra-cold antihydrogen atoms for free-fall in GBAR. <i>International Journal of Modern Physics Conference Series</i> , 2014, 30, 1460269. | 0.7 | 13 |
| 835 | Fast expansions and compressions of trapped-ion chains. <i>Physical Review A</i> , 2015, 91, . | 1.0 | 15 |
| 836 | Freezing of quantum correlations under local decoherence. <i>Physical Review A</i> , 2015, 91, . | 1.0 | 35 |
| 837 | Polarization of electric-field noise near metallic surfaces. <i>Physical Review A</i> , 2015, 92, . | 1.0 | 10 |
| 838 | Rabi lattice models with discrete gauge symmetry: Phase diagram and implementation in trapped-ion quantum simulators. <i>Physical Review A</i> , 2015, 92, . | 1.0 | 6 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 839 | Low-noise optical lattices for ultracold Li . Physical Review A, 2015, 92, . | 1.0 | 23 |
| 840 | Quantum controlled-Zgate for weakly interacting qubits. Physical Review A, 2015, 92, . | 1.0 | 4 |
| 841 | Time and spatial parity operations with trapped ions. Physical Review A, 2015, 92, . | 1.0 | 5 |
| 842 | Tuning energy transport using interacting vibrational modes. Physical Review A, 2015, 92, . | 1.0 | 11 |
| 843 | Quantum metrology with mixed states: When recovering lost information is better than never losing it. Physical Review A, 2015, 92, . | 1.0 | 28 |
| 844 | Spectral collapse via two-phonon interactions in trapped ions. Physical Review A, 2015, 92, . | 1.0 | 92 |
| 845 | Quantum statistics control with a plasmonic nanocavity: Multimode-enhanced interferences. Physical Review A, 2015, 92, . | 1.0 | 11 |
| 846 | Universal control of an oscillator with dispersive coupling to a qubit. Physical Review A, 2015, 92, . | 1.0 | 99 |
| 847 | Fast bias inversion of a double well without residual particle excitation. Physical Review A, 2015, 92, . | 1.0 | 7 |
| 848 | Phonon-to-spin mapping in a system of a trapped ion via optimal control. Physical Review A, 2015, 92, . | 1.0 | 5 |
| 849 | Transfer of non-Gaussian quantum states of mechanical oscillator to light. Physical Review A, 2015, 92, . | 1.0 | 13 |
| 850 | Surface-plasmon-polariton-assisted dissipative backaction cooling and amplification. Physical Review A, 2015, 92, . | 1.0 | 1 |
| 851 | Modulating carrier and sideband coupling strengths in a standing-wave gate beam. Physical Review A, 2015, 92, . | 1.0 | 9 |
| 852 | Reducing computational complexity of quantum correlations. Physical Review A, 2015, 92, . | 1.0 | 11 |
| 853 | V-shaped superconducting artificial atom based on two inductively coupled transmons. Physical Review B, 2015, 92, . | 1.1 | 18 |
| 854 | Frequency Ratio of Hg and Sr . Physical Review Letters, 2015, 115, 095301. | 2.9 | 74 |
| 855 | Diffraction-Unlimited Position Measurement of Ultracold Atoms in an Optical Lattice. Physical Review Letters, 2015, 115, 095301. | 2.9 | 38 |
| 856 | Spectroscopy of Interacting Quasiparticles in Trapped Ions. Physical Review Letters, 2015, 115, 100501. | 2.9 | 60 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 857 | Measurement of Dipole Matrix Elements with a Single Trapped Ion. Physical Review Letters, 2015, 115, 143003. | 2.9 | 35 |
| 858 | Interplay of Electron and Nuclear Spin Noise in n -Type GaAs. Physical Review Letters, 2015, 115, 176601. | 2.9 | 33 |
| 859 | Sensing Atomic Motion from the Zero Point to Room Temperature with Ultrafast Atom Interferometry. Physical Review Letters, 2015, 115, 213001. | 2.9 | 23 |
| 860 | Quantum signatures of chimera states. Physical Review E, 2015, 92, 062924. | 0.8 | 85 |
| 861 | Ion-trap measurements of electric-field noise near surfaces. Reviews of Modern Physics, 2015, 87, 1419-1482. | 16.4 | 265 |
| 862 | Precise determination of micromotion for trapped-ion optical clocks. Journal of Applied Physics, 2015, 118, . | 1.1 | 85 |
| 863 | Quantum Rabi Model with Trapped Ions. Scientific Reports, 2015, 5, 15472. | 1.6 | 124 |
| 864 | Experimental simulation of decoherence in photonics qudits. Scientific Reports, 2015, 5, 16049. | 1.6 | 28 |
| 865 | Cooling of levitated graphene nanoplatelets in high vacuum. Applied Physics Letters, 2015, 106, . | 1.5 | 33 |
| 866 | Analytical Solution for the Anisotropic Rabi Model: Effects of Counter-Rotating Terms. Scientific Reports, 2015, 5, 8756. | 1.6 | 17 |
| 867 | Extending the applicability of an open-ring trap to perform experiments with a single laser-cooled ion. Review of Scientific Instruments, 2015, 86, 103104. | 0.6 | 8 |
| 868 | Biomimetic Cloning of Quantum Observables. Scientific Reports, 2014, 4, 4910. | 1.6 | 22 |
| 869 | Quantum Computation under Micromotion in a Planar Ion Crystal. Scientific Reports, 2015, 5, 8555. | 1.6 | 27 |
| 870 | Two-Ion System in Paul Trap as Element of Quantum Logic. Physics Procedia, 2015, 72, 241-244. | 1.2 | 0 |
| 871 | Rotation of the Orientation of the Wave Function Distribution of a Charged Particle and its Utilization. Journal of Physical Chemistry B, 2015, 119, 11079-11088. | 1.2 | 14 |
| 872 | Controlling instability and phase hops of a kicked two-level ion in Lamb-Dicke regime. European Physical Journal D, 2015, 69, 1. | 0.6 | 4 |
| 873 | A cavity-mediated collective quantum effect in sonoluminescing bubbles. Journal of Physics: Conference Series, 2015, 656, 012177. | 0.3 | 1 |
| 874 | Sympathetic cooling and detection of a hot trapped ion by a cold one. New Journal of Physics, 2015, 17, 103001. | 1.2 | 29 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 875 | Experiments with Highly-ionized Atoms in Unitary Penning Traps. <i>Atoms</i> , 2015, 3, 367-391. | 0.7 | 5 |
| 876 | Quantum teleportation with identical particles. <i>Physical Review A</i> , 2015, 91, . | 1.0 | 37 |
| 877 | Quantum Simulation of Dissipative Processes without Reservoir Engineering. <i>Scientific Reports</i> , 2015, 5, 9981. | 1.6 | 32 |
| 878 | Tuning friction atom-by-atom in an ion-crystal simulator. <i>Science</i> , 2015, 348, 1115-1118. | 6.0 | 101 |
| 879 | An alternative electric-field spectrum for laser-driven atomic systems. <i>European Physical Journal D</i> , 2015, 69, 1. | 0.6 | 1 |
| 880 | Squeezed ions in two places at once. <i>Nature</i> , 2015, 521, 295-296. | 13.7 | 1 |
| 881 | Asymmetric rejuvenation. <i>Nature</i> , 2015, 521, 296-298. | 13.7 | 8 |
| 882 | Spin-motion entanglement and state diagnosis with squeezed oscillator wavepackets. <i>Nature</i> , 2015, 521, 336-339. | 13.7 | 61 |
| 883 | Cavity-based quantum networks with single atoms and optical photons. <i>Reviews of Modern Physics</i> , 2015, 87, 1379-1418. | 16.4 | 632 |
| 884 | Surface traps for freely rotating ion ring crystals. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2015, 48, 205002. | 0.6 | 9 |
| 885 | Ion Coulomb crystals. <i>Physica B: Condensed Matter</i> , 2015, 460, 105-113. | 1.3 | 39 |
| 886 | On-Demand Electrostatic Coupling of Individual Precharacterized Nano- and Microparticles in a Segmented Paul Trap. <i>Nano Letters</i> , 2015, 15, 1993-2000. | 4.5 | 12 |
| 887 | Transition of entanglement dynamics in an oscillator system with weak time-dependent coupling. <i>Physical Review A</i> , 2015, 91, . | 1.0 | 6 |
| 888 | Coupled-qubit Tavis-Cummings scheme for prolonging quantum coherence. <i>Physical Review A</i> , 2015, 91, . | 1.0 | 1 |
| 889 | Thermometry via Light Shifts in Optical Lattices. <i>Physical Review Letters</i> , 2015, 114, 023001. | 2.9 | 33 |
| 890 | Physical characterization of quantum devices from nonlocal correlations. <i>Physical Review A</i> , 2015, 91, . | 1.0 | 62 |
| 891 | Towards optomechanical quantum state reconstruction of mechanical motion. <i>Annalen Der Physik</i> , 2015, 527, 15-26. | 0.9 | 46 |
| 892 | Spectra of $4^2S_{1/2} \rightarrow 3^2D_{5/2}$ Transitions of a Single Trapped $^{40}\text{Ca}^+$ Ion. <i>Chinese Physics Letters</i> , 2015, 32, 013201. | 1.3 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 893 | Mixed Rabi Jaynesâ€“Cummings model of a three-level atom interacting with two quantized fields. Optics Communications, 2015, 346, 110-114. | 1.0 | 8 |
| 894 | Conditional Ramsey Spectroscopy with Synchronized Atoms. Physical Review Letters, 2015, 114, 103601. | 2.9 | 35 |
| 895 | Charge-exchange collisions between ultracold fermionic lithium atoms and calcium ions. Physical Review A, 2015, 91, . | 1.0 | 39 |
| 896 | Relativistic Quantum Metrology in Open System Dynamics. Scientific Reports, 2015, 5, 7946. | 1.6 | 36 |
| 897 | Computational Methods for Chemistry and Physics, and SchrÃ¶dinger in 3+1. Advances in Quantum Chemistry, 2015, , 265-298. | 0.4 | 5 |
| 898 | Generation of motional entangled coherent state in an optomechanical system in the single photon strong coupling regime. Journal of Modern Optics, 2015, 62, 1685-1691. | 0.6 | 2 |
| 899 | Cold interactions between an Yb and a Li atom: Prospects for sympathetic cooling, radiative association, and Feshbach resonances. Physical Review A, 2015, 91, . | 1.0 | 59 |
| 900 | Quantum mechanical uncertainties and exact transition amplitudes for time dependent quadratic Hamiltonian. Physica Scripta, 2015, 90, 074060. | 1.2 | 1 |
| 901 | Optical atomic clocks. Reviews of Modern Physics, 2015, 87, 637-701. | 16.4 | 1,421 |
| 902 | An ion trap built with photonic crystal fibre technology. Review of Scientific Instruments, 2015, 86, 033107. | 0.6 | 7 |
| 903 | Conditional superpositions of Gaussian operations on different modes of light. Physical Review A, 2015, 91, . | 1.0 | 9 |
| 904 | Spin correlations as a probe of quantum synchronization in trapped-ion phonon lasers. Physical Review A, 2015, 91, . | 1.0 | 95 |
| 905 | High-precision spectroscopy of ultracold molecules in an optical lattice. New Journal of Physics, 2015, 17, 055004. | 1.2 | 31 |
| 906 | Quantum limit for driven linear non-Markovian open-quantum-systems. New Journal of Physics, 2015, 17, 033038. | 1.2 | 28 |
| 907 | Integrability versus exact solvability in the quantum Rabi and Dicke models. Physical Review A, 2015, 91, . | 1.0 | 37 |
| 908 | Description of ion motion in a Paul trap immersed in a cold atomic gas. Physical Review A, 2015, 91, . | 1.0 | 37 |
| 909 | Single-step arbitrary control of mechanical quantum states in ultrastrong optomechanics. Physical Review A, 2015, 91, . | 1.0 | 15 |
| 910 | Interaction-free evolution in the presence of time-dependent Hamiltonians. Physical Review A, 2015, 91, . | 1.0 | 10 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 911 | Quantum simulations of a freely rotating ring of ultracold and identical bosonic ions. <i>Physical Review A</i> , 2015, 91, . | 1.0 | 5 |
| 912 | Multi-qubit gate with trapped ions for microwave and laser-based implementation. <i>New Journal of Physics</i> , 2015, 17, 043008. | 1.2 | 21 |
| 913 | Optically pumped semiconductor lasers for atomic and molecular physics. <i>Proceedings of SPIE</i> , 2015, , . | 0.8 | 8 |
| 914 | Particle dynamics in damped nonlinear quadrupole ion traps. <i>American Journal of Physics</i> , 2015, 83, 313-319. | 0.3 | 25 |
| 915 | Parity Symmetry and Parity Breaking in the Quantum Rabi Model with Addition of Ising Interaction. <i>Communications in Theoretical Physics</i> , 2015, 63, 510-514. | 1.1 | 2 |
| 916 | Cavity quantum electrodynamics using a near-resonance two-level system: Emergence of the Glauber state. <i>Applied Physics Letters</i> , 2015, 106, . | 1.5 | 13 |
| 917 | Fundamental laser modes in paraxial optics: from computer algebra and simulations to experimental observation. <i>Applied Physics B: Lasers and Optics</i> , 2015, 121, 315-336. | 1.1 | 18 |
| 918 | Propagators of isochronous an-harmonic oscillators and Mehler formula for the exceptional Hermite polynomials. <i>Annals of Physics</i> , 2015, 363, 122-135. | 1.0 | 2 |
| 919 | Lie algebraic approach to the time-dependent quantum general harmonic oscillator and the bi-dimensional charged particle in time-dependent electromagnetic fields. <i>Annals of Physics</i> , 2015, 362, 83-117. | 1.0 | 18 |
| 920 | Circuit-QED-based scalable architectures for quantum information processing with superconducting qubits. <i>Physical Review B</i> , 2015, 91, . | 1.1 | 87 |
| 921 | Probing polariton dynamics in trapped ions with phase-coherent two-dimensional spectroscopy. <i>Journal of Chemical Physics</i> , 2015, 142, 212439. | 1.2 | 5 |
| 922 | Weak measurements of trajectories in quantum systems: classical, Bohmian and sum over paths. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2015, 48, 305301. | 0.7 | 6 |
| 923 | Robust quantum gates between trapped ions using shaped pulses. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2015, 379, 3045-3049. | 0.9 | 1 |
| 924 | Hexagonal plaquette spin-spin interactions and quantum magnetism in a two-dimensional ion crystal. <i>New Journal of Physics</i> , 2015, 17, 065018. | 1.2 | 32 |
| 925 | Cat-states in the framework of Wigner-Heisenberg algebra. <i>Annals of Physics</i> , 2015, 362, 659-670. | 1.0 | 25 |
| 926 | Trapped ionic simulation of neutrino electromagnetic properties in neutrino oscillation. <i>Nuclear Physics B</i> , 2015, 900, 560-575. | 0.9 | 4 |
| 927 | Strong coupling between surface plasmon polaritons and emitters: a review. <i>Reports on Progress in Physics</i> , 2015, 78, 013901. | 8.1 | 1,109 |
| 928 | From transistor to trapped-ion computers for quantum chemistry. <i>Scientific Reports</i> , 2014, 4, 3589. | 1.6 | 172 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 929 | Precise study of asymptotic physics with subradiant ultracold molecules. <i>Nature Physics</i> , 2015, 11, 32-36. | 6.5 | 89 |
| 930 | Local decoherence-resistant quantum states of large systems. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2015, 379, 261-271. | 0.9 | 2 |
| 931 | Experimental test of the quantum Jarzynski equality with a trapped-ion system. <i>Nature Physics</i> , 2015, 11, 193-199. | 6.5 | 286 |
| 932 | Bright squeezed vacuum: Entanglement of macroscopic light beams. <i>Optics Communications</i> , 2015, 337, 27-43. | 1.0 | 69 |
| 933 | Investigation on the quantum-to-classical transition by optical parametric amplification: Generation and detection of multiphoton quantum superposition. <i>Optics Communications</i> , 2015, 337, 44-52. | 1.0 | 2 |
| 934 | Demystifying the riddle of quantum physics. <i>Contemporary Physics</i> , 2015, 56, 220-224. | 0.8 | 3 |
| 935 | More nonlocality with less entanglement in a tripartite atom-optomechanical system. <i>Annalen Der Physik</i> , 2015, 527, 147-155. | 0.9 | 29 |
| 937 | Arbitrary multi-qubit generation. <i>New Journal of Physics</i> , 2016, 18, 103020. | 1.2 | 5 |
| 938 | Optomechanical Quantum Control of a Nitrogen Vacancy Center in Diamond. , 2016, , . | | 0 |
| 939 | Novel Ion Trap Design for Strong Ion-Cavity Coupling. <i>Atoms</i> , 2016, 4, 15. | 0.7 | 2 |
| 940 | Comparing the Models of Steepest Entropy Ascent Quantum Thermodynamics, Master Equation and the Difference Equation for a Simple Quantum System Interacting with Reservoirs. <i>Entropy</i> , 2016, 18, 176. | 1.1 | 7 |
| 941 | Guidelines for Designing Surface Ion Traps Using the Boundary Element Method. <i>Sensors</i> , 2016, 16, 616. | 2.1 | 14 |
| 942 | VECSEL systems for the generation and manipulation of trapped magnesium ions. <i>Optica</i> , 2016, 3, 1294. | 4.8 | 22 |
| 943 | Analytical simulations of double-well, triple-well and multi-well dynamics via rationally extended Harmonic oscillator. <i>Journal of Physics: Conference Series</i> , 2016, 670, 012042. | 0.3 | 2 |
| 944 | Resolved-sideband Raman cooling of an optical phonon in semiconductor materials. <i>Nature Photonics</i> , 2016, 10, 600-605. | 15.6 | 42 |
| 945 | Quantum simulation of the dynamical Casimir effect with trapped ions. <i>New Journal of Physics</i> , 2016, 18, 043029. | 1.2 | 6 |
| 946 | Time evolution of two-dimensional quadratic Hamiltonians: A Lie algebraic approach. <i>Journal of Mathematical Physics</i> , 2016, 57, 042104. | 0.5 | 8 |
| 947 | Multiple-output microwave single-photon source using superconducting circuits with longitudinal and transverse couplings. <i>Physical Review A</i> , 2016, 94, . | 1.0 | 29 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 948 | $\mathscr{P}\mathscr{T}$ -symmetry breaking in the steady state of microscopic gain-loss systems. <i>New Journal of Physics</i> , 2016, 18, 095003. | 1.2 | 63 |
| 949 | Arrays of individually controlled ions suitable for two-dimensional quantum simulations. <i>Nature Communications</i> , 2016, 7, ncomms11839. | 5.8 | 52 |
| 950 | Multipole electrodynamic ion trap geometries for microparticle confinement under standard ambient temperature and pressure conditions. <i>Journal of Applied Physics</i> , 2016, 119, . | 1.1 | 17 |
| 951 | Exploring structural phase transitions of ion crystals. <i>Scientific Reports</i> , 2016, 6, 21547. | 1.6 | 31 |
| 952 | Artificial Life in Quantum Technologies. <i>Scientific Reports</i> , 2016, 6, 20956. | 1.6 | 22 |
| 953 | Efficient cooling of quantized vibrations using a four-level configuration. <i>Physical Review A</i> , 2016, 94, . | 1.0 | 7 |
| 954 | Constructive interference between disordered couplings enhances multiparty entanglement in quantum Heisenberg spin glass models. <i>New Journal of Physics</i> , 2016, 18, 083044. | 1.2 | 8 |
| 955 | Coupling a Surface Acoustic Wave to an Electron Spin in Diamond via a Dark State. <i>Physical Review X</i> , 2016, 6, . | 2.8 | 88 |
| 956 | Dynamics of a Ground-State Cooled Ion Colliding with Ultracold Atoms. <i>Physical Review Letters</i> , 2016, 117, 243401. | 2.9 | 89 |
| 957 | Trapped-ion Lissajous trajectories by engineering Rashba- and Dresselhaus-type spin-orbit interactions in a Paul trap. <i>Europhysics Letters</i> , 2016, 115, 53001. | 0.7 | 7 |
| 958 | Active stabilization of ion trap radiofrequency potentials. <i>Review of Scientific Instruments</i> , 2016, 87, 053110. | 0.6 | 52 |
| 959 | Experimental system design for the integration of trapped-ion and superconducting qubit systems. <i>Quantum Information Processing</i> , 2016, 15, 5385-5414. | 1.0 | 12 |
| 960 | Complex quantum networks as structured environments: engineering and probing. <i>Scientific Reports</i> , 2016, 6, 26861. | 1.6 | 39 |
| 961 | Spectroscopy of cold rubidium Rydberg atoms for applications in quantum information. <i>Physics-Uspexhi</i> , 2016, 59, 196-208. | 0.8 | 58 |
| 962 | Quantum Optomechanics. <i>Progress in Optics</i> , 2016, 61, 113-236. | 0.4 | 17 |
| 963 | Sympathetic cooling in a large ion crystal. <i>Quantum Information Processing</i> , 2016, 15, 5299-5313. | 1.0 | 13 |
| 964 | Dynamics of entanglement and quantum discord in the Tavis-Cummings model. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 125502. | 0.6 | 7 |
| 965 | Designs for a quantum electron microscope. <i>Ultramicroscopy</i> , 2016, 164, 31-45. | 0.8 | 122 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 966 | A single-atom heat engine. <i>Science</i> , 2016, 352, 325-329. | 6.0 | 533 |
| 967 | Pre-transmetalation intermediates in the Suzuki-Miyaura reaction revealed: The missing link. <i>Science</i> , 2016, 352, 329-332. | 6.0 | 245 |
| 968 | Quantum Acoustics with Surface Acoustic Waves. <i>Quantum Science and Technology</i> , 2016, , 217-244. | 1.5 | 19 |
| 969 | Quantum speedup of uncoupled multiqubit open system via dynamical decoupling pulses. <i>Quantum Information Processing</i> , 2016, 15, 2325-2342. | 1.0 | 13 |
| 970 | Deterministic nonclassicality from thermal states. <i>Optics Express</i> , 2016, 24, 7858. | 1.7 | 5 |
| 971 | Geometry of system-bath coupling and gauge fields in bosonic ladders: Manipulating currents and driving phase transitions. <i>Physical Review A</i> , 2016, 94, . | 1.0 | 18 |
| 972 | Experimental creation of superposition of unknown photonic quantum states. <i>Physical Review A</i> , 2016, 94, . | 1.0 | 13 |
| 973 | Many-body quantum electrodynamics networks: Non-equilibrium condensed matter physics with light. <i>Comptes Rendus Physique</i> , 2016, 17, 808-835. | 0.3 | 82 |
| 974 | High-resolution spectroscopic frequency measurements. , 2016, , 343-432. | | 0 |
| 975 | Confinement-induced resonances in ultracold atom-ion systems. <i>Physical Review A</i> , 2016, 94, . | 1.0 | 21 |
| 976 | Spin-Orbit Interactions and Quantum Spin Dynamics in Cold Ion-Atom Collisions. <i>Physical Review Letters</i> , 2016, 117, 143201. | 2.9 | 17 |
| 977 | Generation of spin-dependent coherent states in a quantum wire. <i>Physical Review B</i> , 2016, 94, . | 1.1 | 8 |
| 978 | Static and dynamical quantum correlations in phases of an alternating-fieldXYmodel. <i>Physical Review A</i> , 2016, 94, . | 1.0 | 16 |
| 979 | Physical design of quantum circuits in ion trap technology â€“ A survey. <i>Microelectronics Journal</i> , 2016, 55, 116-133. | 1.1 | 7 |
| 980 | Keldysh field theory for driven open quantum systems. <i>Reports on Progress in Physics</i> , 2016, 79, 096001. | 8.1 | 354 |
| 981 | Nonlinear Jaynesâ€“Cummings model for two interacting two-level atoms. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 165503. | 0.6 | 11 |
| 982 | Deterministic nonclassicality for quantum-mechanical oscillators in thermal states. <i>Physical Review A</i> , 2016, 94, . | 1.0 | 8 |
| 983 | Generalized geometric measure of entanglement for multiparty mixed states. <i>Physical Review A</i> , 2016, 94, . | 1.0 | 18 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 984 | Motional-mode analysis of trapped ions. <i>Physical Review A</i> , 2016, 94, . | 1.0 | 11 |
| 985 | Addressing single trapped ions for Rydberg quantum logic. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 154004. | 0.6 | 14 |
| 986 | Multiparticle losses in a linear quadrupole Paul trap. <i>Quantum Electronics</i> , 2016, 46, 935-940. | 0.3 | 9 |
| 987 | Hidden $sl(2)$ -algebraic structure in Rabi model and its 2-photon and two-mode generalizations. <i>Annals of Physics</i> , 2016, 375, 460-470. | 1.0 | 9 |
| 988 | Efficient single-photon absorption by a trapped moving atom. <i>Physical Review A</i> , 2016, 94, . | 1.0 | 5 |
| 989 | Noise-Resilient Quantum Computing with a Nitrogen-Vacancy Center and Nuclear Spins. <i>Physical Review Letters</i> , 2016, 117, 130502. | 2.9 | 36 |
| 990 | Trampolines Sense a Disturbance in the Force. <i>Physics Magazine</i> , 2016, 9, . | 0.1 | 2 |
| 991 | Controlled long-range interactions between Rydberg atoms and ions. <i>Physical Review A</i> , 2016, 94, . | 1.0 | 40 |
| 992 | Occurrence of discontinuities in the performance of finite-time quantum Otto cycles. <i>Physical Review E</i> , 2016, 94, 012137. | 0.8 | 32 |
| 993 | Proposal for laser cooling of rare-earth ions. <i>Physical Review A</i> , 2016, 93, . | 1.0 | 10 |
| 994 | Dynamics of an ion coupled to a parametric superconducting circuit. <i>Physical Review A</i> , 2016, 93, . | 1.0 | 2 |
| 995 | Hidden frustrated interactions and quantum annealing in trapped-ion spin-phonon chains. <i>Physical Review A</i> , 2016, 93, . | 1.0 | 24 |
| 996 | Measuring and using non-Markovianity. <i>Physical Review A</i> , 2016, 93, . | 1.0 | 33 |
| 997 | Master equation for collective spontaneous emission with quantized atomic motion. <i>Physical Review A</i> , 2016, 93, . | 1.0 | 16 |
| 998 | Degenerate parametric oscillation in quantum membrane optomechanics. <i>Physical Review A</i> , 2016, 93, . | 1.0 | 21 |
| 999 | Nonlinearity as a resource for nonclassicality in anharmonic systems. <i>Physical Review A</i> , 2016, 93, . | 1.0 | 29 |
| 1000 | Dissipative structures in optomechanical cavities. <i>Physical Review A</i> , 2016, 93, . | 1.0 | 5 |
| 1001 | Control and enhancement of interferometric coupling between two photonic qubits. <i>Physical Review A</i> , 2016, 93, . | 1.0 | 4 |

| # | ARTICLE | IF | CITATIONS |
|------|---|-----|-----------|
| 1002 | Survival of time-evolved quantum correlations depending on whether quenching is across a critical point in an XY spin chain. Physical Review A, 2016, 93, . | 1.0 | 7 |
| 1003 | Controlling spin-dependent localization and directed transport in a bipartite lattice. Physical Review A, 2016, 93, . | 1.0 | 11 |
| 1004 | Quantum state engineering in hybrid open quantum systems. Physical Review A, 2016, 93, . | 1.0 | 18 |
| 1005 | Superiority of photon subtraction to addition for entanglement in a multimode squeezed vacuum. Physical Review A, 2016, 93, . | 1.0 | 13 |
| 1006 | Raman sideband cooling of a Ba^{+} ion using a Zeeman interval. Physical Review A, 2016, 93, . | 1.0 | 8 |
| 1007 | Effective long-distance interaction from short-distance interaction in a periodically driven one-dimensional classical system. Physical Review A, 2016, 93, . | 1.0 | 24 |
| 1008 | Quantum transitions and quantum entanglement from Dirac-like dynamics simulated by trapped ions. Physical Review A, 2016, 93, . | 1.0 | 14 |
| 1009 | Nonequilibrium properties of trapped ions under sudden application of a laser. Physical Review A, 2016, 94, . | 1.0 | 2 |
| 1010 | Attosecond and femtosecond forces exerted on gold nanoparticles induced by swift electrons. Physical Review B, 2016, 93, . | 1.1 | 14 |
| 1011 | Quartz-superconductor quantum electromechanical system. Physical Review B, 2016, 93, . | 1.1 | 9 |
| 1012 | Photon-statistics excitation spectroscopy of a single two-level system. Physical Review B, 2016, 93, . | 1.1 | 7 |
| 1013 | Optomechanical test of the Schrödinger-Newton equation. Physical Review D, 2016, 93, . | 1.6 | 41 |
| 1014 | Quantum correlations in quenched disordered spin models: Enhanced order from disorder by thermal fluctuations. Physical Review E, 2016, 93, 032115. | 0.8 | 7 |
| 1015 | Doppler Cooling Trapped Ions with a UV Frequency Comb. Physical Review Letters, 2016, 116, 043002. | 2.9 | 21 |
| 1016 | Observation of Quantum Interference between Separated Mechanical Oscillator Wave Packets. Physical Review Letters, 2016, 116, 140402. | 2.9 | 67 |
| 1017 | Optomechanical Quantum Control of a Nitrogen-Vacancy Center in Diamond. Physical Review Letters, 2016, 116, 143602. | 2.9 | 199 |
| 1018 | Optimized Multi-Ion Cavity Coupling. Physical Review Letters, 2016, 116, 223001. | 2.9 | 27 |
| 1019 | Conditional nonlinear operations by sequential Jaynes-Cummings interactions. Physical Review A, 2016, 94, . | 1.0 | 3 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1020 | High-resolution adaptive imaging of a single atom. <i>Nature Photonics</i> , 2016, 10, 606-610. | 15.6 | 24 |
| 1021 | Quantum discord length is enhanced while entanglement length is not by introducing disorder in a spin chain. <i>Physical Review E</i> , 2016, 93, 012131. | 0.8 | 21 |
| 1022 | Phase-Stable Free-Space Optical Lattices for Trapped Ions. <i>Physical Review Letters</i> , 2016, 116, 033002. | 2.9 | 20 |
| 1023 | Mechanically Mediated Microwave Frequency Conversion in the Quantum Regime. <i>Physical Review Letters</i> , 2016, 116, 043601. | 2.9 | 76 |
| 1024 | Buffer-Gas Cooling of a Single Ion in a Multipole Radio Frequency Trap Beyond the Critical Mass Ratio. <i>Physical Review Letters</i> , 2016, 116, 233003. | 2.9 | 50 |
| 1025 | Co-designing a scalable quantum computer with trapped atomic ions. <i>Npj Quantum Information</i> , 2016, 2, . | 2.8 | 151 |
| 1026 | Noise-induced transport in the motion of trapped ions. <i>Physical Review A</i> , 2016, 94, . | 1.0 | 7 |
| 1027 | Diverging scaling with converging multisite entanglement in odd and even quantum Heisenberg ladders. <i>New Journal of Physics</i> , 2016, 18, 023025. | 1.2 | 9 |
| 1028 | Arbitrary Dicke-State Control of Symmetric Rydberg Ensembles. <i>Physical Review Letters</i> , 2016, 117, 213601. | 2.9 | 17 |
| 1029 | Verifying Heisenberg's error-disturbance relation using a single trapped ion. <i>Science Advances</i> , 2016, 2, e1600578. | 4.7 | 29 |
| 1030 | An optimized geometry for a micro Penning-trap mass spectrometer based on interconnected ions. <i>International Journal of Mass Spectrometry</i> , 2016, 410, 22-30. | 0.7 | 10 |
| 1031 | Shortcuts to adiabaticity by counterdiabatic driving for trapped-ion displacement in phase space. <i>Nature Communications</i> , 2016, 7, 12999. | 5.8 | 142 |
| 1032 | Time-Resolved Observation of Thermalization in an Isolated Quantum System. <i>Physical Review Letters</i> , 2016, 117, 170401. | 2.9 | 81 |
| 1033 | Heisenberg uncertainty principle and light squeezing in quantum nanoantennas and electric circuits. <i>Journal of Nanophotonics</i> , 2016, 10, 046005. | 0.4 | 7 |
| 1034 | A simple and general strategy for generating frequency-anticorrelated photon pairs. <i>Scientific Reports</i> , 2016, 6, 24509. | 1.6 | 3 |
| 1035 | Average diagonal entropy in nonequilibrium isolated quantum systems. <i>Physical Review E</i> , 2016, 94, 012122. | 0.8 | 7 |
| 1036 | Generation of large coherent states by bang control of a trapped-ion oscillator. <i>Nature Communications</i> , 2016, 7, 11243. | 5.8 | 40 |
| 1037 | A robust scheme for the implementation of the quantum Rabi model in trapped ions. <i>New Journal of Physics</i> , 2016, 18, 113039. | 1.2 | 31 |

| # | ARTICLE | IF | CITATIONS |
|------|---|-----|-----------|
| 1038 | In-vacuum scattered light reduction with black cupric oxide surfaces for sensitive fluorescence detection. <i>Review of Scientific Instruments</i> , 2016, 87, 053119. | 0.6 | 7 |
| 1039 | 0.26-Hz-linewidth ultrastable lasers at 1557nm. <i>Scientific Reports</i> , 2016, 6, 24969. | 1.6 | 30 |
| 1040 | Analysis of frequency noise properties of 729nm extended cavity diode laser with unbalanced Mach-Zehnder interferometer. , 2016, , . | | 0 |
| 1041 | Operator-based derivation of phonon modes and characterization of correlations for trapped ions at zero and finite temperature. <i>Physical Review B</i> , 2016, 94, . | 1.1 | 2 |
| 1042 | Dark-resonance Doppler cooling and high fluorescence in trapped Ca-43 ions at intermediate magnetic field. <i>New Journal of Physics</i> , 2016, 18, 023043. | 1.2 | 7 |
| 1043 | Single-frequency 571nm VECSEL for photo-ionization of magnesium. , 2016, , . | | 1 |
| 1044 | Stability Diagrams for Paul Ion Traps Driven by Two-Frequencies. <i>Journal of Physical Chemistry A</i> , 2016, 120, 4915-4922. | 1.1 | 8 |
| 1045 | Performances and robustness of quantum teleportation with identical particles. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2016, 472, 20150621. | 1.0 | 16 |
| 1046 | Dark Plasmon-Solitons in Plasmonic Photonic Crystal Fiber Induced by Thermo-Modulational Nonlinearity of Metal. <i>Plasmonics</i> , 2016, 11, 895-901. | 1.8 | 1 |
| 1047 | Blackbody-radiation-induced shifts and the broadening of Rydberg states in the ions of group Ila elements. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 035003. | 0.6 | 7 |
| 1048 | Chimera States in Quantum Mechanics. <i>Understanding Complex Systems</i> , 2016, , 315-336. | 0.3 | 3 |
| 1049 | Quantum Simulation with Trapped Ions”Experimental Realization of the Jaynes-Cummings-Hubbard Model”. <i>Lecture Notes in Physics</i> , 2016, , 325-340. | 0.3 | 0 |
| 1050 | Optimization of phonon dynamics protocols in ion traps. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 055502. | 0.6 | 2 |
| 1051 | Optomechanical Entanglement Between an Ion and an Optical Cavity Field. <i>International Journal of Theoretical Physics</i> , 2016, 55, 1944-1952. | 0.5 | 5 |
| 1052 | Dipole-dipole interaction between trapped two-level ions interacting with a quantized field in the Lamb-Dicke regime. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2016, 33, 382. | 0.9 | 6 |
| 1053 | Reply to the comment on “Quantum trajectory tests of radical-pair quantum dynamics in CIDNP measurements of photosynthetic reaction centers” by G. Jeschke. <i>Chemical Physics Letters</i> , 2016, 648, 204-207. | 1.2 | 3 |
| 1054 | Two mode mechanical non-Gaussian squeezed number state in a two-membrane optomechanical system. <i>Optics Communications</i> , 2016, 370, 55-61. | 1.0 | 3 |
| 1055 | Quantum simulations of lattice gauge theories using ultracold atoms in optical lattices. <i>Reports on Progress in Physics</i> , 2016, 79, 014401. | 8.1 | 301 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1056 | Physical properties of a trapped two-level ion decaying by thermal and squeezed vacuum reservoirs. <i>Journal of Modern Optics</i> , 2016, 63, 111-125. | 0.6 | 4 |
| 1057 | Wave packet dynamics of an atomic ion in a Paul trap. <i>International Journal of Modern Physics C</i> , 2016, 27, 1650014. | 0.8 | 5 |
| 1058 | Exploration quantum steering, nonlocality and entanglement of two-qubit X-state in structured reservoirs. <i>Scientific Reports</i> , 2017, 7, 39651. | 1.6 | 49 |
| 1059 | Dicke phase transition and collapse of superradiant phase in optomechanical cavity with arbitrary number of atoms. <i>Annals of Physics</i> , 2017, 378, 448-458. | 1.0 | 5 |
| 1060 | Ultrastrong coupling dynamics with a transmon qubit. <i>New Journal of Physics</i> , 2017, 19, 023022. | 1.2 | 29 |
| 1061 | Entanglement dynamics of two nitrogen vacancy centers coupled by a nanomechanical resonator. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2017, 50, 055007. | 0.6 | 3 |
| 1062 | Schrödinger cat and Werner state disentanglement simulated by trapped ion systems. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2017, 50, 075501. | 0.6 | 5 |
| 1063 | Robust state preparation in quantum simulations of Dirac dynamics. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 23 |
| 1064 | Motion-induced enhancement of Rabi coupling between atomic ensembles in cavity optomechanics. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 10 |
| 1065 | Experimental demonstration of real-time adaptive one-qubit quantum-state tomography. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 6 |
| 1066 | Heisenberg-limited Sagnac interferometer with multiparticle states. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 23 |
| 1067 | Ionic vibration induced transparency and Autler-Townes splitting. <i>Laser Physics Letters</i> , 2017, 14, 045203. | 0.6 | 3 |
| 1068 | The quantum Rabi model: solution and dynamics. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017, 50, 113001. | 0.7 | 110 |
| 1069 | Topical review: spins and mechanics in diamond. <i>Journal of Optics (United Kingdom)</i> , 2017, 19, 033001. | 1.0 | 126 |
| 1070 | Optical holonomic single quantum gates with a geometric spin under a zero field. <i>Nature Photonics</i> , 2017, 11, 309-314. | 15.6 | 117 |
| 1071 | Quantum stability of an ion in a Paul trap revisited. <i>Molecular Physics</i> , 2017, 115, 1927-1933. | 0.8 | 0 |
| 1072 | Continuous variables quantum computation over the vibrational modes of a single trapped ion. <i>Optics Communications</i> , 2017, 397, 166-174. | 1.0 | 18 |
| 1073 | Progress in optical frequency standards: ultracold Thulium, ions, and passive resonators. <i>Journal of Physics: Conference Series</i> , 2017, 793, 012013. | 0.3 | 0 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1074 | Geometrical characterization of reduced density matrices reveals quantum phase transitions in many-body systems. <i>Science China: Physics, Mechanics and Astronomy</i> , 2017, 60, 1. | 2.0 | 1 |
| 1075 | Preparation and coherent manipulation of pure quantum states of a single molecular ion. <i>Nature</i> , 2017, 545, 203-207. | 13.7 | 122 |
| 1076 | Trapping ions and atoms optically. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2017, 50, 102001. | 0.6 | 31 |
| 1077 | Quantum simulation of the Abelian-Higgs lattice gauge theory with ultracold atoms. <i>New Journal of Physics</i> , 2017, 19, 063038. | 1.2 | 53 |
| 1078 | Cold interactions and chemical reactions of linear polyatomic anions with alkali-metal and alkaline-earth-metal atoms. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 16512-16523. | 1.3 | 10 |
| 1079 | A Study on Fast Gates for Large-Scale Quantum Simulation with Trapped Ions. <i>Scientific Reports</i> , 2017, 7, 46197. | 1.6 | 14 |
| 1080 | Local probe of single phonon dynamics in warm ion crystals. <i>Nature Communications</i> , 2017, 8, 15712. | 5.8 | 28 |
| 1081 | A generalization of the quantum Rabi model: exact solution and spectral structure. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017, 50, 294004. | 0.7 | 36 |
| 1082 | Steady-state spin synchronization through the collective motion of trapped ions. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 18 |
| 1083 | Spin readout of trapped electron qubits. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 9 |
| 1084 | Element base of quantum informatics I. Qubits of a quantum computer based on single atoms in optical traps. <i>Russian Microelectronics</i> , 2017, 46, 109-120. | 0.1 | 1 |
| 1085 | Coherent Atom-Phonon Interaction through Mode Field Coupling in Hybrid Optomechanical Systems. <i>Physical Review Letters</i> , 2017, 118, 133603. | 2.9 | 31 |
| 1086 | Hybrid quantum systems with trapped charged particles. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 27 |
| 1087 | Quantum lock-in force sensing using optical clock Doppler velocimetry. <i>Nature Communications</i> , 2017, 8, 14157. | 5.8 | 26 |
| 1088 | Multipartite entanglement accumulation in quantum states: Localizable generalized geometric measure. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 23 |
| 1089 | The reachable set of single-mode quadratic Hamiltonians. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017, 50, 155203. | 0.7 | 7 |
| 1090 | Playing tricks to ions. <i>Applied Physics B: Lasers and Optics</i> , 2017, 123, 1. | 1.1 | 5 |
| 1091 | Dynamical properties of the Rabi model. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017, 50, 074004. | 0.7 | 0 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1092 | Rapid generation of a three-dimensional entangled state for two atoms trapped in a cavity via shortcuts to adiabatic passage. <i>Quantum Information Processing</i> , 2017, 16, 1. | 1.0 | 8 |
| 1093 | Frequency-renormalized multipolaron expansion for the quantum Rabi model. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 24 |
| 1094 | Microwave photonics with superconducting quantum circuits. <i>Physics Reports</i> , 2017, 718-719, 1-102. | 10.3 | 853 |
| 1095 | Introduction and Outline. <i>Springer Theses</i> , 2017, , 1-6. | 0.0 | 0 |
| 1096 | Quantum Rabi model in a superfluid Bose-Einstein condensate. <i>Physical Review A</i> , 2017, 96, . | 1.0 | 8 |
| 1097 | Spectroscopy and Directed Transport of Topological Solitons in Crystals of Trapped Ions. <i>Physical Review Letters</i> , 2017, 119, 153602. | 2.9 | 29 |
| 1098 | Quantum simulation of Abelian lattice gauge theories via state-dependent hopping. <i>Physical Review A</i> , 2017, 96, . | 1.0 | 22 |
| 1099 | High-fidelity spin measurement on the nitrogen-vacancy center. <i>New Journal of Physics</i> , 2017, 19, 103002. | 1.2 | 16 |
| 1100 | Protected ultrastrong coupling regime of the two-photon quantum Rabi model with trapped ions. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 53 |
| 1101 | Quantum sensing close to a dissipative phase transition: Symmetry breaking and criticality as metrological resources. <i>Physical Review A</i> , 2017, 96, . | 1.0 | 42 |
| 1102 | Quantum Sensors for the Generating Functional of Interacting Quantum Field Theories. <i>Physical Review X</i> , 2017, 7, . | 2.8 | 22 |
| 1103 | Acoustic Traps and Lattices for Electrons in Semiconductors. <i>Physical Review X</i> , 2017, 7, . | 2.8 | 21 |
| 1104 | Electron spin resonance from NV centers in diamonds levitating in an ion trap. <i>New Journal of Physics</i> , 2017, 19, 033031. | 1.2 | 52 |
| 1105 | Demonstration of the Jaynes-Cummings ladder with Rydberg-dressed atoms. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 24 |
| 1106 | Single-ion quantum Otto engine with always-on bath interaction. <i>Europhysics Letters</i> , 2017, 118, 60003. | 0.7 | 22 |
| 1107 | Generation of Schrödinger cat type states in a planar semiconductor heterostructure. <i>Physical Review B</i> , 2017, 96, . | 1.1 | 9 |
| 1108 | Switchable particle statistics with an embedding quantum simulator. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 4 |
| 1109 | The (2+1)-dimensional f-deformed Dirac oscillator in the presence of an external field. <i>International Journal of Modern Physics A</i> , 2017, 32, 1750158. | 0.5 | 1 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 1110 | Zeeman-insensitive cooling of a single atom to its two-dimensional motional ground state in tightly focused optical tweezers. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 17 |
| 1111 | Qubit-mediated deterministic nonlinear gates for quantum oscillators. <i>Scientific Reports</i> , 2017, 7, 11536. | 1.6 | 8 |
| 1112 | A Single-Ion Reservoir as a High-Sensitive Sensor of Electric Signals. <i>Scientific Reports</i> , 2017, 7, 8336. | 1.6 | 13 |
| 1113 | Enabling quantum non-Markovian dynamics by injection of classical colored noise. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 23 |
| 1114 | Protecting Quantum State in Time-Dependent Decoherence-Free Subspaces Without the Rotating-Wave Approximation. <i>Annalen Der Physik</i> , 2017, 529, 1700186. | 0.9 | 10 |
| 1115 | Homodyne versus photon-counting quantum trajectories for dissipative Kerr resonators with two-photon driving. <i>European Physical Journal: Special Topics</i> , 2017, 226, 2705-2713. | 1.2 | 28 |
| 1116 | Time-dependent interaction between a two-level atom and a $su(1,1)$ Lie algebra quantum system. <i>International Journal of Modern Physics B</i> , 2017, 31, 1750211. | 1.0 | 3 |
| 1117 | Strong cavity-pseudospin coupling in monolayer transition metal dichalcogenides. <i>Physical Review B</i> , 2017, 96, . | 1.1 | 4 |
| 1118 | 3D Sisyphus Cooling of Trapped Ions. <i>Physical Review Letters</i> , 2017, 119, 043001. | 2.9 | 31 |
| 1119 | A mechanism for electromagnetic trapping of extended objects. <i>Europhysics Letters</i> , 2017, 118, 45002. | 0.7 | 5 |
| 1120 | Microscopic description for the emergence of collective dissipation in extended quantum systems. <i>Scientific Reports</i> , 2017, 7, 42050. | 1.6 | 41 |
| 1121 | Properties of entanglement between the two trapped ions. <i>Indian Journal of Physics</i> , 2017, 91, 1615-1624. | 0.9 | 3 |
| 1122 | Quantum-coherent phase oscillations in synchronization. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 42 |
| 1123 | Parametric Instability Rates in Periodically Driven Band Systems. <i>Physical Review X</i> , 2017, 7, . | 2.8 | 44 |
| 1124 | Demonstration of Two-Atom Entanglement with Ultrafast Optical Pulses. <i>Physical Review Letters</i> , 2017, 119, 230501. | 2.9 | 54 |
| 1125 | Locally optimal symplectic control of multimode Gaussian states. <i>Quantum Science and Technology</i> , 2017, 2, 044014. | 2.6 | 3 |
| 1126 | Topological Edge States in Periodically Driven Trapped-Ion Chains. <i>Physical Review Letters</i> , 2017, 119, 210401. | 2.9 | 24 |
| 1127 | Circuit Cavity QED with Macroscopic Solid-State Spin Ensembles. <i>Springer Theses</i> , 2017, , . | 0.0 | 3 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 1128 | Unified framework to determine Gaussian states in continuous-variable systems. <i>Physical Review A</i> , 2017, 96, . | 1.0 | 5 |
| 1129 | Reconstruction of the Jaynes-Cummings field state of ionic motion in a harmonic trap. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 24 |
| 1130 | Realization of Translational Symmetry in Trapped Cold Ion Rings. <i>Physical Review Letters</i> , 2017, 118, 053001. | 2.9 | 35 |
| 1131 | Fast ion swapping for quantum-information processing. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 40 |
| 1132 | Quantum Synchronization Blockade: Energy Quantization Hinders Synchronization of Identical Oscillators. <i>Physical Review Letters</i> , 2017, 118, 243602. | 2.9 | 69 |
| 1133 | Trapped Ions in Rydberg-Dressed Atomic Gases. <i>Physical Review Letters</i> , 2017, 118, 263201. | 2.9 | 23 |
| 1134 | Multispecies Trapped-Ion Node for Quantum Networking. <i>Physical Review Letters</i> , 2017, 118, 250502. | 2.9 | 66 |
| 1135 | Effects of external fields, dimension and polarization on the resonance fluorescence of quantum dots. <i>Physica B: Condensed Matter</i> , 2017, 506, 23-27. | 1.3 | 2 |
| 1136 | Stable Trapping of Multielectron Helium Bubbles in a Paul Trap. <i>Journal of Low Temperature Physics</i> , 2017, 187, 580-587. | 0.6 | 7 |
| 1139 | Local Detection of Correlations in Composite Quantum Systems. <i>Springer Theses</i> , 2017, , 69-128. | 0.0 | 0 |
| 1140 | Multidimensional Nonlinear Spectroscopy of Controllable Quantum Systems. <i>Springer Theses</i> , 2017, , 201-256. | 0.0 | 0 |
| 1141 | Dynamics and Characterization of Composite Quantum Systems. <i>Springer Theses</i> , 2017, , . | 0.0 | 4 |
| 1142 | Trapped Ion Spectroscopy. <i>Springer Theses</i> , 2017, , 205-232. | 0.0 | 0 |
| 1143 | Quantum-Enhanced Nonlinear Spectroscopy. <i>Springer Theses</i> , 2017, , . | 0.0 | 1 |
| 1144 | MÃlmer-Årensen entangling gate for cavity QED systems. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2017, 50, 195501. | 0.6 | 3 |
| 1146 | Coherent versus measurement-based feedback for controlling a single qubit. <i>Quantum Science and Technology</i> , 2017, 2, 025001. | 2.6 | 9 |
| 1147 | Dirac bi-spinor entanglement under local noise and its simulation by Jaynes-Cummings interactions. <i>Journal of Physics: Conference Series</i> , 2017, 880, 012063. | 0.3 | 1 |
| 1148 | Mapping of the 2 + 1 q-deformed Dirac oscillator onto the q-deformed Jaynes-Cummings model. <i>Europhysics Letters</i> , 2017, 120, 44002. | 0.7 | 6 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1149 | Picturing stimulated Raman adiabatic passage: a STIRAP tutorial. <i>Advances in Optics and Photonics</i> , 2017, 9, 563. | 12.1 | 50 |
| 1150 | High-order corrections on the laser cooling limit in the Lamb-Dicke regime. <i>Optics Express</i> , 2017, 25, 1314. | 1.7 | 3 |
| 1151 | Simple delay-limited sideband locking with heterodyne readout. <i>Optics Express</i> , 2017, 25, 1582. | 1.7 | 12 |
| 1152 | UV-sensitive superconducting nanowire single photon detectors for integration in an ion trap. <i>Optics Express</i> , 2017, 25, 8705. | 1.7 | 40 |
| 1153 | 53-dB phase noise suppression and Hz-range linewidth emission in compact Brillouin/erbium fiber laser. <i>Optics Express</i> , 2017, 25, 19216. | 1.7 | 18 |
| 1154 | High mechanical bandwidth fiber-coupled Fabry-Perot cavity. <i>Optics Express</i> , 2017, 25, 20932. | 1.7 | 19 |
| 1155 | Doppler cooling thermometry of a multilevel ion in the presence of micromotion. <i>Physical Review A</i> , 2017, 96, . | 1.0 | 18 |
| 1156 | Thermodynamics of a qubit undergoing dephasing. <i>Journal of Physics: Conference Series</i> , 2017, 841, 012019. | 0.3 | 2 |
| 1157 | Micromotion-enabled improvement of quantum logic gates with trapped ions. <i>New Journal of Physics</i> , 2017, 19, 113038. | 1.2 | 10 |
| 1158 | General implementation of arbitrary nonlinear quadrature phase gates. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 40 |
| 1159 | Controlling chaotic spin-motion entanglement of ultracold atoms via spin-orbit coupling. <i>Chaos</i> , 2018, 28, 023115. | 1.0 | 11 |
| 1160 | Multiple transparency windows and Fano interferences induced by dipole-dipole couplings. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 8 |
| 1161 | Singularities of Floquet scattering and tunneling. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 2 |
| 1162 | Analog quantum simulation of generalized Dicke models in trapped ions. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 29 |
| 1163 | Single-Atom Heat Machines Enabled by Energy Quantization. <i>Physical Review Letters</i> , 2018, 120, 170601. | 2.9 | 41 |
| 1164 | Orbital State Manipulation of a Diamond Nitrogen-Vacancy Center Using a Mechanical Resonator. <i>Physical Review Letters</i> , 2018, 120, 167401. | 2.9 | 43 |
| 1165 | Two-photon processes based on quantum commutators. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 3 |
| 1166 | Time-dependent nonlinear Jaynes-Cummings dynamics of a trapped ion. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 17 |

| # | ARTICLE | IF | CITATIONS |
|------|---|-----|-----------|
| 1167 | Controlled ultrafast transfer and stability degree of generalized coherent states of a kicked two-level ion. <i>Results in Physics</i> , 2018, 9, 424-431. | 2.0 | 1 |
| 1168 | Optomechanically induced anomalous population inversion in a hybrid system. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2018, 51, 414017. | 0.7 | 3 |
| 1169 | Magnetic field fluctuations analysis for the ion trap implementation of the quantum Rabi model in the deep strong coupling regime. <i>Journal of Modern Optics</i> , 2018, 65, 745-753. | 0.6 | 3 |
| 1170 | Measurement of quantum memory effects and its fundamental limitations. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 28 |
| 1171 | Nonlinear quantum Rabi model in trapped ions. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 39 |
| 1172 | Distance scaling of electric-field noise in a surface-electrode ion trap. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 40 |
| 1173 | Entanglement measures in embedding quantum simulators with nuclear spins. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 11 |
| 1174 | A distinguishable single excited-impurity in a Bose-Einstein condensate. <i>Laser Physics Letters</i> , 2018, 15, 025501. | 0.6 | 5 |
| 1175 | Experimental quantum simulation of fermion-antifermion scattering via boson exchange in a trapped ion. <i>Nature Communications</i> , 2018, 9, 195. | 5.8 | 21 |
| 1176 | Quantum weak and modular values in enlarged Hilbert spaces. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 7 |
| 1177 | Emergence of entanglement with temperature and time in factorization-surface states. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 7 |
| 1178 | Measuring Anomalous Heating in a Planar Ion Trap with Variable Ion-Surface Separation. <i>Physical Review Letters</i> , 2018, 120, 023201. | 2.9 | 44 |
| 1179 | Relaxation to Negative Temperatures in Double Domain Systems. <i>Physical Review Letters</i> , 2018, 120, 060403. | 2.9 | 23 |
| 1180 | The effect of atomic response time in the theory of Doppler cooling of trapped ions. <i>Journal of Modern Optics</i> , 2018, 65, 577-584. | 0.6 | 3 |
| 1181 | Observation of Hopping and Blockade of Bosons in a Trapped Ion Spin Chain. <i>Physical Review Letters</i> , 2018, 120, 073001. | 2.9 | 35 |
| 1182 | Discrete Time-Crystalline Order in Cavity and Circuit QED Systems. <i>Physical Review Letters</i> , 2018, 120, 040404. | 2.9 | 150 |
| 1183 | Squeezed coherent states of motion for ions confined in quadrupole and octupole ion traps. <i>Annals of Physics</i> , 2018, 388, 100-113. | 1.0 | 7 |
| 1184 | Quantum-enhanced sensing from hyperentanglement. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 8 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 1185 | Playing Tricks to Ions. , 2018, , 117-128. | | 0 |
| 1186 | Optical Trapping of Ion Coulomb Crystals. Physical Review X, 2018, 8, . | 2.8 | 31 |
| 1187 | Sustained State-Independent Quantum Contextual Correlations from a Single Ion. Physical Review Letters, 2018, 120, 180401. | 2.9 | 35 |
| 1188 | Quantum Simulation of the Quantum Rabi Model in a Trapped Ion. Physical Review X, 2018, 8, . | 2.8 | 84 |
| 1189 | One-way quantum computing in superconducting circuits. Physical Review A, 2018, 97, . | 1.0 | 15 |
| 1190 | Fast, High-Precision Optical Polarization Synthesizer for Ultracold-Atom Experiments. Physical Review Applied, 2018, 9, . | 1.5 | 17 |
| 1191 | Hybrid setup for stable magnetic fields enabling robust quantum control. Scientific Reports, 2018, 8, 4404. | 1.6 | 5 |
| 1192 | Propagation of arbitrary initial wave packets in a quantum parametric oscillator: Instability zones for higher order moments. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 1202-1206. | 0.9 | 3 |
| 1193 | Frequency stabilization of multiple lasers on a single medium-finesse cavity. Laser Physics Letters, 2018, 15, 045702. | 0.6 | 2 |
| 1194 | Microscopic approach to field dissipation in the Jaynes-Cummings model. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 015301. | 0.7 | 6 |
| 1195 | Quantum discord and its allies: a review of recent progress. Reports on Progress in Physics, 2018, 81, 024001. | 8.1 | 150 |
| 1196 | Dynamical quantum correlations after sudden quenches. Physical Review A, 2018, 98, . | 1.0 | 18 |
| 1197 | EIT Ground State Cooling Scheme of $^{171}\text{Yb}^+$ Based on the $2S_{1/2} \rightarrow 2P_{1/2}$ Cooling Transition. Journal of Russian Laser Research, 2018, 39, 568-574. | 0.3 | 5 |
| 1198 | Transient non-confining potentials for speeding up a single ion heat pump. New Journal of Physics, 2018, 20, 105001. | 1.2 | 4 |
| 1199 | Bloch-like energy oscillations. Physical Review A, 2018, 98, . | 1.0 | 5 |
| 1200 | Scaling Phononic Quantum Networks of Solid-State Spins with Closed Mechanical Subsystems. Physical Review X, 2018, 8, . | 2.8 | 46 |
| 1201 | Method for determination of technical noise contributions to ion motional heating. Journal of Applied Physics, 2018, 124, . | 1.1 | 10 |
| 1202 | Microscopic Control and Detection of Ultracold Strontium in Optical-Tweezer Arrays. Physical Review X, 2018, 8, . | 2.8 | 109 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1203 | Alkaline-Earth Atoms in Optical Tweezers. <i>Physical Review X</i> , 2018, 8, . | 2.8 | 125 |
| 1204 | Photon-recoil spectroscopy: Systematic shifts and nonclassical enhancements. <i>Physical Review A</i> , 2018, 98, . | 1.0 | 2 |
| 1205 | Critical-point behavior of a measurement-based quantum heat engine. <i>Physical Review E</i> , 2018, 98, . | 0.8 | 21 |
| 1206 | A scalable hardware and software control apparatus for experiments with hybrid quantum systems. <i>Review of Scientific Instruments</i> , 2018, 89, 113116. | 0.6 | 15 |
| 1207 | Simulating the performance of a distance-3 surface code in a linear ion trap. <i>New Journal of Physics</i> , 2018, 20, 043038. | 1.2 | 55 |
| 1208 | Negative-temperature-state relaxation and reservoir-assisted quantum entanglement in double-spin-domain systems. <i>Physical Review A</i> , 2018, 98, . | 1.0 | 8 |
| 1209 | Effective metal-insulator nonequilibrium quantum phase transition in the Su-Schrieffer-Heeger model. <i>Physical Review B</i> , 2018, 98, . | 1.1 | 6 |
| 1210 | Connecting nth order generalised quantum Rabi models: Emergence of nonlinear spin-boson coupling via spin rotations. <i>Npj Quantum Information</i> , 2018, 4, . | 2.8 | 36 |
| 1211 | Engineering steady entanglement for trapped ions at finite temperature by dissipation. <i>Physical Review A</i> , 2018, 98, . | 1.0 | 10 |
| 1212 | Quantum Simulation with a Trilinear Hamiltonian. <i>Physical Review Letters</i> , 2018, 121, 130502. | 2.9 | 19 |
| 1214 | Digital quantum simulation of lattice gauge theories in three spatial dimensions. <i>New Journal of Physics</i> , 2018, 20, 093001. | 1.2 | 77 |
| 1215 | A double Paul trap system for the electronic coupling of ions. <i>European Physical Journal: Special Topics</i> , 2018, 227, 445-456. | 1.2 | 3 |
| 1216 | Prospects of reaching the quantum regime in $\text{Li}^{+}\text{Yb}^{+}$ mixtures. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2018, 51, 195001. | 0.6 | 22 |
| 1217 | NOON States of Nine Quantized Vibrations in Two Radial Modes of a Trapped Ion. <i>Physical Review Letters</i> , 2018, 121, 160502. | 2.9 | 56 |
| 1218 | Phonon-Number-Sensitive Electromechanics. <i>Physical Review Letters</i> , 2018, 121, 183601. | 2.9 | 48 |
| 1219 | Quantum metrology with nonclassical states of atomic ensembles. <i>Reviews of Modern Physics</i> , 2018, 90, . | 16.4 | 852 |
| 1220 | Structural Phase Transitions. <i>Springer Theses</i> , 2018, , 25-53. | 0.0 | 0 |
| 1221 | Superradiant QPT with a Single Trapped Ion. <i>Springer Theses</i> , 2018, , 123-147. | 0.0 | 0 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1222 | Concluding Remarks and Outlook. Springer Theses, 2018, , 165-172. | 0.0 | 0 |
| 1223 | Huygensâ€™™ Metadevices for Parametric Waves. Physical Review X, 2018, 8, . | 2.8 | 79 |
| 1224 | Towards quantum entanglement of micromirrors via a two-level atom and radiation pressure. Frontiers of Physics, 2018, 13, 1. | 2.4 | 17 |
| 1225 | Surface trap with dc-tunable ion-electrode distance. Review of Scientific Instruments, 2018, 89, 093102. | 0.6 | 7 |
| 1226 | Rigorous Model of Nonlinear Optomechanical Coupling in Micro- and Nano-Structured Resonant Cavities. , 2018, , . | | 0 |
| 1227 | Floquet scattering theory based on effective Hamiltonians of driven systems. Physical Review B, 2018, 98, . | 1.1 | 13 |
| 1228 | Strongly Correlated Bosons on a Dynamical Lattice. Physical Review Letters, 2018, 121, 090402. | 2.9 | 37 |
| 1229 | Artificial gauge fields and topology with ultracold atoms in optical lattices. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 193001. | 0.6 | 12 |
| 1230 | Stochastic laser cooling enabled by many-body effects. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 135002. | 0.6 | 2 |
| 1231 | General solution to inhomogeneous dephasing and smooth pulse dynamical decoupling. New Journal of Physics, 2018, 20, 033011. | 1.2 | 24 |
| 1232 | Multi-second magnetic coherence in a single domain spinor Boseâ€™Einstein condensate. New Journal of Physics, 2018, 20, 053008. | 1.2 | 15 |
| 1233 | Deterministic nonlinear phase gates induced by a single qubit. New Journal of Physics, 2018, 20, 053022. | 1.2 | 13 |
| 1234 | Macroscopic quantum states: Measures, fragility, and implementations. Reviews of Modern Physics, 2018, 90, . | 16.4 | 110 |
| 1235 | Hybrid entanglement between a trapped ion and a mirror. European Physical Journal Plus, 2018, 133, 1. | 1.2 | 2 |
| 1236 | Phase-space study of surface-electrode Paul traps: Integrable, chaotic, and mixed motions. Physical Review A, 2018, 97, . | 1.0 | 6 |
| 1237 | Increased dimensionality of Raman cooling in a slightly nonorthogonal optical lattice. Physical Review A, 2018, 98, . | 1.0 | 3 |
| 1238 | Solid-state magnetic traps and lattices. Physical Review B, 2018, 97, . | 1.1 | 2 |
| 1239 | Mathematical Modeling of Resonant Processes in Confined Geometry of Atomic and Atom-Ion Traps. EPJ Web of Conferences, 2018, 173, 01008. | 0.1 | 0 |

| # | ARTICLE | IF | CITATIONS |
|------|---|-----|-----------|
| 1240 | Transformation Optics: Large Multiphysics Simulation of Nonlinear Optomechanical Coupling in Microstructured Resonant Cavities. IEEE Microwave Magazine, 2018, 19, 79-84. | 0.7 | 0 |
| 1241 | A novel derivation of quantum propagator useful for time-dependent trapping and control. European Physical Journal Plus, 2018, 133, 1. | 1.2 | 4 |
| 1242 | Phonon Lasing from Optical Frequency Comb Illumination of Trapped Ions. Physical Review Letters, 2018, 121, 043201. | 2.9 | 22 |
| 1243 | Quantum phase gate based on multiphoton process in multimode cavity QED. Quantum Information Processing, 2018, 17, 1. | 1.0 | 8 |
| 1244 | Liouvillian of the Open STIRAP Problem. Entropy, 2018, 20, 20. | 1.1 | 9 |
| 1245 | Trap-induced shape resonances in an ultracold few-body system of an atom and static impurities. Physical Review A, 2018, 98, . | 1.0 | 10 |
| 1246 | Information entropies of multi-qubit Rabi model beyond the rotating wave approximation. Nonlinear Dynamics, 2018, 94, 1689-1701. | 2.7 | 11 |
| 1247 | High-Voltage-Assisted Mechanical Stabilization of Single-Molecule Junctions. Nano Letters, 2018, 18, 4727-4733. | 4.5 | 20 |
| 1248 | Operational effects of the UNOT gate on classical and quantum correlations. Science Bulletin, 2018, 63, 765-770. | 4.3 | 4 |
| 1249 | Periodically driven integrable systems with long-range pair potentials. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 334002. | 0.7 | 25 |
| 1250 | Probing microscopic models for system-bath interactions via parametric driving. Physical Review A, 2018, 98, . | 1.0 | 1 |
| 1251 | Multiqubit and multilevel quantum reinforcement learning with quantum technologies. PLoS ONE, 2018, 13, e0200455. | 1.1 | 25 |
| 1252 | Doppler laser cooling and vibrational spectrum of $^{24}\text{Mg}^+$ ions in a linear Paul trap. Quantum Electronics, 2018, 48, 448-452. | 0.3 | 5 |
| 1253 | Motional studies of one and two laser-cooled trapped ions for electric-field sensing applications. Journal of Modern Optics, 2018, 65, 613-621. | 0.6 | 4 |
| 1254 | Intensity stabilisation of optical pulse sequences for coherent control of laser-driven qubits. Applied Physics B: Lasers and Optics, 2018, 124, 1. | 1.1 | 7 |
| 1255 | Deterministic quantum dense coding networks. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 1709-1715. | 0.9 | 10 |
| 1256 | Sideband cooling of small ion Coulomb crystals in a Penning trap. Journal of Modern Optics, 2018, 65, 549-559. | 0.6 | 16 |
| 1257 | Experimental apparatus for overlapping a ground-state cooled ion with ultracold atoms. Journal of Modern Optics, 2018, 65, 501-519. | 0.6 | 19 |

| # | ARTICLE | IF | CITATIONS |
|------|---|-----|-----------|
| 1258 | Cavity-mediated collective laser-cooling of a non-interacting atomic gas inside an asymmetric trap to very low temperatures. <i>Journal of Modern Optics</i> , 2018, 65, 693-705. | 0.6 | 3 |
| 1259 | Note: Sensitive fluorescence detection through minimizing the scattering light by anti-reflective nanostructured materials. <i>Review of Scientific Instruments</i> , 2018, 89, 046103. | 0.6 | 2 |
| 1260 | Pulsed dynamical decoupling for fast and robust two-qubit gates on trapped ions. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 20 |
| 1261 | Estimating localizable entanglement from witnesses. <i>New Journal of Physics</i> , 2018, 20, 063017. | 1.2 | 11 |
| 1262 | Printed-circuit-board linear Paul trap for manipulating single nano- and microparticles. <i>Review of Scientific Instruments</i> , 2018, 89, 083101. | 0.6 | 3 |
| 1263 | Fundamental Limitations for Measurements in Quantum Many-Body Systems. <i>Physical Review Letters</i> , 2018, 121, 080406. | 2.9 | 5 |
| 1265 | Relativistic motion enhanced quantum estimation of κ -deformation of spacetime. <i>European Physical Journal C</i> , 2018, 78, 1. | 1.4 | 8 |
| 1266 | String order parameters for one-dimensional Floquet symmetry protected topological phases. <i>Physical Review B</i> , 2018, 97, . | 1.1 | 10 |
| 1267 | Energy consumption for ion-transport in a segmented Paul trap. <i>New Journal of Physics</i> , 2018, 20, 065002. | 1.2 | 18 |
| 1268 | Rigorous simulation of nonlinear optomechanical coupling in micro- and nano-structured resonant cavities. <i>International Journal of Optomechatronics</i> , 2018, 12, 11-19. | 3.3 | 3 |
| 1269 | Carrier thermometry of cold ytterbium atoms in an optical lattice clock. <i>Scientific Reports</i> , 2018, 8, 7927. | 1.6 | 5 |
| 1270 | Study of open systems with molecules in isotropic liquids. <i>Modern Physics Letters B</i> , 2018, 32, 1830002. | 1.0 | 3 |
| 1271 | Coupling two spin qubits with a high-impedance resonator. <i>Physical Review B</i> , 2018, 97, . | 1.1 | 33 |
| 1272 | Introduction to topological quantum computation with non-Abelian anyons. <i>Quantum Science and Technology</i> , 2018, 3, 045004. | 2.6 | 48 |
| 1273 | Improved microparticle electrodynamic ion traps for physics teaching. <i>American Journal of Physics</i> , 2018, 86, 539-558. | 0.3 | 8 |
| 1274 | Scale-invariant freezing of entanglement. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 10 |
| 1275 | Noise analysis for high-fidelity quantum entangling gates in an anharmonic linear Paul trap. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 35 |
| 1276 | A flexible positron spectrometer for the undergraduate laboratory. <i>American Journal of Physics</i> , 2018, 86, 549-558. | 0.3 | 1 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1277 | Classical and quantum dynamics of a trapped ion coupled to a charged nanowire. <i>New Journal of Physics</i> , 2019, 21, 013030. | 1.2 | 3 |
| 1278 | Measurement-induced cooling of a qubit in structured environments. <i>Physical Review A</i> , 2019, 100, . | 1.0 | 6 |
| 1279 | Dissipative dynamics in a tunable Rabi dimer with periodic harmonic driving. <i>Journal of Chemical Physics</i> , 2019, 150, 184116. | 1.2 | 11 |
| 1280 | Active energy transport and the role of symmetry breaking in microscopic power grids. <i>Physical Review A</i> , 2019, 100, . | 1.0 | 9 |
| 1281 | Coherently driving a single quantum two-level system with dichromatic laser pulses. <i>Nature Physics</i> , 2019, 15, 941-946. | 6.5 | 58 |
| 1282 | Tuning nonthermal distributions to thermal ones in time-dependent Paul traps. <i>Physical Review A</i> , 2019, 100, . | 1.0 | 4 |
| 1283 | Cold hybrid ion-atom systems. <i>Reviews of Modern Physics</i> , 2019, 91, . | 16.4 | 163 |
| 1284 | Entropy Exchange and Thermodynamic Properties of the Single Ion Cooling Process. <i>Entropy</i> , 2019, 21, 650. | 1.1 | 1 |
| 1285 | Quantum correlations in periodically driven spin chains: Revivals and steady-state properties. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 491, 165546. | 1.0 | 6 |
| 1286 | Quantum thermal absorption machines: refrigerators, engines and clocks. <i>Contemporary Physics</i> , 2019, 60, 164-187. | 0.8 | 89 |
| 1287 | Continuous-monitoring measured signals bounded by past and future conditions in enlarged quantum systems. <i>Quantum Information Processing</i> , 2019, 18, . | 1.0 | 1 |
| 1288 | Oxides: An answer to the qubit problem?. <i>International Journal of Modern Physics B</i> , 2019, 33, 1930003. | 1.0 | 2 |
| 1289 | Quantum-enhanced sensing of a single-ion mechanical oscillator. <i>Nature</i> , 2019, 572, 86-90. | 13.7 | 69 |
| 1290 | Motional states of laser cooled Yb ions in an optimized radiofrequency trap. <i>Laser Physics</i> , 2019, 29, 095201. | 0.6 | 3 |
| 1291 | Observation of Interactions between Trapped Ions and Ultracold Rydberg Atoms. <i>Physical Review Letters</i> , 2019, 122, 253401. | 2.9 | 23 |
| 1292 | Optimization of Raman Cooling of 25Mg^+ Ion to Ground Vibrational State in Linear Paul Trap. <i>Bulletin of the Lebedev Physics Institute</i> , 2019, 46, 138-142. | 0.1 | 0 |
| 1293 | Universal Uhrig Dynamical Decoupling for Bosonic Systems. <i>Physical Review Letters</i> , 2019, 123, 010501. | 2.9 | 5 |
| 1294 | Multiphonon interactions between nitrogen-vacancy centers and nanomechanical resonators. <i>Physical Review A</i> , 2019, 100, . | 1.0 | 16 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1295 | Highly Polarizable Rydberg Ion in a Paul Trap. <i>Physical Review Letters</i> , 2019, 123, 153602. | 2.9 | 8 |
| 1296 | Modular quantum computation in a trapped ion system. <i>Nature Communications</i> , 2019, 10, 4692. | 5.8 | 8 |
| 1297 | Quantum decoherence. <i>Physics Reports</i> , 2019, 831, 1-57. | 10.3 | 178 |
| 1298 | Realization of controllable open system with NMR. <i>New Journal of Physics</i> , 2019, 21, 093008. | 1.2 | 8 |
| 1299 | Simulation of Quantum Universe. <i>Journal of Physics: Conference Series</i> , 2019, 1275, 012057. | 0.3 | 0 |
| 1300 | One-shot conclusive multiport quantum dense coding capacities. <i>Physical Review A</i> , 2019, 100, . | 1.0 | 5 |
| 1301 | Three-Dimensional Paul Trap with High Secular Frequency for Compact Optical Clock. <i>Bulletin of the Lebedev Physics Institute</i> , 2019, 46, 297-300. | 0.1 | 2 |
| 1302 | Phase-controlled and chaos-assisted or -suppressed quantum entanglement for a spin-orbit coupled Bose-Einstein condensate. <i>Chaos</i> , 2019, 29, 103148. | 1.0 | 7 |
| 1303 | Systematic uncertainty due to background-gas collisions in trapped-ion optical clocks. <i>Physical Review A</i> , 2019, 100, . | 1.0 | 13 |
| 1304 | Enhanced Multiqubit Phase Estimation in Noisy Environments by Local Encoding. <i>Physical Review Letters</i> , 2019, 123, 180503. | 2.9 | 10 |
| 1305 | Improved Wavelength Measurement of $2S_{1/2} \rightarrow 2P_{1/2}$ and $2D_{3/2} \rightarrow 3[3/2]_{1/2}$ Transitions in Yb ⁺ . <i>Journal of Russian Laser Research</i> , 2019, 40, 375-381. | 0.3 | 8 |
| 1306 | Coherent coupling between the motional fluctuation of a mirror and a trapped ion inside an optical cavity: Memory, state transfer, and entanglement. <i>Physical Review A</i> , 2019, 100, . | 1.0 | 3 |
| 1307 | Measuring the temperature and heating rate of a single ion by imaging. <i>New Journal of Physics</i> , 2019, 21, 113014. | 1.2 | 8 |
| 1308 | Implementing two-qubit phase gates by exchanging non-Abelian quasiparticles. <i>Quantum Information Processing</i> , 2019, 18, 1. | 1.0 | 3 |
| 1309 | Phonon Pair Creation by Inflating Quantum Fluctuations in an Ion Trap. <i>Physical Review Letters</i> , 2019, 123, 180502. | 2.9 | 36 |
| 1310 | Compound atom-ion Josephson junction: Effects of finite temperature and ion motion. <i>Physical Review A</i> , 2019, 100, . | 1.0 | 6 |
| 1311 | Ultrafast infrared spectroscopy with single molecular ions. <i>New Journal of Physics</i> , 2019, 21, 083025. | 1.2 | 1 |
| 1312 | Intrasystem Entanglement Generator and Unambiguous Bell States Discriminator on Chip. , 2019, , . | | 2 |

| # | ARTICLE | IF | CITATIONS |
|------|---|-----|-----------|
| 1313 | Nonselective Paul ion trap loading with a light-emitting diode. Applied Physics Letters, 2019, 115, . | 1.5 | 3 |
| 1315 | Coherent Control of the Rotational Degree of Freedom of a Two-Ion Coulomb Crystal. Physical Review Letters, 2019, 123, 133202. | 2.9 | 17 |
| 1316 | Analytical investigation of one-dimensional Doppler cooling of trapped ions with $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML">\langle \text{mml:mi mathvariant="normal">\hat{1}\langle \text{mml:mi}>\langle \text{mml:math}> \text{-type configuration. Physical Review A, 2019, 100, .$ | 1.0 | 7 |
| 1317 | State-selective coherent motional excitation as a new approach for the manipulation, spectroscopy and state-to-state chemistry of single molecular ions. Faraday Discussions, 2019, 217, 561-583. | 1.6 | 10 |
| 1318 | Population dynamics in sideband cooling of trapped ions outside the Lamb-Dicke regime. Physical Review A, 2019, 99, . | 1.0 | 8 |
| 1319 | Fast and Scalable Quantum Information Processing with Two \hat{E} lectron Atoms in Optical Tweezer Arrays. Advanced Quantum Technologies, 2019, 2, 1800067. | 1.8 | 18 |
| 1320 | Quantum Rabi Model with Two-Photon Relaxation. Physical Review Letters, 2019, 122, 043601. | 2.9 | 17 |
| 1321 | Observation of superconductivity and surface noise using a single trapped ion as a field probe. Physical Review A, 2019, 99, . | 1.0 | 15 |
| 1322 | Quantum absorption refrigerator with trapped ions. Nature Communications, 2019, 10, 202. | 5.8 | 157 |
| 1323 | Spin-Boson Model as A Simulator of Non-Markovian Multiphoton Jaynes-Cummings Models. Symmetry, 2019, 11, 695. | 1.1 | 10 |
| 1324 | Multi-path interferometry using single photons. Journal of Physics Communications, 2019, 3, 045012. | 0.5 | 1 |
| 1325 | A quantum engineer's guide to superconducting qubits. Applied Physics Reviews, 2019, 6, . | 5.5 | 909 |
| 1326 | Honeycomblike Phononic Networks of Spins with Closed Mechanical Subsystems. Physical Review Applied, 2019, 11, . | 1.5 | 7 |
| 1327 | Spatiotemporal Bloch states of a spin \hat{E} orbit coupled Bose \hat{E} Einstein condensate in an optical lattice*. Chinese Physics B, 2019, 28, 056701. | 0.7 | 6 |
| 1328 | Simulating the Klein tunneling of pseudospin-one Maxwell particles with trapped ions. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 2462-2466. | 0.9 | 1 |
| 1329 | Trapped-ion quantum computing: Progress and challenges. Applied Physics Reviews, 2019, 6, . | 5.5 | 680 |
| 1330 | On the properties of a class of higher-order Mathieu equations originating from a parametric quantum oscillator. Nonlinear Dynamics, 2019, 96, 737-750. | 2.7 | 10 |
| 1331 | Operation of a Microfabricated Planar Ion \hat{E} Trap for Studies of a Yb $\langle \text{sup}>+\langle \text{sup}>\hat{E}$ Rb Hybrid Quantum System. Physica Status Solidi (B): Basic Research, 2019, 256, 1800647. | 0.7 | 5 |

| # | ARTICLE | IF | CITATIONS |
|------|---|-----|-----------|
| 1332 | Electric feedback cooling of single charged nanoparticles in an optical trap. Physical Review A, 2019, 99, . | 1.0 | 18 |
| 1333 | Generalized hydrodynamics, quasiparticle diffusion, and anomalous local relaxation in random integrable spin chains. Physical Review B, 2019, 99, . | 1.1 | 20 |
| 1334 | Far-from-equilibrium noise-heating and laser-cooling dynamics in radio-frequency Paul traps. Physical Review A, 2019, 99, . | 1.0 | 6 |
| 1335 | “Near”-Cat States: Nonclassicality and Generation. Journal of Russian Laser Research, 2019, 40, 121-131. | 0.3 | 8 |
| 1336 | Stabilization of All Bell States in a Lossy Coupled-Cavity Array. Entropy, 2019, 21, 402. | 1.1 | 1 |
| 1337 | Synthetic spin-orbit coupling and topological polaritons in Janey’s-Cummings lattices. Npj Quantum Information, 2019, 5, . | 2.8 | 7 |
| 1338 | 2000-Times Repeated Imaging of Strontium Atoms in Clock-Magic Tweezer Arrays. Physical Review Letters, 2019, 122, 173201. | 2.9 | 76 |
| 1339 | Quantum Computing Circuits and Devices. IEEE Design and Test, 2019, 36, 69-94. | 1.1 | 42 |
| 1340 | Kosterlitz-Thouless scaling at many-body localization phase transitions. Physical Review B, 2019, 99, . | 1.1 | 87 |
| 1341 | On the \hat{p} -deformed Dirac oscillator in $(2 + 1)$ -dimensions. Modern Physics Letters A, 2019, 34, 1950089. | 0.5 | 9 |
| 1342 | Reexamination of Bessel beams: A generalized scheme to derive optical vortices. Physical Review A, 2019, 99, . | 1.0 | 18 |
| 1343 | Simulating Anisotropic quantum Rabi model via frequency modulation. Scientific Reports, 2019, 9, 4569. | 1.6 | 14 |
| 1344 | Metrological Nonlinear Squeezing Parameter. Physical Review Letters, 2019, 122, 090503. | 2.9 | 54 |
| 1345 | Quantum simulation of multiphoton and nonlinear dissipative spin-boson models. Physical Review A, 2019, 99, . | 1.0 | 14 |
| 1346 | Universal quantum computing with thermal state bosonic systems. Physical Review A, 2019, 99, . | 1.0 | 7 |
| 1347 | Emulation of n -photon Jaynes-Cummings and anti-Jaynes-Cummings models via parametric modulation of a cyclic qutrit. Physical Review A, 2019, 99, . | 1.0 | 9 |
| 1348 | Feasible platform to study negative temperatures. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 065501. | 0.6 | 5 |
| 1349 | Coherently displaced oscillator quantum states of a single trapped atom. Quantum Science and Technology, 2019, 4, 024010. | 2.6 | 7 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1350 | Quantum simulation of the Weyl equation with a trapped ion. Quantum Information Processing, 2019, 18, 1. | 1.0 | 3 |
| 1351 | Enhanced Quantum Synchronization via Quantum Machine Learning. Advanced Quantum Technologies, 2019, 2, 1800076. | 1.8 | 10 |
| 1352 | Chip-Integrated Voltage Sources for Control of Trapped Ions. Physical Review Applied, 2019, 11, . | 1.5 | 36 |
| 1353 | Atomic Bell measurement via two-photon interactions. Physical Review A, 2019, 99, . | 1.0 | 19 |
| 1354 | The unit of time: Present and future directions. Comptes Rendus Physique, 2019, 20, 153-168. | 0.3 | 37 |
| 1355 | Phase boundaries in an alternating-field quantum XY model with Dzyaloshinskii-Moriya interaction: Sustainable entanglement in dynamics. Physical Review B, 2019, 99, . | 1.1 | 11 |
| 1356 | Quantum optical microcombs. Nature Photonics, 2019, 13, 170-179. | 15.6 | 295 |
| 1357 | A compact radiofrequency drive based on interdependent resonant circuits for precise control of ion traps. Review of Scientific Instruments, 2019, 90, 023201. | 0.6 | 5 |
| 1358 | Towards generation of millihertz-linewidth laser light with 10^{-18} frequency instability via four-wave mixing. Applied Physics Letters, 2019, 114, 051104. | 1.5 | 4 |
| 1359 | Evolution of entanglement in quantum neural network. IOP Conference Series: Materials Science and Engineering, 2019, 618, 012006. | 0.3 | 1 |
| 1360 | Adaptive Bayesian phase estimation for quantum error correcting codes. New Journal of Physics, 2019, 21, 123027. | 1.2 | 7 |
| 1361 | Distance scaling and polarization of electric-field noise in a surface ion trap. Physical Review A, 2019, 100, . | 1.0 | 12 |
| 1362 | Impact of ion motion on atom-ion confinement-induced resonances in hybrid traps. Physical Review A, 2019, 100, . | 1.0 | 8 |
| 1363 | Boson Sampling with 20 Input Photons and a 60-Mode Interferometer in a \mathbb{C}^{14} -Dimensional Hilbert Space. Physical Review Letters, 2019, 123, 250503. | 2.9 | 313 |
| 1364 | In uence of Stark shift and detuning on atomic entanglement induced by a thermal eld of one-mode cavity. Journal of Physics: Conference Series, 2019, 1368, 022011. | 0.3 | 1 |
| 1365 | The mixed quantum Rabi model. Scientific Reports, 2019, 9, 18353. | 1.6 | 12 |
| 1366 | Intrinsic Relations of Bipartite Quantum Resources in Tripartite Systems. Annalen Der Physik, 2019, 531, 1800358. | 0.9 | 7 |
| 1367 | Ultracold molecules for quantum simulation: rotational coherences in CaF and RbCs. Quantum Science and Technology, 2019, 4, 014010. | 2.6 | 96 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1368 | Atomic swap gate, driven by position fluctuations, in dispersive cavity optomechanics. Journal of Modern Optics, 2019, 66, 438-447. | 0.6 | 3 |
| 1369 | Modular-value-based metrology with spin coherent pointers. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 153-157. | 0.9 | 5 |
| 1370 | Quantum well photoelastic comb for ultra-high frequency cavity optomechanics. Quantum Science and Technology, 2019, 4, 014011. | 2.6 | 7 |
| 1371 | Controlling systematic frequency uncertainties at the 10^{-10} level in linear Coulomb crystals. Physical Review A, 2019, 99, . | 0.8 | 12 |
| 1372 | Optomechanical damping basis. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 08LT02. | 0.7 | 10 |
| 1373 | Superradiant Quantum Materials. Physical Review Letters, 2019, 122, 017401. | 2.9 | 93 |
| 1374 | Introduction to the Dicke Model: From Equilibrium to Nonequilibrium, and <i>Vice Versa</i> . Advanced Quantum Technologies, 2019, 2, 1800043. | 1.8 | 200 |
| 1375 | Quantum autoencoders via quantum adders with genetic algorithms. Quantum Science and Technology, 2019, 4, 014007. | 2.6 | 42 |
| 1376 | Nonclassicality of photon-subtracted squeezing-enhanced coherent state. Physica A: Statistical Mechanics and Its Applications, 2019, 514, 290-297. | 1.2 | 7 |
| 1377 | $Sp(4; \mathbb{R})$ squeezing for Bloch four-hyperboloid via the non-compact Hopf map. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 055303. | 0.7 | 8 |
| 1378 | Versatile surface ion trap with fork junction for effective cooling. Physica Scripta, 2020, 95, 045103. | 1.2 | 3 |
| 1379 | Quantum Computers as Universal Quantum Simulators: State-of-the-Art and Perspectives. Advanced Quantum Technologies, 2020, 3, 1900052. | 1.8 | 80 |
| 1380 | Phase-Preserving Linear Amplifiers Not Simulable by the Parametric Amplifier. Physical Review Letters, 2020, 125, 163603. | 2.9 | 7 |
| 1381 | Integrated multi-wavelength control of an ion qubit. Nature, 2020, 586, 538-542. | 13.7 | 161 |
| 1382 | Integrated optical multi-ion quantum logic. Nature, 2020, 586, 533-537. | 13.7 | 160 |
| 1383 | Coherently Manipulated 2D Ion Crystal in a Monolithic Paul Trap. Advanced Quantum Technologies, 2020, 3, 2000068. | 1.8 | 10 |
| 1384 | 2D Linear Trap Array for Quantum Information Processing. Advanced Quantum Technologies, 2020, 3, 2000031. | 1.8 | 19 |
| 1385 | Distributing entangled state using quantum repeater protocol: Trapped atomic ions in optomechanical cavities. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126728. | 0.9 | 7 |

| # | ARTICLE | IF | CITATIONS |
|------|---|-----|-----------|
| 1386 | The Panopticon device: An integrated Paul-trap hemispherical mirror system for quantum optics. Review of Scientific Instruments, 2020, 91, 113201. | 0.6 | 13 |
| 1387 | Structural phase transition of the ion crystals embedded in an optical lattice. Physical Review A, 2020, 102, . | 1.0 | 7 |
| 1388 | NOON state generation beyond the Lamb-Dicke limit in trapped-ion systems. Quantum Information Processing, 2020, 19, 1. | 1.0 | 0 |
| 1389 | Statistical properties of the two-dimensional Dirac oscillator with spin-orbit coupling. Annals of Physics, 2020, 423, 168328. | 1.0 | 4 |
| 1390 | Efficient Ground-State Cooling of Large Trapped-Ion Chains with an Electromagnetically-Induced-Transparency Tripod Scheme. Physical Review Letters, 2020, 125, 053001. | 2.9 | 36 |
| 1391 | Superconducting quantum computing: a review. Science China Information Sciences, 2020, 63, 1. | 2.7 | 152 |
| 1392 | Topological classification of dynamical quantum phase transitions in the xy chain. Scientific Reports, 2020, 10, 12766. | 1.6 | 23 |
| 1393 | Rating the performance of noisy teleportation using fluctuations in fidelity. Physical Review A, 2020, 102, . | 1.0 | 5 |
| 1394 | Generation of Entanglement between Two Two-Level Atoms Coupled to a Microtoroidal Cavity Via Thermal Field. Quantum Reports, 2020, 2, 343-351. | 0.6 | 1 |
| 1395 | Trapped Rydberg ions: A new platform for quantum information processing. Advances in Atomic, Molecular and Optical Physics, 2020, 69, 233-306. | 2.3 | 9 |
| 1396 | Signatures of Associative Memory Behavior in a Multimode Dicke Model. Physical Review Letters, 2020, 125, 070604. | 2.9 | 14 |
| 1397 | Coherent rotations of qubits within a surface ion-trap quantum computer. Physical Review A, 2020, 102, . | 1.0 | 17 |
| 1398 | Mass-selective removal of ions from Paul traps using parametric excitation. Applied Physics B: Lasers and Optics, 2020, 126, 176. | 1.1 | 9 |
| 1399 | Spontaneous transition rates near the focus of a parabolic mirror with identification of the vectorial modes involved. Scientific Reports, 2020, 10, 17383. | 1.6 | 2 |
| 1401 | Trapped-ion toolkit for studies of quantum harmonic oscillators under extreme conditions. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190230. | 1.6 | 4 |
| 1402 | Identification of molecular quantum states using phase-sensitive forces. Nature Communications, 2020, 11, 4470. | 5.8 | 12 |
| 1403 | Experimental setup for studying an ultracold mixture of trapped Yb-Li6. Physical Review A, 2020, 102, . | 1.0 | 6 |
| 1404 | Phase-space elementary information content of confined Dirac spinors. European Physical Journal Plus, 2020, 135, 1. | 1.2 | 5 |

| # | ARTICLE | IF | CITATIONS |
|------|---|-----|-----------|
| 1405 | Weak-to-strong transition of quantum measurement in a trapped-ion system. <i>Nature Physics</i> , 2020, 16, 1206-1210. | 6.5 | 41 |
| 1406 | Direct Detection of Optical Forces of Magnetic Nature in Dielectric Nanoantennas. <i>Nano Letters</i> , 2020, 20, 7627-7634. | 4.5 | 11 |
| 1407 | An easy to construct sub-micron resolution imaging system. <i>Scientific Reports</i> , 2020, 10, 21796. | 1.6 | 1 |
| 1408 | How efficient is transport of quantum cargo through multiple highways?. <i>Annals of Physics</i> , 2020, 422, 168281. | 1.0 | 5 |
| 1409 | Experimental Realization of Nonadiabatic Holonomic Single-Qubit Quantum Gates with Optimal Control in a Trapped Ion. <i>Physical Review Applied</i> , 2020, 14, . | 1.5 | 38 |
| 1410 | Nonlinear parametric oscillator: A tool for probing quantum fluctuations. <i>Physical Review E</i> , 2020, 102, 052204. | 0.8 | 0 |
| 1411 | Superradiant Phase Transition in Electronic Systems and Emergent Topological Phases. <i>Physical Review Letters</i> , 2020, 125, 257604. | 2.9 | 45 |
| 1412 | Quantum coherence and speed limit in the mean-field Dicke model of superradiance. <i>Physical Review A</i> , 2020, 102, . | 1.0 | 16 |
| 1413 | Coupling spins to nanomechanical resonators: Toward quantum spin-mechanics. <i>Applied Physics Letters</i> , 2020, 117, . | 1.5 | 21 |
| 1414 | Heisenberg-Limited Spin Squeezing via Bosonic Parametric Driving. <i>Physical Review Letters</i> , 2020, 125, 203601. | 2.9 | 18 |
| 1415 | Optimal Control of Hydrogen Atom-Like Systems as Thermodynamic Engines in Finite Time. <i>Entropy</i> , 2020, 22, 1066. | 1.1 | 10 |
| 1416 | First-order and continuous quantum phase transitions in the anisotropic quantum Rabi-Stark model. <i>Physical Review A</i> , 2020, 101, . | 1.0 | 13 |
| 1417 | Quantum simulation of electron Coulomb interactions. <i>Europhysics Letters</i> , 2020, 130, 10001. | 0.7 | 0 |
| 1418 | Single-atom energy-conversion device with a quantum load. <i>Npj Quantum Information</i> , 2020, 6, . | 2.8 | 47 |
| 1419 | Dimensionality-enhanced quantum state transfer in long-range-interacting spin systems. <i>Physical Review A</i> , 2020, 101, . | 1.0 | 11 |
| 1420 | Dynamics of Quantum Correlations in a Qubit-Oscillator System Interacting via a Dissipative Bath. <i>Open Systems and Information Dynamics</i> , 2020, 27, 2050004. | 0.5 | 5 |
| 1421 | Quantum State Engineering by Shortcuts to Adiabaticity in Interacting Spin-Boson Systems. <i>Physical Review Letters</i> , 2020, 124, 180401. | 2.9 | 14 |
| 1422 | Long-Lived Interacting Phases of Matter Protected by Multiple Time-Translation Symmetries in Quasiperiodically Driven Systems. <i>Physical Review X</i> , 2020, 10, . | 2.8 | 56 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1423 | Time-dependent interaction between a two-level atom and bimodal electromagnetic field. <i>Optical and Quantum Electronics</i> , 2020, 52, 1. | 1.5 | 2 |
| 1424 | Engineering of microfabricated ion traps and integration of advanced on-chip features. <i>Nature Reviews Physics</i> , 2020, 2, 285-299. | 11.9 | 43 |
| 1425 | State-dependent motional squeezing of a trapped ion: Proposed method and applications. <i>Physical Review A</i> , 2020, 101, . | 1.0 | 8 |
| 1426 | Unconditional Accumulation of Nonclassicality in a Single-Atom Mechanical Oscillator. <i>Advanced Quantum Technologies</i> , 2020, 3, 2000012. | 1.8 | 5 |
| 1427 | Heat-flow reversal in a trapped-ion simulator. <i>Physical Review A</i> , 2020, 101, . | 1.0 | 2 |
| 1428 | Disorder-dressed quantum evolution. <i>Physical Review B</i> , 2020, 101, . | 1.1 | 7 |
| 1429 | Design and Development of Single-Qubit Ion Trap on Glass and Si Substrates With RF Analysis and Performance Benchmarking. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2020, 10, 1221-1231. | 1.4 | 6 |
| 1430 | Scalable characterization of localizable entanglement in noisy topological quantum codes. <i>New Journal of Physics</i> , 2020, 22, 053038. | 1.2 | 7 |
| 1431 | Far Off-Resonance Laser Frequency Stabilization Technology. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 3255. | 1.3 | 1 |
| 1432 | Discrete Time Crystals. <i>Annual Review of Condensed Matter Physics</i> , 2020, 11, 467-499. | 5.2 | 146 |
| 1435 | Spatial configurations and temperature profiles in nonequilibrium steady state of two-species trapped ion systems. <i>Physical Review E</i> , 2020, 101, 012129. | 0.8 | 2 |
| 1436 | Quantum Computing with Rotation-Symmetric Bosonic Codes. <i>Physical Review X</i> , 2020, 10, . | 2.8 | 84 |
| 1437 | Spin-cooling of the motion of a trapped diamond. <i>Nature</i> , 2020, 580, 56-59. | 13.7 | 66 |
| 1438 | Generation of arbitrary qubit states by adiabatic evolution split by a phase jump. <i>Physical Review A</i> , 2020, 101, . | 1.0 | 10 |
| 1439 | Quantum computational chemistry. <i>Reviews of Modern Physics</i> , 2020, 92, . | 16.4 | 726 |
| 1440 | Selective interactions in the quantum Rabi model. <i>Physical Review A</i> , 2020, 101, . | 1.0 | 22 |
| 1441 | Entangling Two Macroscopic Mechanical Resonators at High Temperature. <i>Physical Review Applied</i> , 2020, 13, . | 1.5 | 31 |
| 1442 | Quantum-nondemolition state detection and spectroscopy of single trapped molecules. <i>Science</i> , 2020, 367, 1213-1218. | 6.0 | 38 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 1443 | Protocol for Implementing Quantum Nonparametric Learning with Trapped Ions. Physical Review Letters, 2020, 124, 010506. | 2.9 | 12 |
| 1444 | Micromotion-enhanced fast entangling gates for trapped-ion quantum computing. Physical Review A, 2020, 101, . | 1.0 | 6 |
| 1445 | Dynamical Invariants and Quantization of the One-Dimensional Time-Dependent, Damped, and Driven Harmonic Oscillator. Brazilian Journal of Physics, 2020, 50, 534-540. | 0.7 | 1 |
| 1446 | Application of the polaron picture in the two-qubit quantum Rabi model. Physical Review A, 2020, 101, . | 1.0 | 8 |
| 1447 | A Two-Dimensional Architecture for Fast Large-Scale Trapped-Ion Quantum Computing. Chinese Physics Letters, 2020, 37, 070302. | 1.3 | 3 |
| 1448 | Teleporting quantum information encoded in fermionic modes. Physical Review A, 2020, 101, . | 1.0 | 11 |
| 1449 | Quantum Speedup for Aerospace and Engineering. AIAA Journal, 2020, 58, 3715-3727. | 1.5 | 14 |
| 1450 | Relativistic dynamics for a particle carrying a non-Abelian charge in a non-Abelian background electromagnetic field. Journal of Mathematical Physics, 2020, 61, 022302. | 0.5 | 5 |
| 1451 | Quantum Simulation of Non-Perturbative Cavity QED with Trapped Ions. Advanced Quantum Technologies, 2020, 3, 1900125. | 1.8 | 3 |
| 1452 | Quantum information processing and quantum optics with circuit quantum electrodynamics. Nature Physics, 2020, 16, 247-256. | 6.5 | 220 |
| 1453 | From cavity to circuit quantum electrodynamics. Nature Physics, 2020, 16, 243-246. | 6.5 | 55 |
| 1454 | Characterisation of a charged particle levitated nano-oscillator. Journal Physics D: Applied Physics, 2020, 53, 175302. | 1.3 | 21 |
| 1455 | Effect of ion-trap parameters on energy distributions of ultra-cold atom-ion mixtures. New Journal of Physics, 2020, 22, 013047. | 1.2 | 11 |
| 1456 | Fast High-Fidelity Quantum Nondemolition Qubit Readout via a Nonperturbative Cross-Kerr Coupling. Physical Review X, 2020, 10, . | 2.8 | 31 |
| 1457 | Photon-added entangled Barut-Girardello coherent states: non-classicality and generation. European Physical Journal Plus, 2020, 135, 1. | 1.2 | 6 |
| 1458 | Trends in Quantum Nanophotonics. Advanced Quantum Technologies, 2020, 3, 1900126. | 1.8 | 37 |
| 1459 | Deterministic generation of hybrid high- N NOON states with Rydberg atoms trapped in microwave cavities. Physical Review A, 2020, 101, . | 1.0 | 7 |
| 1460 | Real-time simulation of flux qubits used for quantum annealing. Physical Review A, 2020, 101, . | 1.0 | 5 |

| # | ARTICLE | IF | CITATIONS |
|------|---|-----|-----------|
| 1461 | Quantum collapse-revival effect in a supersymmetric Jaynes-Cummings model and its possible application in supersymmetric qubits. <i>Physica Scripta</i> , 2020, 95, 055104. | 1.2 | 4 |
| 1462 | Shuttling-based trapped-ion quantum information processing. <i>AVS Quantum Science</i> , 2020, 2, . | 1.8 | 61 |
| 1463 | A Quantum Heat Exchanger for Nanotechnology. <i>Entropy</i> , 2020, 22, 379. | 1.1 | 0 |
| 1464 | Enhancement in the performance of a quantum battery by ordered and disordered interactions. <i>Physical Review A</i> , 2020, 101, . | 1.0 | 50 |
| 1465 | Spin mechanics with levitating ferromagnetic particles. <i>Physical Review B</i> , 2020, 101, . | 1.1 | 24 |
| 1466 | Trapped Ion Architecture for Multi-Dimensional Quantum Simulations. <i>Advanced Quantum Technologies</i> , 2020, 3, 1900137. | 1.8 | 8 |
| 1467 | Ground-state cooling of a single atom inside a high-bandwidth cavity. <i>Physical Review A</i> , 2020, 101, . | 1.0 | 5 |
| 1468 | Hybrid Quantum Computing with Conditional Beam Splitter Gate in Trapped Ion System. <i>Physical Review Letters</i> , 2020, 124, 170502. | 2.9 | 26 |
| 1469 | Supersymmetric gauge potentials in multiphoton transition of atoms and squeezed-vacuum-state driven supersymmetric spin-evolution. <i>European Physical Journal D</i> , 2020, 74, 1. | 0.6 | 1 |
| 1470 | Classical and Nonclassical Time Dilation for Quantum Clocks. <i>Physical Review Letters</i> , 2020, 124, 160602. | 2.9 | 12 |
| 1471 | Extended Dirac oscillator in $(2\ell+1)$ -dimensional space-time. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2020, 384, 126484. | 0.9 | 5 |
| 1472 | Cooperative emission spectra as an efficient key probe of qubits pair entanglement along with field state tomography: an effective response to nonlinearity and classical drive power. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2020, 53, 145001. | 0.6 | 2 |
| 1473 | Probe of topological invariants using quantum walks of a trapped ion in coherent state space. <i>Chinese Physics B</i> , 2020, 29, 070501. | 0.7 | 3 |
| 1474 | Instability zones in the dynamics of a quantum mechanical quasiperiodic parametric oscillator. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2021, 93, 105537. | 1.7 | 1 |
| 1475 | Trapping Electrons in a Room-Temperature Microwave Paul Trap. <i>Physical Review X</i> , 2021, 11, . | 2.8 | 12 |
| 1476 | Stability analysis of an ensemble of simple harmonic oscillators. <i>International Journal of Modern Physics B</i> , 2021, 35, 2150034. | 1.0 | 1 |
| 1477 | RF Performance Benchmarking of TSV Integrated Surface Electrode Ion Trap for Quantum Computing. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2021, 11, 1856-1863. | 1.4 | 5 |
| 1478 | Optical and electrical feedback cooling of a silica nanoparticle levitated in a Paul trap. <i>Physical Review Research</i> , 2021, 3, . | 1.3 | 32 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 1479 | A Feedback Control Method to Maintain the Amplitude of the RF Signal Applied to Ion Traps. Applied Sciences (Switzerland), 2021, 11, 837. | 1.3 | 0 |
| 1480 | Continuously Parametrized Quantum Simulation of Molecular Electron-Transfer Reactions. PRX Quantum, 2021, 2, . | 3.5 | 5 |
| 1481 | Generation of N -particle W State with Trapped $\hat{\Lambda}$ -Type Ions by Transitionless Quantum Driving. Annalen Der Physik, 2021, 533, 2000526. | 0.9 | 7 |
| 1482 | Hybrid quantum-classical approach to enhanced quantum metrology. Scientific Reports, 2021, 11, 672. | 1.6 | 11 |
| 1483 | Time-Rescaling of Dirac Dynamics: Shortcuts to Adiabaticity in Ion Traps and Weyl Semimetals. Entropy, 2021, 23, 81. | 1.1 | 10 |
| 1484 | Large flux-mediated coupling in hybrid electromechanical system with a transmon qubit. Communications Physics, 2021, 4, . | 2.0 | 16 |
| 1485 | Microwaves in Quantum Computing. IEEE Journal of Microwaves, 2021, 1, 403-427. | 4.9 | 59 |
| 1486 | Atomic Qubits. Graduate Texts in Physics, 2021, , 221-251. | 0.1 | 0 |
| 1487 | Quantum photonics based on metasurfaces. Opto-Electronic Advances, 2021, 4, 200092-200092. | 6.4 | 50 |
| 1488 | Engineering the Quantum Scientific Computing Open User Testbed. IEEE Transactions on Quantum Engineering, 2021, 2, 1-32. | 2.9 | 19 |
| 1489 | Probing the spectrum of the Jaynes-Cummings-Rabi model by its isomorphism to an atom inside a parametric amplifier cavity. Physical Review A, 2021, 103, . | 1.0 | 12 |
| 1490 | A New Measurement Method for High Voltages Applied to an Ion Trap Generated by an RF Resonator. Sensors, 2021, 21, 1143. | 2.1 | 2 |
| 1491 | Research on the ions' axial temperature of a sympathetically-cooled $^{113}\text{Cd}^+$ ion crystal*. Chinese Physics B, 2021, 30, 113701. | 0.7 | 4 |
| 1492 | Selected topics of quantum computing for nuclear physics*. Chinese Physics B, 2021, 30, 020306. | 0.7 | 10 |
| 1493 | High-fidelity entangling gates in a three-dimensional ion crystal under micromotion. Physical Review A, 2021, 103, . | 1.0 | 7 |
| 1494 | Observation of a quantum phase transition in the quantum Rabi model with a single trapped ion. Nature Communications, 2021, 12, 1126. | 5.8 | 85 |
| 1495 | Random Sequence Generation using Superconducting Qubits. , 2021, , . | | 6 |
| 1496 | Fast universal two-qubit gate for neutral fermionic atoms in optical tweezers. Physical Review Research, 2021, 3, . | 1.3 | 8 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1497 | Influence of kinetic energy on the metrology of Rabi frequency. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2021, 54, 115302. | 0.7 | 0 |
| 1498 | Fast cooling of trapped ion in strong sideband coupling regime. <i>New Journal of Physics</i> , 2021, 23, 023018. | 1.2 | 11 |
| 1499 | Density-matrix formalism for PT -symmetric non-Hermitian Hamiltonians with the Lindblad equation. <i>Physical Review A</i> , 2021, 103, . | 1.0 | 11 |
| 1500 | Quantum thermodynamic properties of a vector field coupled to a moving environment. <i>European Physical Journal Plus</i> , 2021, 136, 1. | 1.2 | 2 |
| 1501 | Speeding up quantum perceptron via shortcuts to adiabaticity. <i>Scientific Reports</i> , 2021, 11, 5783. | 1.6 | 14 |
| 1502 | Finite-time performance of a single-ion quantum Otto engine. <i>Physical Review E</i> , 2021, 103, 032144. | 0.8 | 13 |
| 1503 | Finite-temperature spectrum at the symmetry-breaking linear to zigzag transition. <i>Physical Review B</i> , 2021, 103, . | 1.1 | 6 |
| 1504 | Phase-Adaptive Dynamical Decoupling Methods for Robust Spin-Spin Dynamics in Trapped Ions. <i>Physical Review Applied</i> , 2021, 15, . | 1.5 | 3 |
| 1505 | Nonadiabatic Topological Energy Pumps with Quasiperiodic Driving. <i>Physical Review Letters</i> , 2021, 126, 106805. | 2.9 | 19 |
| 1506 | Quantum control with a multi-dimensional Gaussian quantum invariant. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 5, 409. | 0.0 | 6 |
| 1507 | MgO surface lattice phonons observation during interstellar ice transition. <i>Scientific Reports</i> , 2021, 11, 6149. | 1.6 | 1 |
| 1508 | Squeezed Coherent States in Double Optical Resonance. <i>Photonics</i> , 2021, 8, 72. | 0.9 | 1 |
| 1509 | Dynamics of field nonclassicality in the Jaynes-Cummings model. <i>Quantum Information Processing</i> , 2021, 20, 1. | 1.0 | 6 |
| 1510 | Programmable quantum simulations of spin systems with trapped ions. <i>Reviews of Modern Physics</i> , 2021, 93, . | 16.4 | 316 |
| 1511 | Coupling Modifies the Quantum Fluctuations of Entangled Oscillators. <i>Brazilian Journal of Physics</i> , 2021, 51, 559-565. | 0.7 | 0 |
| 1512 | Quantum Zeno effect in self-sustaining systems: Suppressing phase diffusion via repeated measurements. <i>Physical Review A</i> , 2021, 103, . | 1.0 | 7 |
| 1513 | Entanglement Transition in a Monitored Free-Fermion Chain: From Extended Criticality to Area Law. <i>Physical Review Letters</i> , 2021, 126, 170602. | 2.9 | 132 |
| 1514 | Quantum guidelines for solid-state spin defects. <i>Nature Reviews Materials</i> , 2021, 6, 906-925. | 23.3 | 185 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 1515 | Materials challenges and opportunities for quantum computing hardware. Science, 2021, 372, . | 6.0 | 196 |
| 1516 | Single ion thermal wave packet analyzed via time-of-flight detection. New Journal of Physics, 0, , . | 1.2 | 3 |
| 1517 | Strong-coupling quantum logic of trapped ions. Physical Review A, 2021, 103, . | 1.0 | 5 |
| 1518 | Analytic approach to dynamics of the resonant and off-resonant Jaynes-Cummings systems with cavity losses. Physical Review A, 2021, 103, . | 1.0 | 6 |
| 1519 | Quantum computation and simulation with vibrational modes of trapped ions. Chinese Physics B, 2021, 30, 060311. | 0.7 | 14 |
| 1520 | Spin dynamics under the influence of elliptically rotating fields: Extracting the field topology from time-averaged quantities. Physical Review E, 2021, 103, 052139. | 0.8 | 2 |
| 1521 | Shortcuts to Squeezed Thermal States. Quantum - the Open Journal for Quantum Science, 0, 5, 449. | 0.0 | 8 |
| 1522 | On the $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e22" altimg="si3.svg" \rangle \langle \text{mml:mi} \rangle \text{q} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -deformed Dirac oscillator in $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e27" altimg="si4.svg" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle$ Tj ETQq1 1 0.784314 rgBT/Overlock 10 Tf 50 4 | 1.0 | 4 |
| 1523 | Motional heating of spatially extended ion crystals. Quantum Science and Technology, 2021, 6, 034003. | 2.6 | 9 |
| 1524 | Motional quantum metrology in a Penning trap. Europhysics Letters, 2021, 134, 38001. | 0.7 | 5 |
| 1525 | Improving efficiency of sympathetic cooling in atom-ion and atom-atom confined collisions. Physical Review A, 2021, 103, . | 1.0 | 7 |
| 1526 | Self-Induced Glassy Phase in Multimodal Cavity Quantum Electrodynamics. Physical Review Letters, 2021, 126, 183601. | 2.9 | 4 |
| 1527 | Efficient method for the calculation of the optical force of a single nanoparticle based on the quasnormal mode expansion. Optics Letters, 2021, 46, 2658. | 1.7 | 3 |
| 1528 | Robust single-qubit gates by composite pulses in three-level systems. Physical Review A, 2021, 103, . | 1.0 | 20 |
| 1529 | Interaction induced non-reciprocal three-level quantum transport*. Chinese Physics B, 2021, 30, 060314. | 0.7 | 1 |
| 1530 | Compact Ion-Trap Quantum Computing Demonstrator. PRX Quantum, 2021, 2, . | 3.5 | 159 |
| 1531 | Superposition of two-mode squeezed states for quantum information processing and quantum sensing. Physical Review A, 2021, 103, . | 1.0 | 16 |
| 1532 | Enhanced force sensitivity and entanglement in periodically driven optomechanics. Physical Review A, 2021, 103, . | 1.0 | 17 |

| # | ARTICLE | IF | CITATIONS |
|------|---|-----|-----------|
| 1533 | Kapitza-Dirac Blockade: A Universal Tool for the Deterministic Preparation of Non-Gaussian Oscillator States. <i>Physical Review Letters</i> , 2021, 126, 253601. | 2.9 | 5 |
| 1534 | Learning from Physics Experiments with Quantum Computers: Applications in Muon Spectroscopy. <i>PRX Quantum</i> , 2021, 2, . | 3.5 | 4 |
| 1535 | Quantum Harmonic Oscillator Spectrum Analyzers. <i>Physical Review Letters</i> , 2021, 126, 250507. | 2.9 | 8 |
| 1536 | Maximum violation of monogamy of entanglement for indistinguishable particles by measures that are monogamous for distinguishable particles. <i>Physical Review A</i> , 2021, 104, . | 1.0 | 2 |
| 1537 | Continuous-Variable Assisted Thermal Quantum Simulation. <i>Physical Review Letters</i> , 2021, 127, 020502. | 2.9 | 9 |
| 1538 | Single-Atom Verification of the Noise-Resilient and Fast Characteristics of Universal Nonadiabatic Noncyclic Geometric Quantum Gates. <i>Physical Review Letters</i> , 2021, 127, 030502. | 2.9 | 17 |
| 1539 | Double degeneracy associated with hidden symmetries in the asymmetric two-photon Rabi model. <i>Physical Review Research</i> , 2021, 3, . | 1.3 | 7 |
| 1540 | An ion trap apparatus with high optical access in multiple directions. <i>Review of Scientific Instruments</i> , 2021, 92, 073201. | 0.6 | 8 |
| 1541 | Quantum logic and entanglement by neutral Rydberg atoms: methods and fidelity. <i>Quantum Science and Technology</i> , 2022, 7, 023002. | 2.6 | 30 |
| 1542 | Design, fabrication and characterization of a micro-fabricated stacked-wafer segmented ion trap with two X-junctions. <i>Quantum Science and Technology</i> , 2021, 6, 044001. | 2.6 | 12 |
| 1543 | Quantum gravitational decoherence from fluctuating minimal length and deformation parameter at the Planck scale. <i>Nature Communications</i> , 2021, 12, 4449. | 5.8 | 55 |
| 1544 | Experimental Study of the Optical Qubit on the 435-nm Quadrupole Transition in the 171Yb+ Ion. <i>JETP Letters</i> , 2021, 114, 59-64. | 0.4 | 13 |
| 1545 | Motion analysis of a trapped ion chain by single photon self-interference. <i>Applied Physics Letters</i> , 2021, 119, 024003. | 1.5 | 2 |
| 1546 | Steady-state phonon occupation of electromagnetically-induced-transparency cooling: Higher-order calculations. <i>Physical Review A</i> , 2021, 104, . | 1.0 | 4 |
| 1547 | An effective pumping method for increasing atomic utilization in a compact cold atom clock*. <i>Chinese Physics B</i> , 2021, 30, 083202. | 0.7 | 1 |
| 1548 | Exact Bloch States of a Spin-orbit Coupled Bose-Einstein Condensate in an Optical Lattice. <i>International Journal of Theoretical Physics</i> , 2021, 60, 3161-3176. | 0.5 | 0 |
| 1549 | Atomic population inversion in a two-level atom for shaped and chirped laser pulses: Exact solutions of Bloch equations with dephasing. <i>Results in Physics</i> , 2021, 26, 104419. | 2.0 | 2 |
| 1550 | Experimental study of decoherence of the two-mode squeezed vacuum state via second harmonic generation. <i>Physical Review Research</i> , 2021, 3, . | 1.3 | 4 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 1551 | Photon and photon-added intelligent states of coupled parametric oscillators. Europhysics Letters, 0, , . | 0.7 | 0 |
| 1552 | Investigating the quench dynamics of the bound states in a spin-orbital-coupling system using a trapped ion. Physical Review A, 2021, 104, . | 1.0 | 1 |
| 1553 | Local measures of dynamical quantum phase transitions. Physical Review B, 2021, 104, . | 1.1 | 18 |
| 1554 | Performance and limits of feedback cooling methods for levitated oscillators: A direct comparison. Physical Review A, 2021, 104, . | 1.0 | 13 |
| 1555 | Electric-field noise in a high-temperature superconducting surface ion trap. Physical Review B, 2021, 104, . | 1.1 | 5 |
| 1556 | Measuring Ion Oscillations at the Quantum Level with Fluorescence Light. Physical Review Letters, 2021, 127, 063603. | 2.9 | 6 |
| 1557 | Role of dissipation in the stability of a parametrically driven quantum harmonic oscillator. Journal of the Korean Physical Society, 2021, 79, 600-605. | 0.3 | 2 |
| 1558 | Orbital and electronic entanglement in quantum teleportation schemes. Physical Review Research, 2021, 3, . | 1.3 | 5 |
| 1559 | Observation of second- and higher-order electric quadrupole interactions with an atomic ion. Physical Review Research, 2021, 3, . | 1.3 | 2 |
| 1560 | Engineering generalized Gibbs ensembles with trapped ions. Physical Review Research, 2021, 3, . | 1.3 | 7 |
| 1561 | An ultralow-noise superconducting radio-frequency ion trap for frequency metrology with highly charged ions. Review of Scientific Instruments, 2021, 92, 083203. | 0.6 | 6 |
| 1562 | Quantum control of bosonic modes with superconducting circuits. Science Bulletin, 2021, 66, 1789-1805. | 4.3 | 45 |
| 1563 | Transparent qubit manipulations with spin-orbit coupled two-electron nanowire quantum dot. Scientific Reports, 2021, 11, 18839. | 1.6 | 2 |
| 1564 | Creating atom-nanoparticle quantum superpositions. Physical Review Research, 2021, 3, . | 1.3 | 4 |
| 1565 | Quantum Otto engines at relativistic energies. New Journal of Physics, 2021, 23, 105001. | 1.2 | 17 |
| 1566 | Optical Superresolution Sensing of a Trapped Ion's Wave Packet Size. Physical Review Letters, 2021, 127, 143602. | 2.9 | 13 |
| 1567 | Locking Multi-Laser Frequencies to a Precision Wavelength Meter: Application to Cold Atoms. Sensors, 2021, 21, 6255. | 2.1 | 5 |
| 1568 | Parameter-dependent unitary transformation approach for quantum Rabi model. New Journal of Physics, 2021, 23, 093014. | 1.2 | 1 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1569 | Quantum Simulating the Electron Transport in Quantum Cascade Laser Structures. <i>Advanced Quantum Technologies</i> , 2021, 4, 2100044. | 1.8 | 4 |
| 1570 | Experimental verification of the inertial theorem control protocols. <i>New Journal of Physics</i> , 0, , . | 1.2 | 1 |
| 1571 | Signatures of Quantum Phase Transitions after Quenches in Quantum Chaotic One-Dimensional Systems. <i>Physical Review X</i> , 2021, 11, . | 2.8 | 13 |
| 1572 | Ferromagnetic Heisenberg spin chain in a resonator. <i>Chinese Physics B</i> , 2021, 30, 090506. | 0.7 | 0 |
| 1573 | Irreversible entropy production: From classical to quantum. <i>Reviews of Modern Physics</i> , 2021, 93, . | 16.4 | 157 |
| 1574 | High-fidelity laser-free universal control of trapped ion qubits. <i>Nature</i> , 2021, 597, 209-213. | 13.7 | 85 |
| 1575 | Experimental Realization of Multi-ion Sympathetic Cooling on a Trapped Ion Crystal. <i>Physical Review Letters</i> , 2021, 127, 143201. | 2.9 | 5 |
| 1576 | Electric trapping and circuit cooling of charged nanorotors. <i>New Journal of Physics</i> , 2021, 23, 093001. | 1.2 | 6 |
| 1577 | 100,000-spin coherent Ising machine. <i>Science Advances</i> , 2021, 7, eabh0952. | 4.7 | 101 |
| 1578 | Negativity-mutual information conversion and coherence in two-coupled harmonic oscillators. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2021, 579, 125937. | 1.2 | 5 |
| 1579 | Microscopic quantum generalization of classical Liouville oscillators. <i>Physical Review E</i> , 2021, 103, 012118. | 0.8 | 0 |
| 1580 | Heat rectification with a minimal model of two harmonic oscillators. <i>Physical Review E</i> , 2021, 103, 012134. | 0.8 | 10 |
| 1581 | Double-Electromagnetically-Induced-Transparency Ground-State Cooling of Stationary Two-Dimensional Ion Crystals. <i>Physical Review Letters</i> , 2021, 126, 023604. | 2.9 | 29 |
| 1582 | Dominant Fifth-Order Correlations in Doped Quantum Antiferromagnets. <i>Physical Review Letters</i> , 2021, 126, 026401. | 2.9 | 11 |
| 1584 | Tunable transverse spin-motion coupling for quantum information processing. <i>Quantum Science and Technology</i> , 2021, 6, 024003. | 2.6 | 6 |
| 1585 | Charged particle guiding and beam splitting with auto-ponderomotive potentials on a chip. <i>Nature Communications</i> , 2021, 12, 390. | 5.8 | 9 |
| 1586 | Quantum Zeno effect and quantum nondemolition spin measurement in a quantum dot micropillar cavity in the strong coupling regime. <i>Physical Review B</i> , 2021, 103, . | 1.1 | 7 |
| 1587 | Quantum Computing with Trapped Ions. , 2012, , 2406-2436. | | 1 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 1588 | An Introduction to Trapped Ions, Scalability and Quantum Metrology. , 2014, , 211-245. | | 1 |
| 1589 | Single Photon Absorption by a Single Atom: From Heralded Absorption to Polarization State Mapping. Nano-optics and Nanophotonics, 2015, , 125-141. | 0.2 | 1 |
| 1590 | Quantum Computing and Its Potential for Turbulence Simulations. Communications in Computer and Information Science, 2015, , 124-132. | 0.4 | 2 |
| 1595 | From megahertz to terahertz qubits encoded in molecular ions: theoretical analysis of dipole-forbidden spectroscopic transitions in N^{2+} . Physical Chemistry Chemical Physics, 2020, 22, 23083-23098. | 1.3 | 11 |
| 1596 | Vacuum characterization of a compact room-temperature trapped ion system. Applied Physics Letters, 2020, 117, . | 1.5 | 6 |
| 1597 | A single-atom heat engine. Physics Today, 2020, 73, 66-67. | 0.3 | 3 |
| 1598 | Initiating revolutions for optical manipulation: the origins and applications of rotational dynamics of trapped particles. Advances in Physics: X, 2021, 6, 1838322. | 1.5 | 15 |
| 1599 | Semiclassical dynamics for an ion confined within a nonlinear electromagnetic trap. Physica Scripta, 2011, T143, 014018. | 1.2 | 5 |
| 1600 | The new SI and the fundamental constants of nature. European Journal of Physics, 2020, 41, 063003. | 0.3 | 7 |
| 1601 | Single-ion addressing via trap potential modulation in global optical fields. New Journal of Physics, 2020, 22, 053024. | 1.2 | 4 |
| 1602 | Ultrafast critical ground state preparation via bang-bang protocols. New Journal of Physics, 2020, 22, 093050. | 1.2 | 6 |
| 1603 | Polarization-gradient cooling of 1D and 2D ion Coulomb crystals. New Journal of Physics, 2020, 22, 103013. | 1.2 | 29 |
| 1604 | Single-site-resolved imaging of ultracold atoms in a triangular optical lattice. New Journal of Physics, 2020, 22, 123028. | 1.2 | 16 |
| 1605 | Transparently manipulating spin-orbit qubit via exact degenerate ground states*. Chinese Physics B, 2020, 29, 083203. | 0.7 | 4 |
| 1606 | Hyper-hybrid entanglement, indistinguishability, and two-particle entanglement swapping. Physical Review A, 2020, 102, . | 1.0 | 6 |
| 1607 | Controlled melting of a Wigner ion crystal with atomic resolution. Physical Review A, 2020, 102, . | 1.0 | 4 |
| 1608 | Quantum criticality of the Rabi-Stark model at finite frequency ratios. Physical Review A, 2020, 102, . | 1.0 | 9 |
| 1609 | Single-shot energy measurement of a single atom and the direct reconstruction of its energy distribution. Physical Review A, 2017, 96, . | 1.0 | 10 |

| # | ARTICLE | IF | CITATIONS |
|------|---|-----|-----------|
| 1610 | Preparation of Long-Lived, Non-Autoionizing Circular Rydberg States of Strontium. <i>Physical Review Letters</i> , 2020, 125, 263001. | 2.9 | 14 |
| 1611 | Quantum motional state tomography with nonquadratic potentials and neural networks. <i>Physical Review Research</i> , 2019, 1, . | 1.3 | 16 |
| 1612 | Dynamics of strongly coupled disordered dissipative spin-boson systems. <i>Physical Review Research</i> , 2020, 2, . | 1.3 | 5 |
| 1613 | Kinks and nanofriction: Structural phases in few-atom chains. <i>Physical Review Research</i> , 2020, 2, . | 1.3 | 9 |
| 1614 | Superadiabatic thermalization of a quantum oscillator by engineered dephasing. <i>Physical Review Research</i> , 2020, 2, . | 1.3 | 17 |
| 1615 | Controlling the nature of a charged impurity in a bath of Feshbach dimers. <i>Physical Review Research</i> , 2020, 2, . | 1.3 | 17 |
| 1616 | Quantum simulation of extended polaron models using compound atom-ion systems. <i>Physical Review Research</i> , 2020, 2, . | 1.3 | 9 |
| 1617 | Oscillating bound states for a giant atom. <i>Physical Review Research</i> , 2020, 2, . | 1.3 | 83 |
| 1618 | Scalable and Parallel Tweezer Gates for Quantum Computing with Long Ion Strings. <i>PRX Quantum</i> , 2020, 1, . | 3.5 | 30 |
| 1619 | Towards fast and scalable trapped-ion quantum logic with integrated photonics. , 2019, , . | | 9 |
| 1620 | Optimization of the Normal Mode Spectrum of Linear Ion Crystals in Paul Traps for EIT Cooling Using an Optical Lattice. <i>JETP Letters</i> , 2020, 112, 585-590. | 0.4 | 7 |
| 1622 | Quantum simulations of light-matter interactions in arbitrary coupling regimes. <i>Europhysics Letters</i> , 2020, 132, 20002. | 0.7 | 2 |
| 1623 | Dynamics of a quantum oscillator coupled with a three-level $\hat{\rho}$ -type emitter. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2019, 36, 2473. | 0.9 | 3 |
| 1624 | Simulation and realization of a second-order quantum-interference-based quantum clock synchronization at the femtosecond level. <i>Optics Letters</i> , 2019, 44, 614. | 1.7 | 17 |
| 1626 | Emergence of PT-symmetry breaking in open quantum systems. <i>SciPost Physics</i> , 2020, 9, . | 1.5 | 35 |
| 1627 | Coherent fluctuation relations: from the abstract to the concrete. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 3, 124. | 0.0 | 24 |
| 1628 | Electrode Configurations for fast separation of trapped ions. <i>Quantum Information and Computation</i> , 2006, 6, 289-325. | 0.1 | 30 |
| 1631 | Exact quantum motion of a single trapped ion interacting with standing laser pulses in Lamb-Dicke regime. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2010, 59, 2406. | 0.2 | 2 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 1632 | Development on quantum metrology with quantum Fisher information. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 040601. | 0.2 | 7 |
| 1633 | Exact Solution of a Non-Hermitian Generalized Rabi Model. Chinese Physics Letters, 2021, 38, 080202. | 1.3 | 3 |
| 1634 | Fast laser cooling using optimal quantum control. Physical Review A, 2021, 104, . | 1.0 | 3 |
| 1635 | Antibunched N -photon bundles emitted by a Josephson photonic device. Physical Review Research, 2021, 3, . | 1.3 | 14 |
| 1636 | Optomechanical interface between telecom photons and spin quantum memory. Nature Physics, 2021, 17, 1420-1425. | 6.5 | 35 |
| 1637 | Optimized pulsed sideband cooling and enhanced thermometry of trapped ions. Physical Review A, 2021, 104, . | 1.0 | 6 |
| 1638 | Enhanced Parameter Estimation with Periodically Driven Quantum Probe. Entropy, 2021, 23, 1333. | 1.1 | 1 |
| 1639 | Phonon-Laser Ultrasensitive Force Sensor. Physical Review Applied, 2021, 16, . | 1.5 | 13 |
| 1640 | The population transfer and superflow associated with the spatiotemporal Bloch states for a high-frequency driven spin-orbit coupled Bose-Einstein condensate. Results in Physics, 2021, 31, 104926. | 2.0 | 3 |
| 1641 | Fermi's golden rule for heating in strongly driven Floquet systems. Physical Review B, 2021, 104, . | 1.1 | 13 |
| 1644 | Laser-Cooled Ions and Their Applications. Journal of Plasma and Fusion Research, 2005, 81, 755-763. | 0.4 | 1 |
| 1646 | Cooling and Trapping. , 2006, , 1091-1106. | | 1 |
| 1647 | Monitoring the Decoherence of Mesoscopic Quantum Superpositions in a Cavity. , 2006, , 33-83. | | 0 |
| 1648 | Quantum Information. , 2006, , 1215-1231. | | 0 |
| 1649 | Perturbative Treatment of the Evolution Operator Associated with Raman Couplings. Symmetry, Integrability and Geometry: Methods and Applications (SIGMA), 2006, , . | 0.5 | 0 |
| 1650 | Quantum Stochastic Heating of a Trapped Ion through Resonance Fluorescence. , 2007, , . | | 0 |
| 1651 | Quantum Stochastic Heating of a Trapped Ion. , 2007, , . | | 0 |
| 1652 | Cooling of an Atom in a Cavity to the Quantum Ground State of Axial Motion. , 2007, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 1653 | Quantum computation with donor-based qubits in silicon cavities. , 2007, , . | | 0 |
| 1654 | Quantum Interface between Single Photons and Ions. The Review of Laser Engineering, 2008, 36, 493-498. | 0.0 | 0 |
| 1655 | Quantum computation with donor-based qubits in silicon photonic cavities. , 2008, , . | | 0 |
| 1656 | Generation of resolved phonon sidebands in a self-assembled quantum dot. , 2009, , . | | 0 |
| 1657 | Radium ion: a candidate for measuring atomic parity violation. , 2010, , 261-267. | | 0 |
| 1658 | Realization of Robust Single-Qubit Operations with Purely Geometric Phase Factors. , 2011, , . | | 0 |
| 1659 | Hamiltonian spectrum for three coupled harmonic oscillators in non-commutative space. Wuli Xuebao/Acta Physica Sinica, 2011, 60, 040303. | 0.2 | 2 |
| 1660 | No-Collapse Physics and Consciousness. , 2012, , 55-78. | | 1 |
| 1661 | Realization of Fast Rabi Oscillations in Radio Frequency Magnetic Resonance of Ground Zeeman States of $^{40}\text{Ca}^{+}$. Japanese Journal of Applied Physics, 2011, 50, 122801. | 0.8 | 0 |
| 1662 | Cold highly charged ions in a cryogenic Paul trap. , 2013, , 189-194. | | 0 |
| 1663 | Towards Strong Coupling between a Single Ion and a Fiber Cavity. The Review of Laser Engineering, 2013, 41, 507. | 0.0 | 0 |
| 1664 | Princípio de a Ação quântica de Schwinger. Revista Brasileira De Ensino De Fisica, 2013, 35, 1-16. | 0.2 | 3 |
| 1666 | Quantum Information Processing with Trapped Ions. Springer Tracts in Modern Physics, 2014, , 253-291. | 0.1 | 2 |
| 1668 | Measurement and Control of the Internal Atomic State. Springer Theses, 2016, , 29-42. | 0.0 | 0 |
| 1669 | Arrays of optomechanical systems. , 2015, , 296-317. | | 0 |
| 1670 | Controlling the Position and Motion of a Single Atom in an Optical Cavity. Springer Theses, 2016, , 11-28. | 0.0 | 0 |
| 1671 | Single-photon optomechanics. , 2015, , 212-249. | | 0 |
| 1672 | Coherent Optomechanical Coupling between a Surface Acoustic Wave and a Nitrogen Vacancy Center in Diamond. , 2016, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|------|---|-----|-----------|
| 1674 | Electron Spin Resonance From NV Centers in Diamonds Levitating in an Ion Trap. , 2017, , . | | 0 |
| 1675 | The Local Detection Method: Dynamical Detection of Quantum Discord with Local Operations. Quantum Science and Technology, 2017, , 275-307. | 1.5 | 1 |
| 1676 | Nonequilibrium Quantum Dynamics of Many-Body Systems. Understanding Complex Systems, 2018, , 231-260. | 0.3 | 3 |
| 1679 | Quantum Hardware I: Ion Trap Qubits. , 2018, , 149-182. | | 0 |
| 1680 | Probing Quantum Fluctuations of Work with a Trapped Ion. Fundamental Theories of Physics, 2018, , 917-938. | 0.1 | 0 |
| 1681 | Physical Implementations of Quantum Absorption Refrigerators. Fundamental Theories of Physics, 2018, , 149-174. | 0.1 | 2 |
| 1682 | Resonating valence bonds and spinon pairing in the Dicke model. SciPost Physics, 2018, 4, . | 1.5 | 0 |
| 1683 | Rydberg atoms and quantum information. , 2019, , . | | 0 |
| 1685 | Recent Strategies in Quantum Metrology: The Quest for the Ultimate Precision Limits. , 2019, , . | | 0 |
| 1687 | Trapping Ions with Light Fields. SpringerBriefs in Physics, 2019, , 9-20. | 0.2 | 0 |
| 1688 | The Ions. Springer Theses, 2020, , 9-23. | 0.0 | 0 |
| 1689 | Mean field theory for the quantum Rabi model, inconsistency to the rotating wave approximation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126287. | 0.9 | 0 |
| 1690 | Optical Tweezers in Biotechnology. , 0, , . | | 0 |
| 1691 | Experimental quantum simulation of superradiant phase transition beyond no-go theorem via antisqueezing. Nature Communications, 2021, 12, 6281. | 5.8 | 23 |
| 1693 | Coherence properties of highly-excited motional states of a trapped ion. Journal of Physics B: Atomic, Molecular and Optical Physics, 2021, 54, 015501. | 0.6 | 4 |
| 1694 | Cumulative loading of the ion trap by laser ablation of thorium target in buffer gas. Laser Physics Letters, 2021, 18, 015501. | 0.6 | 1 |
| 1696 | A critical overview on Quantum Computing. Journal of Quantum Computing, 2020, 2, 181-192. | 0.3 | 5 |
| 1697 | Research progress of 698nm narrow-linewidth lasers for Sr atom optical clocks at NTSC. , 2020, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 1698 | Full Quantum Analysis of Complete Population Transfer Using Frequency Boost. International Journal of Optics and Photonics, 2020, 14, 91-98. | 0.2 | 1 |
| 1699 | Conical Intersections in Other Physical Systems. Lecture Notes in Physics, 2020, , 127-147. | 0.3 | 0 |
| 1700 | An Introduction to Special Functions with Some Applications to Quantum Mechanics. Tutorials, Schools, and Workshops in the Mathematical Sciences, 2020, , 517-628. | 0.3 | 0 |
| 1701 | Quantum Master Equation for the Time-Periodic Density Operator of a Single Qubit Coupled to a Harmonic Oscillator. Trends in Mathematics, 2020, , 271-281. | 0.1 | 0 |
| 1703 | Spontaneous decay of artificial atoms in a three-qubit system. European Physical Journal B, 2021, 94, 1. | 0.6 | 2 |
| 1706 | Ion Traps. , 2008, , 347-363. | | 0 |
| 1708 | Quantum Optics with Giant Atoms—the First Five Years. Mathematics for Industry, 2021, , 125-146. | 0.4 | 16 |
| 1709 | Analytical approximation of the second-harmonic conversion efficiency. Applied Optics, 2020, 59, 9010. | 0.9 | 0 |
| 1710 | Optical Sideband Cooling of a Radial Motional Mode of a Trapped $^{138}\text{Ba}^+$ Ion. Journal of the Korean Physical Society, 2020, 77, 1143-1147. | 0.3 | 2 |
| 1711 | Optimization of Segmented Linear Paul Traps and Transport of Stored Particles. , 0, , 45-68. | | 1 |
| 1712 | Dynamics of a trapped ion in a quantum gas: Effects of particle statistics. Physical Review A, 2021, 104, . | 1.0 | 8 |
| 1713 | THz trapped ion model and THz spectroscopy detection of potassium channels. Nano Research, 2022, 15, 3825-3833. | 5.8 | 4 |
| 1714 | Sequential phonon measurements of atomic motion. Quantum Science and Technology, 0, , . | 2.6 | 1 |
| 1715 | Universality class and exact phase boundary in the superradiant phase transition. Physical Review A, 2021, 104, . | 1.0 | 4 |
| 1716 | Entangling operations in nonlinear two-atom Tavis-Cummings models. Physical Review A, 2021, 104, . | 1.0 | 1 |
| 1717 | Composite pulses for high fidelity population transfer in three-level systems. New Journal of Physics, 2022, 24, 023014. | 1.2 | 12 |
| 1718 | Time-Dependent Dissipative Massive Scalar Field. International Journal of Optics and Photonics, 2021, 15, 49-54. | 0.2 | 0 |
| 1719 | Ion Qubit Control in a Passively Phase-Stable Optical Standing Wave. , 2021, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1720 | Phase-modulated Autler-Townes splitting in a giant-atom system within waveguide QED. <i>Frontiers of Physics</i> , 2022, 17, 1. | 2.4 | 13 |
| 1721 | Effects of quantum deformation on the Jaynes-Cummings and anti-Jaynes-Cummings models. <i>Physical Review A</i> , 2022, 105, . | 1.0 | 3 |
| 1722 | Simulation of Mixed Quantum Rabi Model and its Applications on Generation of Squeezed Cat State. <i>International Journal of Theoretical Physics</i> , 2022, 61, 1. | 0.5 | 9 |
| 1723 | Generation of an Enhanced Multi-Mode Optomechanical-Like Quantum System and Its Application in Creating Hybrid Entangled States. <i>Annalen Der Physik</i> , 2022, 534, . | 0.9 | 5 |
| 1724 | Control System of Superconducting Quantum Computers. <i>Journal of Superconductivity and Novel Magnetism</i> , 2022, 35, 11-31. | 0.8 | 9 |
| 1725 | High-Stability Cryogenic System for Quantum Computing With Compact Packaged Ion Traps. <i>IEEE Transactions on Quantum Engineering</i> , 2022, 3, 1-11. | 2.9 | 11 |
| 1726 | Probing a Dissipative Phase Transition with a Trapped Ion through Reservoir Engineering. <i>Chinese Physics Letters</i> , 2022, 39, 020502. | 1.3 | 2 |
| 1727 | Machine classification for probe-based quantum thermometry. <i>Physical Review A</i> , 2022, 105, . | 1.0 | 4 |
| 1728 | Two-Photon Blockade with Second-Order Nonlinearity in Cavity Systems. <i>International Journal of Theoretical Physics</i> , 2022, 61, 1. | 0.5 | 1 |
| 1729 | Fast quantum search driven by environmental engineering. <i>Communications in Theoretical Physics</i> , 2022, 74, 045101. | 1.1 | 3 |
| 1730 | Super-resolved Imaging of a Single Cold Atom on a Nanosecond Timescale. <i>Physical Review Letters</i> , 2021, 127, 263603. | 2.9 | 6 |
| 1731 | Observation of Feshbach resonances between a single ion and ultracold atoms. <i>Nature</i> , 2021, 600, 429-433. | 13.7 | 40 |
| 1732 | Advances in the study of ion trap structures in Quantum computation and simulation. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2022, . | 0.2 | 1 |
| 1733 | Topological-Graph Dependencies and Scaling Properties of a Heuristic Qubit-Assignment Algorithm. <i>IEEE Transactions on Quantum Engineering</i> , 2022, 3, 1-14. | 2.9 | 5 |
| 1734 | Universal patterns in multifrequency-driven dissipative systems. <i>Europhysics Letters</i> , 2022, 137, 12001. | 0.7 | 1 |
| 1735 | Resolving the gravitational redshift across a millimetre-scale atomic sample. <i>Nature</i> , 2022, 602, 420-424. | 13.7 | 167 |
| 1736 | Ultrastrong coupling of a qubit with a nonlinear optical resonator. <i>Physical Review A</i> , 2022, 105, . | 1.0 | 0 |
| 1737 | Enhancing entanglement and total correlation dynamics via local unitaries. <i>Physical Review A</i> , 2022, 105, . | 1.0 | 0 |

| # | ARTICLE | IF | CITATIONS |
|------|---|-----|-----------|
| 1738 | Designing robust quantum refrigerators in disordered spin models. <i>Physical Review A</i> , 2022, 105, . | 1.0 | 2 |
| 1739 | Quantum parameter estimation of nonlinear coupling in a trilinear Hamiltonian with trapped ions. <i>Physical Review A</i> , 2022, 105, . | 1.0 | 0 |
| 1740 | Thermally induced entanglement of atomic oscillators. <i>Optics Express</i> , 2022, 30, 8814. | 1.7 | 3 |
| 1741 | Analytical and experimental study of center-line miscalibrations in Mølmer-Sørensen gates. <i>Physical Review A</i> , 2022, 105, . | 1.0 | 3 |
| 1742 | Coherent control of a multi-qubit dark state in waveguide quantum electrodynamics. <i>Nature Physics</i> , 2022, 18, 538-543. | 6.5 | 51 |
| 1743 | Photon spin molasses for laser cooling molecular rotation. <i>Journal of Molecular Spectroscopy</i> , 2022, 385, 111596. | 0.4 | 1 |
| 1744 | Testing the upper bound on the speed of scrambling with an analogue of Hawking radiation using trapped ions. <i>European Physical Journal C</i> , 2022, 82, 1. | 1.4 | 13 |
| 1745 | Buffer gas cooling of ions in radio-frequency traps using ultracold atoms. <i>New Journal of Physics</i> , 2022, 24, 035004. | 1.2 | 5 |
| 1746 | Control of Transverse Motion for Quantum Gates on Individually Addressed Atomic Qubits. <i>PRX Quantum</i> , 2022, 3, . | 3.5 | 23 |
| 1747 | Optical coherent manipulation of alkaline-earth circular Rydberg states. <i>Nature Physics</i> , 2022, 18, 502-505. | 6.5 | 9 |
| 1748 | Ultrafast dynamics of entanglement in Heisenberg antiferromagnets. <i>Physical Review B</i> , 2022, 105, . | 1.1 | 2 |
| 1749 | Scrambling and many-body localization in the XXZ chain. <i>Physical Review B</i> , 2022, 105, . | 1.1 | 10 |
| 1750 | Analytical solution and hidden symmetry operators of asymmetric two-mode quantum Rabi model. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2022, 55, 155303. | 0.7 | 2 |
| 1751 | Observation of anomalous heat transport in a trapped ion chain. <i>Physical Review A</i> , 2022, 105, . | 1.0 | 3 |
| 1752 | rf-induced heating dynamics of noncrystallized trapped ions. <i>Physical Review A</i> , 2022, 105, . | 1.0 | 2 |
| 1753 | Model-Free Quantum Control with Reinforcement Learning. <i>Physical Review X</i> , 2022, 12, . | 2.8 | 27 |
| 1754 | Entanglement of two superconducting qubits induced by a thermal noise of a cavity with Kerr medium taking into account the atomic coherence. <i>Physics of Wave Processes and Radio Systems</i> , 2022, 25, 7-15. | 0.1 | 1 |
| 1755 | Inverse iteration quantum eigensolvers assisted with a continuous variable. <i>Quantum Science and Technology</i> , 2022, 7, 025026. | 2.6 | 3 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 1756 | Approximate solutions for the ion-laser interaction in the high intensity regime: matrix method perturbative analysis. <i>Optical and Quantum Electronics</i> , 2022, 54, 1. | 1.5 | 0 |
| 1757 | Observation of Chemical Reactions between a Trapped Ion and Ultracold Feshbach Dimers. <i>Physical Review Letters</i> , 2022, 128, 103401. | 2.9 | 16 |
| 1758 | Quantum kernels with Gaussian state encoding for machine learning. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2022, 436, 128088. | 0.9 | 0 |
| 1759 | Superconducting Circuit Companion—An Introduction with Worked Examples. <i>PRX Quantum</i> , 2021, 2, . | 3.5 | 38 |
| 1760 | Phonon-mediated many-body quantum entanglement and logic gates in ion traps. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2022, 71, 1. | 0.2 | 0 |
| 1761 | The photon blockade effect of a complete Buck-Sukumar model. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2022, . | 0.2 | 0 |
| 1762 | Quantum control of molecules for fundamental physics. <i>Physical Review A</i> , 2022, 105, . | 1.0 | 21 |
| 1763 | General symmetry operators of the asymmetric quantum Rabi model. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2022, 55, 225306. | 0.7 | 4 |
| 1764 | Hierarchies of localizable entanglement due to spatial distribution of local noise. <i>Physical Review Research</i> , 2022, 4, . | 1.3 | 4 |
| 1765 | Mesoscopic quantum thermo-mechanics: A new frontier of experimental physics. <i>AVS Quantum Science</i> , 2022, 4, 020501. | 1.8 | 3 |
| 1769 | Partial thermalisation of a two-state system coupled to a finite quantum bath. <i>SciPost Physics</i> , 2022, 12, . | 1.5 | 6 |
| 1770 | Temperature estimation of a pair of trapped ions. <i>Scientific Reports</i> , 2022, 12, 6697. | 1.6 | 2 |
| 1771 | Resource-Efficient Dissipative Entanglement of Two Trapped-Ion Qubits. <i>Physical Review Letters</i> , 2022, 128, 080502. | 2.9 | 13 |
| 1772 | Quantum-limited thermometry of a Fermi gas with a charged spin particle. <i>Physical Review Research</i> , 2022, 4, . | 1.3 | 7 |
| 1773 | New designed helical resonator to improve measurement accuracy of magic radio frequency. <i>Chinese Physics B</i> , 2022, 31, 093201. | 0.7 | 1 |
| 1774 | Experimental Realization of the Rabi-Hubbard Model with Trapped Ions. <i>Physical Review Letters</i> , 2022, 128, 160504. | 2.9 | 21 |
| 1775 | Efficiently fueling a quantum engine with incompatible measurements. <i>Physical Review E</i> , 2022, 105, 044137. | 0.8 | 18 |
| 1776 | Raman imaging of atoms inside a high-bandwidth cavity. <i>Physical Review A</i> , 2022, 105, . | 1.0 | 1 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1777 | An introduction to the surface code. SciPost Physics Lecture Notes, 0, , . | 0.0 | 3 |
| 1778 | Quantum Computing by Coherent Cooling. Physical Review A, 2022, 105, . | 1.0 | 2 |
| 1779 | Critical quantum metrology with fully-connected models: from Heisenberg to Kibbleâ€™Zurek scaling. Quantum Science and Technology, 2022, 7, 035010. | 2.6 | 17 |
| 1780 | Harmonic oscillator kicked by spin measurements: A Floquet-like system without a classical analog. Physical Review A, 2022, 105, . | 1.0 | 0 |
| 1781 | Single electrons on solid neon as a solid-state qubit platform. Nature, 2022, 605, 46-50. | 13.7 | 22 |
| 1782 | Quantum Brain Networks: A Perspective. Electronics (Switzerland), 2022, 11, 1528. | 1.8 | 2 |
| 1783 | Quantum non-Gaussianity of light and atoms. Progress in Quantum Electronics, 2022, 83, 100395. | 3.5 | 11 |
| 1784 | Emerging qubit systems: Guest editorial. Applied Physics Letters, 2022, 120, 190401. | 1.5 | 0 |
| 1785 | Exact master equation for an open Jaynesâ€™Cummings system. Annals of Physics, 2022, 441, 168890. | 1.0 | 0 |
| 1786 | A digital quantum simulation of the Agassi model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 829, 137133. | 1.5 | 8 |
| 1787 | Distinguishing phases via non-Markovian dynamics of entanglement in topological quantum codes under parallel magnetic field. Physical Review A, 2022, 105, . | 1.0 | 2 |
| 1788 | Industrially microfabricated ion trap with 1Â€V trap depth. Quantum Science and Technology, 2022, 7, 035015. | 2.6 | 11 |
| 1789 | Analyzing the Rydberg-based optical-metastable-ground architecture for ^{171}Yb nuclear spins. Physical Review A, 2022, 105, . | 1.0 | 15 |
| 1790 | One decade of quantum optimal control in the chopped random basis. Reports on Progress in Physics, 2022, 85, 076001. | 8.1 | 31 |
| 1792 | Ultracold ion-atom experiments: cooling, chemistry, and quantum effects. Advances in Atomic, Molecular and Optical Physics, 2022, , . | 2.3 | 0 |
| 1793 | Tensor lattice field theory for renormalization and quantum computing. Reviews of Modern Physics, 2022, 94, . | 16.4 | 27 |
| 1794 | Quasienergy operators and generalized squeezed states for systems of trapped ions. Annals of Physics, 2022, 442, 168926. | 1.0 | 2 |
| 1795 | Advances in the study of ion trap structures in quantum computation and simulation. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 133701. | 0.2 | 0 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 1796 | The photon blockade effect of a complete Buck-Sukumar model. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 134203. | 0.2 | 1 |
| 1797 | Quantum Simulation of the Two-Dimensional Weyl Equation in a Magnetic Field. Physical Review Letters, 2022, 128, . | 2.9 | 1 |
| 1798 | Long-Range Ising Interactions Mediated by $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"} \rangle \langle \text{mml:mi} \hat{\rho} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:msup} \langle \text{mml:mi} \hat{\rho} \rangle \langle \text{mml:mn} 4 \rangle \langle \text{mml:msup} \langle \text{mml:math} \rangle \langle \text{mml:math} \rangle$ Fields: Probing the Renormalization of Sound in Crystals of Trapped Ions. PRX Quantum, 2022, 3, . | 3.5 | 1 |
| 1799 | Unresolved sideband photon recoil spectroscopy of molecular ions. Physical Review A, 2022, 105, . | 1.0 | 2 |
| 1800 | Progress of quantum entanglement in a trapped-ion based quantum computer. Current Applied Physics, 2022, , . | 1.1 | 3 |
| 1801 | Breaking reciprocity by designed loss. Journal of the Optical Society of America B: Optical Physics, 2022, 39, 1926. | 0.9 | 2 |
| 1802 | Observation of supersymmetry and its spontaneous breaking in a trapped ion quantum simulator. Nature Communications, 2022, 13, . | 5.8 | 3 |
| 1803 | Complete Physical Characterization of Quantum Nondemolition Measurements via Tomography. Physical Review Letters, 2022, 129, . | 2.9 | 3 |
| 1804 | Effective dynamics and quantum state engineering by periodic kicks. Chinese Physics B, 2023, 32, 044210. | 0.7 | 1 |
| 1805 | Experimental Bayesian Calibration of Trapped-Ion Entangling Operations. PRX Quantum, 2022, 3, . | 3.5 | 5 |
| 1806 | Molecular Vibrational Polaritons Towards Quantum Technologies. Advanced Quantum Technologies, 2022, 5, . | 1.8 | 4 |
| 1807 | Quantum Non-Gaussianity of Multiphonon States of a Single Atom. Physical Review Letters, 2022, 129, . | 2.9 | 3 |
| 1808 | Verification of Information Thermodynamics in a Trapped Ion System. Entropy, 2022, 24, 813. | 1.1 | 2 |
| 1810 | From observations to complexity of quantum states via unsupervised learning. Physical Review B, 2022, 106, . | 1.1 | 4 |
| 1811 | Reservoir-engineering shortcuts to adiabaticity. Physical Review Research, 2022, 4, . | 1.3 | 3 |
| 1812 | Probing Majorana modes via local spin dynamics. Physical Review B, 2022, 106, . | 1.1 | 1 |
| 1813 | Parallel Electromagnetically Induced Transparency near Ground-State Cooling of a Trapped-Ion Crystal. Physical Review Applied, 2022, 18, . | 1.5 | 4 |
| 1814 | High-resolution Spectroscopy and Single-photon Rydberg Excitation of Reconfigurable Ytterbium Atom Tweezer Arrays Utilizing a Metastable State. Journal of the Physical Society of Japan, 2022, 91, . | 0.7 | 13 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 1816 | A new look at the quantum mechanics of the harmonic oscillator. <i>Annalen Der Physik</i> , 2007, 519, 439-528. | 0.9 | 1 |
| 1817 | Interaction of a Three-Level Atom ($\hat{b}, \hat{V}, \hat{b}^\dagger$) with a Two-Mode Field Beyond Rotating Wave Approximation: Intermixed Intensity-Dependent Coupling. <i>International Journal of Optics and Photonics</i> , 2021, 15, 151-166. | 0.2 | 3 |
| 1818 | Frequency stabilization of multiple wavelength lasers based on a broadband spectrum. <i>Laser Physics Letters</i> , 2022, 19, 095701. | 0.6 | 2 |
| 1819 | 19 Quantum error correction. , 2022, , 241-256. | | 0 |
| 1820 | Optimal charging of a superconducting quantum battery. <i>Quantum Science and Technology</i> , 2022, 7, 045018. | 2.6 | 32 |
| 1822 | QASMBench: A Low-Level Quantum Benchmark Suite for NISQ Evaluation and Simulation. <i>ACM Transactions on Quantum Computing</i> , 2023, 4, 1-26. | 2.6 | 22 |
| 1824 | Cavity-Enhanced Optical Lattices for Scaling Neutral Atom Quantum Technologies to Higher Qubit Numbers. <i>PRX Quantum</i> , 2022, 3, . | 3.5 | 9 |
| 1825 | Quantum state interrogation using a preshaped free electron wavefunction. <i>Physical Review Research</i> , 2022, 4, . | 1.3 | 7 |
| 1826 | A New Mechanism for Sympathetic Cooling of Atoms and Ions in Atomic and Ion-Atomic Traps. <i>Physics of Particles and Nuclei</i> , 2022, 53, 795-799. | 0.2 | 0 |
| 1827 | Measurement of dc and ac Electric Fields inside an Atomic Vapor Cell with Wall-Integrated Electrodes. <i>Physical Review Applied</i> , 2022, 18, . | 1.5 | 9 |
| 1828 | N -Body Interactions between Trapped Ion Qubits via Spin-Dependent Squeezing. <i>Physical Review Letters</i> , 2022, 129, . | 2.9 | 17 |
| 1829 | Monitoring-induced entanglement entropy and sampling complexity. <i>Physical Review Research</i> , 2022, 4, . | 1.3 | 3 |
| 1830 | Realizing coherently convertible dual-type qubits with the same ion species. <i>Nature Physics</i> , 2022, 18, 1058-1061. | 6.5 | 19 |
| 1831 | Picosecond ion-qubit manipulation and spin-phonon entanglement with resonant laser pulses. <i>Physical Review A</i> , 2022, 106, . | 1.0 | 6 |
| 1832 | Surface-Induced Decoherence and Heating of Charged Particles. <i>PRX Quantum</i> , 2022, 3, . | 3.5 | 1 |
| 1833 | Squeezing-enhanced parameter estimation with a hybrid spin-oscillator interferometer. <i>Physical Review A</i> , 2022, 106, . | 1.0 | 2 |
| 1834 | Noise-Tolerant Optomechanical Entanglement via Synthetic Magnetism. <i>Physical Review Letters</i> , 2022, 129, . | 2.9 | 36 |
| 1835 | Optical measurement of electron spins in quantum dots: quantum Zeno effects. <i>Nanoscale</i> , 2022, 14, 13284-13291. | 2.8 | 1 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 1836 | Diamond Integrated Quantum Nanophotonics: Spins, Photons and Phonons. Journal of Lightwave Technology, 2022, 40, 7538-7571. | 2.7 | 15 |
| 1837 | Stable Turnkey Laser System for a Yb/Ba Trapped-Ion Quantum Computer. IEEE Transactions on Quantum Engineering, 2022, 3, 1-8. | 2.9 | 3 |
| 1838 | High-fidelity rf/microwave-based universal control of trapped ion qubits. , 2022, , . | | 1 |
| 1839 | Sculpting bosonic states with arithmetic subtractions. New Journal of Physics, 2022, 24, 083023. | 1.2 | 2 |
| 1840 | NISQ computing: where are we and where do we go?. AAPPS Bulletin, 2022, 32, . | 2.7 | 38 |
| 1841 | Detection of DC electric forces with zeptonewton sensitivity by single-ion phonon laser. Science China: Physics, Mechanics and Astronomy, 2022, 65, . | 2.0 | 3 |
| 1842 | Generating tensor-network states via combination of phonons and qubits in a trapped-ion platform. Physical Review A, 2022, 106, . | 1.0 | 1 |
| 1843 | Classy disorder-induced effects in noisy dynamics of Bose-Hubbard and Fermi-Hubbard systems. Journal of Physics B: Atomic, Molecular and Optical Physics, 2022, 55, 205502. | 0.6 | 1 |
| 1844 | Experimental Demonstration of Swift Analytical Universal Control Over Nearby Transitions. Physical Review Applied, 2022, 18, . | 1.5 | 1 |
| 1845 | Demonstration of a quantum advantage by a joint detection receiver for optical communication using quantum belief propagation on a trapped-ion device. Physical Review A, 2022, 106, . | 1.0 | 2 |
| 1846 | <i>Ab initio</i> quantum theory of mass defect and time dilation in trapped-ion optical clocks. Physical Review A, 2022, 106, . | 1.0 | 4 |
| 1847 | A frequency comb stabilized Ti:Sa laser as a self-reference for ion-trap experiments with a ⁴⁰ Ca ⁺ ion. Review of Scientific Instruments, 2022, 93, 093304. | 0.6 | 0 |
| 1848 | Observation of Non-Markovian Spin Dynamics in a Jaynes-Cummings-Hubbard Model Using a Trapped-Ion Quantum Simulator. Physical Review Letters, 2022, 129, . | 2.9 | 8 |
| 1849 | Number-resolved detection of dark ions in Coulomb crystals. Physical Review A, 2022, 106, . | 1.0 | 1 |
| 1850 | Manipulating the non-Hermitian skin effect via electric fields. Physical Review B, 2022, 106, . | 1.1 | 7 |
| 1851 | Symmetry operators of the asymmetric two-photon quantum Rabi model. Journal of Physics A: Mathematical and Theoretical, 0, , . | 0.7 | 0 |
| 1852 | Coherent control of a local phonon in trapped ions using dynamical decoupling. Physical Review A, 2022, 106, . | 1.0 | 1 |
| 1853 | Pauli blocking of stimulated emission in a degenerate Fermi gas. Nature Communications, 2022, 13, . | 5.8 | 1 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1854 | Generation of Schrödinger Cat States in a Hybrid Cavity Optomechanical System. <i>Entropy</i> , 2022, 24, 1554. | 1.1 | 1 |
| 1855 | Superior dark-state cooling via nonreciprocal couplings in trapped atoms. <i>New Journal of Physics</i> , 0, , . | 1.2 | 5 |
| 1856 | Para-Bose oscillator algebras of odd orders: x-representations and Wigner functions for coherent and cat states and their photon-added and photon-subtracted counterparts. <i>European Physical Journal Plus</i> , 2022, 137, . | 1.2 | 0 |
| 1857 | Effect of micromotion and local stress in quantum simulations with trapped ions in optical tweezers. <i>Physical Review A</i> , 2022, 106, . | 1.0 | 1 |
| 1858 | Numerical Simulation of the Performance of Single Qubit Gates for Trapped Ions. <i>JETP Letters</i> , 2022, 116, 580-585. | 0.4 | 1 |
| 1859 | Ion trap with gold-plated alumina: Substrate and surface characterization. <i>AIP Advances</i> , 2022, 12, 115006. | 0.6 | 1 |
| 1860 | Acoustic charge transport in organic semiconductor films. <i>Journal Physics D: Applied Physics</i> , 2023, 56, 015102. | 1.3 | 2 |
| 1861 | Correlations dynamics of two-spin XYZ Heisenberg model via negativity and skew information. <i>International Journal of Quantum Information</i> , 2022, 20, . | 0.6 | 1 |
| 1862 | Sympathetic electromagnetically-induced-transparency ground state cooling of a $^{40}\text{Ca}^{+}$ - $^{27}\text{Al}^{+}$ pair in a $^{27}\text{Al}^{+}$ clock. <i>Chinese Physics B</i> , 0, , . | 0.7 | 0 |
| 1863 | Applications of optical microcombs. <i>Advances in Optics and Photonics</i> , 2023, 15, 86. | 12.1 | 37 |
| 1864 | Amplifying quantum correlations with quench dynamics in a quantum spin chain: Steady-states versus ground-states. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2022, 608, 128314. | 1.2 | 1 |
| 1865 | Quantum dense coding network using multimode squeezed states of light. <i>Physical Review A</i> , 2022, 106, . | 1.0 | 0 |
| 1866 | The spin-one DKP oscillator in the plane with an external magnetic field. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2023, 457, 128538. | 0.9 | 6 |
| 1867 | Demonstration and operation of quantum harmonic oscillators in an AlGaAs-GaAs heterostructure. <i>Frontiers of Physics</i> , 2023, 18, . | 2.4 | 0 |
| 1868 | Thermal-noise-resistant optomechanical entanglement via general dark-mode control. <i>Physical Review A</i> , 2022, 106, . | 1.0 | 8 |
| 1869 | Non-Markovian disentanglement dynamics in double-giant-atom waveguide-QED systems. <i>Physical Review A</i> , 2022, 106, . | 1.0 | 19 |
| 1870 | Numerical investigation of a segmented-blade ion trap with biasing rods. <i>Applied Physics B: Lasers and Optics</i> , 2023, 129, . | 1.1 | 0 |
| 1871 | Observation of Spin-Tensor Induced Topological Phase Transitions of Triply Degenerate Points with a Trapped Ion. <i>Physical Review Letters</i> , 2022, 129, . | 2.9 | 2 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1872 | Controllable Multiregister Transport on a Photonic Chip. ACS Photonics, 2022, 9, 3841-3847. | 3.2 | 0 |
| 1873 | Effects of autocorrelated disorder on the dynamics in the vicinity of the many-body localization transition. Physical Review B, 2022, 106, . | 1.1 | 3 |
| 1874 | Coherent interaction of multistate quantum systems possessing the Wigner–Majorana and Morris–Shore dynamic symmetries with pulse trains. Journal of Physics B: Atomic, Molecular and Optical Physics, 2023, 56, 014001. | 0.6 | 1 |
| 1875 | Quantum thermometry with a dissipative quantum Rabi system. European Physical Journal Plus, 2022, 137, . | 1.2 | 2 |
| 1876 | Coherent Transfer of Transverse Optical Momentum to the Motion of a Single Trapped Ion. Physical Review Letters, 2022, 129, . | 2.9 | 4 |
| 1877 | Lindbladian-Induced Alignment in Quantum Measurements. Foundations of Physics, 2023, 53, . | 0.6 | 0 |
| 1878 | Colloquium : Cavity-enhanced quantum network nodes. Reviews of Modern Physics, 2022, 94, . | 16.4 | 15 |
| 1880 | Quantum Nonreciprocal Interactions via Dissipative Gauge Symmetry. PRX Quantum, 2023, 4, . | 3.5 | 4 |
| 1881 | Slow melting of a disordered quantum crystal. Physical Review B, 2023, 107, . | 1.1 | 1 |
| 1882 | Probing Phases of Quantum Matter with an Ion-Trap Tensor-Network Quantum Eigensolver. Physical Review X, 2022, 12, . | 2.8 | 4 |
| 1883 | Quantum simulation of weak-field light-matter interactions. Physical Review Research, 2023, 5, . | 1.3 | 2 |
| 1884 | Cooling and Trapping. Springer Handbooks, 2023, , 1141-1155. | 0.3 | 0 |
| 1885 | Micromotion-synchronized pulsed Doppler cooling of trapped ions. Physical Review A, 2023, 107, . | 1.0 | 1 |
| 1886 | Enhanced Tripartite Interactions in Spin-Magnon-Mechanical Hybrid Systems. Physical Review Letters, 2023, 130, . | 2.9 | 12 |
| 1887 | Trap-Assisted Complexes in Cold Atom-Ion Collisions. Physical Review Letters, 2023, 130, . | 2.9 | 3 |
| 1888 | Simultaneous ground-state cooling of two mechanical modes of a levitated nanoparticle. Nature Physics, 2023, 19, 1009-1013. | 6.5 | 26 |
| 1889 | Topological synchronization of quantum van der Pol oscillators. Physical Review Research, 2023, 5, . | 1.3 | 3 |
| 1890 | Trapped ions beyond carrier and sideband interactions. Physical Review A, 2023, 107, . | 1.0 | 0 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1891 | The physics and applications of strongly coupled Coulomb systems (plasmas) levitated in electrodynamic traps. Physics Reports, 2023, 1016, 1-103. | 10.3 | 3 |
| 1892 | The Possibility of Generating Photon Cluster using Ions in a Linear Trap. , 2022, , . | | 0 |
| 1893 | Coherent resonant coupling between atoms and a mechanical oscillator mediated by cavity-vacuum fluctuations. Physical Review Research, 2023, 5, . | 1.3 | 4 |
| 1894 | Offset Lock with 440 GHz Range using Electro-Optic Modulation. , 0, , . | | 0 |
| 1895 | Interaction of twisted light with a trapped atom: Interplay between electronic and motional degrees of freedom. Physical Review A, 2023, 107, . | 1.0 | 4 |
| 1896 | The Physical Foundation of Quantum Theory. Foundations of Physics, 2023, 53, . | 0.6 | 0 |
| 1897 | Late-time critical behavior of local stringlike observables under quantum quenches. Physical Review B, 2023, 107, . | 1.1 | 1 |
| 1898 | Strong Coupling of a Gd \rightarrow $3d$ \rightarrow $4f$ Multilevel Spin System to an On-Chip Superconducting Resonator. Physical Review Applied, 2023, 19, . | 1.5 | 0 |
| 1899 | Rydberg ions in coherent motional states: a new method for determining the polarizability of Rydberg ions. New Journal of Physics, 2023, 25, 033020. | 1.2 | 1 |
| 1900 | Enhanced dark-state sideband cooling in trapped atoms via photon-mediated dipole-dipole interactions. Physical Review A, 2023, 107, . | 1.0 | 2 |
| 1901 | Scalable and programmable phononic network with trapped ions. Nature Physics, 2023, 19, 877-883. | 6.5 | 6 |
| 1902 | Influence of simultaneous weak measurements in Heisenberg uncertainty relation. Europhysics Letters, 2023, 141, 68002. | 0.7 | 0 |
| 1903 | Photonic shielding in giant resonator system. Wuli Xuebao/Acta Physica Sinica, 2023, 72, 094202. | 0.2 | 0 |
| 1904 | Parallel tomography of quantum non-demolition measurements in multi-qubit devices. Npj Quantum Information, 2023, 9, . | 2.8 | 2 |
| 1905 | Multiphonon Bundle Emission in a Strongly Coupling Cavity Optomechanical System. Annalen Der Physik, 2023, 535, . | 0.9 | 0 |
| 1906 | Vacuum-enhanced charging of a quantum battery. Physical Review A, 2023, 107, . | 1.0 | 5 |
| 1907 | The resonance fluorescence cascade of a laser-excited two-level atom. , 2023, 2023, . | | 1 |
| 1908 | Measurement-based ground-state cooling of a trapped-ion oscillator. Physical Review A, 2023, 107, . | 1.0 | 0 |

| # | ARTICLE | IF | CITATIONS |
|------|---|-----|-----------|
| 1909 | Chiral-coupling-assisted refrigeration in trapped ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2023, 56, 105502. | 0.6 | 2 |
| 1910 | Many-body bound states and induced interactions of charged impurities in a bosonic bath. Nature Communications, 2023, 14, . | 5.8 | 7 |
| 1911 | Effects of micromotion on the squeezing and on the dynamical behaviour of ion in a Paul trap. European Physical Journal Plus, 2023, 138, . | 1.2 | 0 |
| 1912 | Control of an Atomic Quadrupole Transition in a Phase-Stable Standing Wave. Physical Review Letters, 2023, 130, . | 2.9 | 4 |
| 1913 | Entangling gates for trapped-ion quantum computation and quantum simulation. Journal of the Korean Physical Society, 0, , . | 0.3 | 2 |
| 1914 | Engineering Dynamically Decoupled Quantum Simulations with Trapped Ions. PRX Quantum, 2023, 4, . | 3.5 | 9 |
| 1915 | Vibration-assisted multiphoton resonance and multi-ion excitation. Physical Review Research, 2023, 5, . | 1.3 | 1 |
| 1916 | http://www.w3.org/1998/Math/MathML S 0 1 P 2 3 magnetic quadrupole transition in neutral strontium. Physical Review Research, 2023, 5, . | 1.3 | 4 |
| 1917 | Controlling gain with loss: Bounds on localizable entanglement in multiqubit systems. Physical Review A, 2023, 107, . | 1.0 | 1 |
| 1918 | Continuous Raman sideband cooling beyond the Lamb-Dicke regime in a trapped ion chain. Physical Review Research, 2023, 5, . | 1.3 | 3 |
| 1919 | Strategies for a practical advantage of fault-tolerant circuit design in noisy trapped-ion quantum computers. Physical Review A, 2023, 107, . | 1.0 | 4 |
| 1948 | Quantum Computing at IQM. Computational Methods in Applied Sciences (Springer), 2023, , 373-393. | 0.1 | 0 |
| 1955 | Coherent and incoherent trapped-ion quantum control in structured lightfields. , 2023, , . | | 0 |
| 1989 | QASMTrans: A QASM Quantum Transpiler Framework for NISQ Devices. , 2023, , . | | 1 |
| 1999 | Experiments in Cavity QED and with Trapped Ions. , 2023, , 308-337. | | 0 |
| 2001 | Control Infrastructure for Near-Term Long-Chain QCCD. , 2023, , . | | 0 |
| 2007 | Molecular Structure and Production of Ultracold ${}^{88}\text{Sr}_2$ in an Optical Lattice. Springer Theses, 2024, , 13-38. | 0.0 | 0 |
| 2014 | Applications of the Matrix Perturbation Method. , 2023, , 107-136. | | 0 |

| # | ARTICLE | IF | CITATIONS |
|---|---------|----|-----------|
|---|---------|----|-----------|