Peng-Bo Li

List of Publications by Year
in descending order

61 papers	1,205 citations	471477 17 h-index	395678 33 g-index
61 all docs	61 docs citations	61 times ranked	601 citing authors

#	Article	IF	Citations
1	Exponentially Enhanced Light-Matter Interaction, Cooperativities, and Steady-State Entanglement Using Parametric Amplification. Physical Review Letters, 2018, 120, 093601.	7.8	158
2	Hybrid Quantum Device with Nitrogen-Vacancy Centers in Diamond Coupled to Carbon Nanotubes. Physical Review Letters, 2016, 117, 015502.	7.8	127
3	Hybrid Quantum Device Based on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>N</mml:mi><mml:mi>V</mml:mi></mml:math>Centers in Diamond Nanomechanical Resonators Plus Superconducting Waveguide Cavities. Physical Review Applied, 2015, 4, .	3.8	71
4	Enhancing Spin-Phonon and Spin-Spin Interactions Using Linear Resources in a Hybrid Quantum System. Physical Review Letters, 2020, 125, 153602.	7.8	63
5	Quantum-information transfer with nitrogen-vacancy centers coupled to a whispering-gallery microresonator. Physical Review A, 2011, 83, .	2.5	61
6	Quantum-information transfer in a coupled resonator waveguide. Physical Review A, 2009, 79, .	2.5	57
7	Dissipative preparation of entangled states between two spatially separated nitrogen-vacancy centers. Physical Review A, 2012, 85, .	2.5	57
8	Hybrid Quantum System with Nitrogen-Vacancy Centers in Diamond Coupled to Surface-Phonon Polaritons in Piezomagnetic Superlattices. Physical Review Applied, 2018, 10, .	3.8	33
9	Quantum microwave-optical interface with nitrogen-vacancy centers in diamond. Physical Review A, 2017, 96, .	2.5	32
10	Engineering two-mode entangled states between two superconducting resonators by dissipation. Physical Review A, 2012, 86, .	2.5	29
11	Preparing multiparticle entangled states of nitrogen-vacancy centers via adiabatic ground-state transitions. Physical Review A, 2018, 98, .	2.5	29
12	Unconventional Quantum Sound-Matter Interactions in Spin-Optomechanical-Crystal Hybrid Systems. Physical Review Letters, 2021, 126, 203601.	7.8	28
13	Dissipation-assisted generation of steady-state single-mode squeezing of collective excitations in a solid-state spin ensemble. Physical Review A, 2013, 88, .	2.5	26
14	Phononic-waveguide-assisted steady-state entanglement of silicon-vacancy centers. Physical Review A, 2020, 101, .	2.5	23
15	Controllable generation of two-mode-entangled states in two-resonator circuit QED with a single gap-tunable superconducting qubit. Physical Review A, 2014, 90, .	2.5	21
16	Simulation of topological phases with color center arrays in phononic crystals. Physical Review Research, 2020, 2, .	3.6	21
17	Robust continuous-variable entanglement of microwave photons with cavity electromechanics. Physical Review A, 2013, 88, .	2.5	19
18	Simulating the Lipkin-Meshkov-Glick model in a hybrid quantum system. Physical Review A, 2017, 96, .	2.5	19

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19	Deterministic generation of multiparticle entanglement in a coupled cavity-fiber system. Optics Express, 2011, 19, 1207.	3.4	18
20	Multiphonon interactions between nitrogen-vacancy centers and nanomechanical resonators. Physical Review A, 2019, 100, .	2.5	16
21	Interfacing a Topological Qubit with a Spin Qubit in a Hybrid Quantum System. Physical Review Applied, 2019, 11, .	3.8	16
22	Nonreciprocal Phonon Blockade in a Spinning Acoustic Ring Cavity Coupled to a Two-Level System. Physical Review Applied, 2022, 17, .	3.8	16
23	Generation of two-mode field squeezing through selective dynamics in cavity QED. Physical Review A, 2008, 77, .	2.5	15
24	Enhanced electromechanical coupling of a nanomechanical resonator to coupled superconducting cavities. Scientific Reports, 2016, 6, 19065.	3.3	15
25	Preparing entangled states between two NV centers via the damping of nanomechanical resonators. Scientific Reports, 2017, 7, 14116.	3.3	14
26	Preparing ground states and squeezed states of nanomechanical cantilevers by fast dissipation. Physical Review A, 2014, 90, .	2.5	13
27	Coupling a single nitrogen-vacancy center with a superconducting qubit via the electro-optic effect. Physical Review A, 2018, 97, .	2.5	13
28	The NV metamaterial: Tunable quantum hyperbolic metamaterial using nitrogen vacancy centers in diamond. Physical Review B, 2021, 104, .	3.2	13
29	Dark-state polaritons for quantum memory in a five-levelM-type atomic ensemble. Physical Review A, 2006, 73, .	2.5	12
30	Simulation of topological Zak phase in spin-phononic crystal networks. Physical Review Research, 2021, 3, .	3.6	12
31	Enhancing spin-photon coupling with a micromagnet. Physical Review A, 2021, 103, .	2.5	12
32	Controlled generation of field squeezing with cold atomic clouds coupled to a superconducting transmission line resonator. Physical Review A, 2010, 81, .	2.5	11
33	Geometrical parameters controlled focusing and enhancing near field in infinite circular metal-dielectric multilayered cylinder. Applied Physics Letters, 2013, 102, .	3.3	11
34	Coherent frequency down-conversions and entanglement generation in a Sagnac interferometer. Optics Express, 2017, 25, 16151.	3.4	10
35	Dissipation-assisted preparation of steady spin-squeezed states of SiV centers. Physical Review A, 2021, 103, .	2.5	9
36	Generation of Ising interaction and cluster states in a one-dimensional coupled resonator waveguide. European Physical Journal D, 2009, 55, 205-209.	1.3	8

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37	Engineering two-mode continuous-variable entangled states of distant atomic spin ensembles with superconducting quantum circuits. Physical Review A, 2012, 85, .	2.5	8
38	Generation of squeezed states in coupled cavity chains via dissipation of gap-tunable qubits. Physical Review A, 2014, 90, .	2.5	8
39	Fifth-order nonlinearity and 3-qubit phase gate in a five-level tripod atomic system. Journal of the Optical Society of America B: Optical Physics, 2008, 25, 504.	2.1	7
40	Engineering squeezed states of microwave radiation with circuit quantum electrodynamics. Physical Review A, 2011, 83, .	2.5	7
41	Generation of two-mode entanglement between separated cavities. Journal of the Optical Society of America B: Optical Physics, 2009, 26, 189.	2.1	6
42	Preparing Squeezed Spin States in a Spinâ€“Mechanical Hybrid System with Siliconâ€Vacancy Centers. Advanced Quantum Technologies, 2020, 3, 2000034.	3.9	6
43	Generation of Greenberger-Horne-Zeilinger states for silicon-vacancy centers using a decoherence-free subspace. Physical Review A, 2022, 105, .	2.5	6
44	Generation and replication of continuous-variable quadripartite cluster and Greenberger-Horne-Zeilinger states in four chains of superconducting transmission line resonators. Physical Review A, 2016, 93, .	2.5	5
45	Generation of multiparticle entangled states of nitrogen-vacancy centers with carbon nanotubes. Quantum Information Processing, 2020, 19, 1.	2.2	5
46	Effective generation of polarization-entangled photon pairs in a cavity-QED system. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 5959-5963.	2.1	4
47	Engineering two-mode squeezed states of cold atomic clouds with a superconducting stripline resonator. Optics Communications, 2011, 284, 294-296.	2.1	4
48	Proposal for a quantum delayed-choice experiment with a spin-mechanical setup. Physical Review A, 2016, 94, .	2.5	4
49	Preparation of entangled states of microwave photons in a hybrid system via the electro-optic effect. Optics Express, 2017, 25, 28305.	3.4	4
50	Chiral spin-phonon bound states and spin-spin interactions with phononic lattices. Physical Review Research, 2022, 4, .	3.6	4
51	QUANTUM PHASE GATES WITH TRAPPED ATOMS COUPLING TO A SUPERCONDUCTING TRANSMISSION LINE RESONATOR. International Journal of Quantum Information, 2011, 09, 583-591.	1.1	3
52	One-step generation of Greenbergerâ€“Horneâ€“Zeilinger states of multi solid-state spin qubits. Journal of Modern Optics, 2012, 59, 1617-1623.	1.3	3
53	Quantum information transfer with hybrid NV center-photon qubit encoding. Journal of Modern Optics, 2015, 62, 487-492.	1.3	2
54	Two-mode squeezing generation in hybrid chains of superconducting resonators and nitrogen-vacancy-center ensembles. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 035504.	1.5	2

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55	Entangling a single NV centre with a superconducting qubit via parametric couplings between photons and phonons in a hybrid system. Journal of Modern Optics, 2016, 63, 2173-2179.	1.3	2
56	Strong Twoâ€Phonon Correlations and Bound States in the Continuum in Phononic Waveguides with Embedded SiV Centers. Advanced Quantum Technologies, 2021, 4, 2100074.	3.9	2
57	Vortexâ€“photonâ€“spin tripartite entanglement in a hybrid quantum system. Quantum Information Processing, 2021, 20, 1.	2.2	2
58	Quantum interferences in four-wave mixing processes inside a cavity driven by quantized fields. Chinese Physics B, 2011, 20, 054202.	1.4	1
59	The Nonlinear Saturation Absorption of Nanometric Metallic Shell Controlled by the Local Dielectric Constant and Shell Thickness. Journal of Computational and Theoretical Nanoscience, 2013, 10, 2595-2599.	0.4	1
60	Efficient scheme for entangled states and quantum information transfer with trapped atoms in a resonator. Chinese Physics B, 2011, 20, 090304.	1.4	1
61	REALIZATION OF FAST QUANTUM INFORMATION TRANSFER AND ENTANGLEMENT WITH SUPERCONDUCTING FLUX QUBITS COUPLED TO A RESONATOR. International Journal of Quantum Information, 2013, 11, 1350040.	1.1	0