

# Jie-Qiao Liao

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3943057/publications.pdf>

Version: 2024-02-01

57  
papers

2,848  
citations

185998

28  
h-index

168136

53  
g-index

58  
all docs

58  
docs citations

58  
times ranked

1215  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nonreciprocal Photon Blockade. <i>Physical Review Letters</i> , 2018, 121, 153601.	2.9	270
2	Photon blockade in quadratically coupled optomechanical systems. <i>Physical Review A</i> , 2013, 88, .	1.0	242
3	Steady-state mechanical squeezing in an optomechanical system via Duffing nonlinearity. <i>Physical Review A</i> , 2015, 91, .	1.0	165
4	Macroscopic Quantum Superposition in Cavity Optomechanics. <i>Physical Review Letters</i> , 2016, 116, 163602.	2.9	139
5	Correlated two-photon transport in a one-dimensional waveguide side-coupled to a nonlinear cavity. <i>Physical Review A</i> , 2010, 82, .	1.0	137
6	Entangling two macroscopic mechanical mirrors in a two-cavity optomechanical system. <i>Physical Review A</i> , 2014, 89, .	1.0	137
7	Parametric generation of quadrature squeezing of mirrors in cavity optomechanics. <i>Physical Review A</i> , 2011, 83, .	1.0	124
8	Controlling the transport of single photons by tuning the frequency of either one or two cavities in an array of coupled cavities. <i>Physical Review A</i> , 2010, 81, .	1.0	123
9	Correlated two-photon scattering in cavity optomechanics. <i>Physical Review A</i> , 2013, 87, .	1.0	109
10	Spectrum of single-photon emission and scattering in cavity optomechanics. <i>Physical Review A</i> , 2012, 85, .	1.0	106
11	Quantum switch for single-photon transport in a coupled superconducting transmission-line-resonator array. <i>Physical Review A</i> , 2009, 80, .	1.0	84
12	Nonreciprocal ground-state cooling of multiple mechanical resonators. <i>Physical Review A</i> , 2020, 102, .	1.0	82
13	Simultaneous cooling of coupled mechanical resonators in cavity optomechanics. <i>Physical Review A</i> , 2018, 98, .	1.0	71
14	Single-photon quadratic optomechanics. <i>Scientific Reports</i> , 2014, 4, 6302.	1.6	65
15	Photon blockade induced by atoms with Rydberg coupling. <i>Physical Review A</i> , 2013, 87, .	1.0	57
16	Tunable optomechanically induced transparency by controlling the dark-mode effect. <i>Physical Review A</i> , 2020, 102, .	1.0	55
17	Cooling of a mirror in cavity optomechanics with a chirped pulse. <i>Physical Review A</i> , 2011, 84, .	1.0	53
18	Quantum coherence in ultrastrong optomechanics. <i>Physical Review A</i> , 2015, 91, .	1.0	52

#	ARTICLE	IF	CITATIONS
19	Enhancement of mechanical effects of single photons in modulated two-mode optomechanics. <i>Physical Review A</i> , 2015, 92, .	1.0	51
20	Enhanced interferometry using squeezed thermal states and even or odd states. <i>Physical Review A</i> , 2014, 89, .	1.0	49
21	Generation of macroscopic Schrödinger-cat states in qubit-oscillator systems. <i>Physical Review A</i> , 2016, 93, .	1.0	48
22	Amplification of quantum discord between two uncoupled qubits in a common environment by phase decoherence. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2010, 43, 165503.	0.6	45
23	Single-particle machine for quantum thermalization. <i>Physical Review A</i> , 2010, 81, .	1.0	42
24	Coherent excitation-energy transfer and quantum entanglement in a dimer. <i>Physical Review A</i> , 2010, 82, .	1.0	41
25	Multiphoton blockade in the two-photon Jaynes-Cummings model. <i>Physical Review A</i> , 2020, 102, .	1.0	37
26	Enhancement of few-photon optomechanical effects with cross-Kerr nonlinearity. <i>Physical Review A</i> , 2019, 99, .	1.0	35
27	Enhancement of photon blockade effect via quantum interference. <i>Optics Express</i> , 2020, 28, 16175.	1.7	34
28	Modulated electromechanics: large enhancements of nonlinearities. <i>New Journal of Physics</i> , 2014, 16, 072001.	1.2	31
29	Quantum thermalization of two coupled two-level systems in eigenstate and bare-state representations. <i>Physical Review A</i> , 2011, 83, .	1.0	29
30	Exceptional Photon Blockade: Engineering Photon Blockade with Chiral Exceptional Points. <i>Laser and Photonics Reviews</i> , 2022, 16, .	4.4	28
31	Domino cooling of a coupled mechanical-resonator chain via cold-damping feedback. <i>Physical Review A</i> , 2021, 103, .	1.0	26
32	A new optical scheme for quantum teleportation of superposed coherent states. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2006, 358, 115-120.	0.9	25
33	Generalized ultrastrong optomechanical-like coupling. <i>Physical Review A</i> , 2020, 101, .	1.0	25
34	Dynamic sensitivity of photon-dressed atomic ensemble with quantum criticality. <i>Physical Review A</i> , 2009, 80, .	1.0	24
35	Quantum thermal discord in a two-spin-1/2 XXZ model. <i>Chinese Physics B</i> , 2010, 19, 100311.	0.7	23
36	Manipulating counter-rotating interactions in the quantum Rabi model via modulation of the transition frequency of the two-level system. <i>Physical Review A</i> , 2017, 96, .	1.0	23

#	ARTICLE	IF	CITATIONS
37	Near-complete teleportation of two-mode four-component entangled coherent states. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2007, 40, 1183-1194.	0.6	21
38	Generation of entangled coherent states of two cavity fields via coupling to a SQUID-based charge qubit. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2007, 40, 1845-1852.	0.6	17
39	Spectrometric reconstruction of mechanical-motional states in optomechanics. <i>Physical Review A</i> , 2014, 90, .	1.0	16
40	Quantum entanglement maintained by virtual excitations in an ultrastrongly-coupled-oscillator system. <i>Scientific Reports</i> , 2020, 10, 12557.	1.6	13
41	Preparation of hybrid entangled states and entangled coherent states for a single trapped ion in a cavity. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006, 39, 4709-4718.	0.6	12
42	Retrieval of photon blockade effect in the dispersive Jaynes-Cummings model. <i>Physical Review A</i> , 2022, 105, .	1.0	10
43	Nanomechanical resonator coupling with a double quantum dot: quantum state engineering. <i>European Physical Journal B</i> , 2008, 63, 79-83.	0.6	9
44	Generation of single entangled photon-phonon pairs via an atom-photon-phonon interaction. <i>Physical Review A</i> , 2019, 100, .	1.0	8
45	Optical normal-mode-induced phonon-sideband splitting in the photon-blockade effect. <i>Physical Review A</i> , 2021, 104, .	1.0	7
46	Spectrometric detection of weak forces in cavity optomechanics. <i>Optics Express</i> , 2020, 28, 28620.	1.7	7
47	Nonequilibrium thermal transport and photon squeezing in a quadratic qubit-resonator system. <i>Physical Review A</i> , 2021, 104, .	1.0	6
48	Dynamical emission of phonon pairs in optomechanical systems. <i>Physical Review A</i> , 2022, 105, .	1.0	6
49	Quantum Anti-Zeno Effect in Artificial Quantum Systems. <i>Communications in Theoretical Physics</i> , 2010, 54, 985-996.	1.1	4
50	Quantum Thermalization and Vanishing Thermal Entanglement in the Open Jaynes-Cummings Model. <i>Annalen Der Physik</i> , 2020, 532, 2000134.	0.9	4
51	Accelerated ground-state cooling of an optomechanical resonator via shortcuts to adiabaticity. <i>Physical Review A</i> , 2022, 105, .	1.0	4
52	All-optical quantum simulation of ultrastrong optomechanics. <i>Physical Review A</i> , 2022, 105, .	1.0	3
53	Spectral Characterization of Couplings in a Mixed Optomechanical Model. <i>Communications in Theoretical Physics</i> , 2019, 71, 939.	1.1	2
54	Supersensitive estimation of the coupling rate in cavity optomechanics with an impurity-doped Bose-Einstein condensate. <i>Optics Express</i> , 2020, 28, 22867.	1.7	2

#	ARTICLE	IF	CITATIONS
55	Quantum simulation of a three-mode optomechanical system based on the Fredkin-type interaction. Physical Review A, 2021, 104, .	1.0	2
56	Controllable cross-Kerr interaction between microwave photons in circuit quantum electrodynamics. Chinese Physics B, 2011, 20, 034203.	0.7	1
57	Quantum simulation of tunable and ultrastrong mixed-optomechanics. Optics Express, 2021, 29, 28202.	1.7	1