Lin Tian

List of Publications by Year
in descending order

64 papers	5,367 citations	126858 33 h-index	118793 62 g-index
65 all docs	65 docs citations	65 times ranked	3108 citing authors

#	Article	IF	Citations
1	Josephson Persistent-Current Qubit. Science, 1999, 285, 1036-1039.	6.0	1,160
2	Superconducting persistent-current qubit. Physical Review B, 1999, 60, 15398-15413.	1.1	597
3	Storing Optical Information as a Mechanical Excitation in a Silica Optomechanical Resonator. Physical Review Letters, 2011, 107, 133601.	2.9	301
4	Adiabatic State Conversion and Pulse Transmission in Optomechanical Systems. Physical Review Letters, 2012, 108, 153604.	2.9	260
5	Observation of Bogoliubov excitations in exciton-polariton condensates. Nature Physics, 2008, 4, 700-705.	6.5	245
6	Robust Photon Entanglement via Quantum Interference in Optomechanical Interfaces. Physical Review Letters, 2013, 110, 233602.	2.9	200
7	Steady-state mechanical squeezing in an optomechanical system via Duffing nonlinearity. Physical Review A, 2015, 91, .	1.0	165
8	Ground-state cooling of mechanical resonators. Physical Review B, 2004, 69, .	1.1	157
9	Coupled Ion-Nanomechanical Systems. Physical Review Letters, 2004, 93, 266403.	2.9	155
10	Optical wavelength conversion of quantum states with optomechanics. Physical Review A, 2010, 82, .	1.0	152
11	Optical Pumping of Quantum-Dot Nuclear Spins. Physical Review Letters, 2003, 91, 017402.	2.9	149
12	Macroscopic Quantum Superposition in Cavity Optomechanics. Physical Review Letters, 2016, 116, 163602.	2.9	139
13	Interfacing Quantum-Optical and Solid-State Qubits. Physical Review Letters, 2004, 92, 247902.	2.9	123
14	Robust quantum state transfer via topological edge states in superconducting qubit chains. Physical Review A, 2018, 98, .	1.0	99
15	Single-photon-driven high-order sideband transitions in an ultrastrongly coupled circuit-quantum-electrodynamics system. Physical Review A, 2017, 96, .	1.0	90
16	Strongly correlated polaritons in a two-dimensional array of photonic crystal microcavities. Physical Review A, 2008, 77, .	1.0	79
17	Optoelectromechanical transducer: Reversible conversion between microwave and optical photons. Annalen Der Physik, 2015, 527, 1-14.	0.9	77
18	Parametric coupling between macroscopic quantum resonators. New Journal of Physics, 2008, 10, 115001.	1.2	65

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19	Decoherence and relaxation of a superconducting quantum bit during measurement. Physical Review B, 2002, 65, .	1.1	64
20	Strong indirect coupling between graphene-based mechanical resonators via a phonon cavity. Nature Communications, 2018, 9, 383.	5.8	63
21	Optical directional amplification in a three-mode optomechanical system. Optics Express, 2017, 25, 18907.	1.7	61
22	Entanglement from a nanomechanical resonator weakly coupled to a single Cooper-pair box. Physical Review B, 2005, 72, .	1.1	57
23	Nonreciprocal quantum-state conversion between microwave and optical photons. Physical Review A, 2017, 96, .	1.0	57
24	Quantum coherence in ultrastrong optomechanics. Physical Review A, 2015, 91, .	1.0	52
25	Analog superconducting quantum simulator for Holstein polarons. Physical Review B, 2013, 88, .	1.1	50
26	Resonant cancellation of off-resonant effects in a multilevel qubit. Physical Review A, 2000, 62, .	1.0	48
27	Generation of macroscopic SchrÃ¶dinger-cat states in qubit-oscillator systems. Physical Review A, 2016, 93, .	1.0	48
28	Deterministic Generation of Entangled Photons in Superconducting Resonator Arrays. Physical Review Letters, 2011, 106, 257002.	2.9	44
29	Coherent phonon dynamics in spatially separated graphene mechanical resonators. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 5582-5587.	3.3	40
30	Ground state cooling of a nanomechanical resonator via parametric linear coupling. Physical Review B, 2009, 79, .	1.1	37
31	Engineering Superposition States and Tailored Probes for Nanoresonators via Open-Loop Control. Physical Review Letters, 2009, 102, 057208.	2.9	37
32	Circuit QED and Sudden Phase Switching in a Superconducting Qubit Array. Physical Review Letters, 2010, 105, 167001.	2.9	35
33	Optical wavelength conversion via optomechanical coupling in a silica resonator. Annalen Der Physik, 2015, 527, 100-106.	0.9	33
34	Coupling spin ensembles via superconducting flux qubits. Physical Review A, 2014, 89, .	1.0	32
35	Optomechanical transistor with mechanical gain. Physical Review A, 2018, 97, .	1.0	32
36	Witnessing topological Weyl semimetal phase in a minimal circuit-QED lattice. Quantum Science and Technology, 2016, 1, 015006.	2.6	31

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37	Quantum computing with atomic Josephson junction arrays. Physical Review A, 2003, 68, .	1.0	29
38	Transmon-based simulator of nonlocal electron-phonon coupling: A platform for observing sharp small-polaron transitions. Physical Review B, 2014, 89, .	1.1	29
39	Josephson Junction Microscope for Low-Frequency Fluctuators. Physical Review Letters, 2007, 99, 137002.	2.9	26
40	Cavity cooling of a mechanical resonator in the presence of a two-level-system defect. Physical Review B, 2011, 84, .	1.1	25
41	Generalized ultrastrong optomechanical-like coupling. Physical Review A, 2020, 101, .	1.0	25
42	Manipulating counter-rotating interactions in the quantum Rabi model via modulation of the transition frequency of the two-level system. Physical Review A, 2017, 96, .	1.0	23
43	Quantum information processing with trapped electrons and superconducting electronics. New Journal of Physics, 2013, 15, 073017.	1.2	20
44	Quantum phase transition in a multiconnected superconducting Jaynes-Cummings lattice. Physical Review B, 2015, 91, .	1.1	17
45	Topology-dependent quantum dynamics and entanglement-dependent topological pumping in superconducting qubit chains. Physical Review A, 2018, 98, .	1.0	17
46	Decoherence of the Superconducting Persistent Current Qubit. , 2000, , 429-438.		12
47	Engineering the quantum measurement process for the persistent current qubit. Physica C: Superconductivity and Its Applications, 2002, 368, 294-299.	0.6	11
48	Scheme for quantum teleportation between nanomechanical modes. Physical Review B, 2006, 74, .	1.1	11
49	Switchable bipartite and genuine tripartite entanglement via an optoelectromechanical interface. Physical Review A, 2020, 101, .	1.0	11
50	Parametric four-wave mixing toolbox for superconducting resonators. Physical Review B, 2012, 86, .	1.1	10
51	Correcting Low-Frequency Noise with Continuous Measurement. Physical Review Letters, 2007, 98, 153602.	2.9	9
52	Extreme quantum nonlinearity in superfluid thin-film surface waves. Npj Quantum Information, 2021, 7, .	2.8	9
53	Cavity-assisted dynamical quantum phase transition at bifurcation points. Physical Review A, 2016, 93, .	1.0	7
54	Scalable ion trap quantum computing without moving ions. European Physical Journal D, 2005, 32, 201-208.	0.6	6

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55	Quantum manipulation of low-frequency fluctuators by superconducting resonator. Physical Review B, 2009, 79, .	1.1	6
56	Superconducting circuit probe for analog quantum simulators. Physical Review A, 2015, 92, .	1.0	6
57	Quantum phase transition in a multiconnected Jaynes-Cummings lattice. Physical Review B, 2017, 96, .	1.1	6
58	Protecting superconducting qubits with a universal quantum degeneracy point. Superconductor Science and Technology, 2013, 26, 114002.	1.8	5
59	Reconstructing the ideal results of a perturbed analog quantum simulator. Physical Review A, 2018, 97, .	1.0	4
60	Projective measurement scheme for solid-state qubits. Physical Review B, 2003, 67, .	1.1	3
61	Robust preparation of many-body ground states in Jaynesâ€“Cummings lattices. Npj Quantum Information, 2021, 7, .	2.8	3
62	A Controllable Interaction Between Two-Level Systems Inside a Josephson Junction. IEEE Transactions on Applied Superconductivity, 2009, 19, 953-956.	1.1	2
63	Cool and Heavy. Physics Magazine, 2015, 8, .	0.1	1
64	A quantum optics approach to quantum state engineering and measurement in nano-mechanical structures. , 2004, 5468, 180.		0