Mauro Paternostro

List of Publications by Year
in descending order

291 papers	11,198 citations	26630 56 h-index	42399 92 g-index
293 all docs	293 docs citations	293 times ranked	5344 citing authors

#	Article	IF	Citations
1	Self-cooling of a micromirror by radiation pressure. Nature, 2006, 444, 67-70.	27.8	819
2	Spin Entanglement Witness for Quantum Gravity. Physical Review Letters, 2017, 119, 240401.	7.8	415
3	Experimental Reconstruction of Work Distribution and Study of Fluctuation Relations in a Closed Quantum System. Physical Review Letters, 2014, 113, 140601.	7.8	288
4	Creating and Probing Multipartite Macroscopic Entanglement with Light. Physical Review Letters, 2007, 99, 250401.	7.8	267
5	More bang for your buck: Super-adiabatic quantum engines. Scientific Reports, 2014, 4, 6208.	3.3	232
6	Geometrical characterization of non-Markovianity. Physical Review A, 2013, 88, .	2.5	212
7	Experimental Realization of Dicke States of up to Six Qubits for Multiparty Quantum Networking. Physical Review Letters, 2009, 103, 020503.	7.8	211
8	Non-Markovian quantum processes: Complete framework and efficient characterization. Physical Review A, 2018, 97, .	2.5	202
9	Measuring the Characteristic Function of the Work Distribution. Physical Review Letters, 2013, 110, 230602.	7.8	200
10	AEDGE: Atomic Experiment for Dark Matter and Gravity Exploration in Space. EPJ Quantum Technology, 2020, 7, .	6.3	190
11	Generation of entangled coherent states via cross-phase-modulation in a double electromagnetically induced transparency regime. Physical Review A, 2003, 67, .	2.5	165
12	Operational Markov Condition for Quantum Processes. Physical Review Letters, 2018, 120, 040405.	7.8	157
13	Irreversible entropy production: From classical to quantum. Reviews of Modern Physics, 2021, 93, .	45.6	157
14	Quantum Discord Bounds the Amount of Distributed Entanglement. Physical Review Letters, 2012, 109, 070501.	7.8	156
15	Perfect State Transfer on a Spin Chain without State Initialization. Physical Review Letters, 2008, 101, 230502.	7.8	131
16	Emergent Thermodynamics in a Quenched Quantum Many-Body System. Physical Review Letters, 2012, 109, 160601.	7.8	119
17	The role of quantum coherence in non-equilibrium entropy production. Npj Quantum Information, 2019, 5, .	6.7	115
18	Experimental Realization of Deutschâ€™s Algorithm in a One-Way Quantum Computer. Physical Review Letters, 2007, 98, 140501.	7.8	112

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19	Complete Conditions for Entanglement Transfer. Physical Review Letters, 2004, 92, 197901.	7.8	111
20	Reconstructing the dynamics of a movable mirror in a detuned optical cavity. New Journal of Physics, 2006, 8, 107-107.	2.9	105
21	Irreversibility and the Arrow of Time in a Quenched Quantum System. Physical Review Letters, 2015, 115, 190601.	7.8	105
22	Linear Optics Simulation of Quantum Non-Markovian Dynamics. Scientific Reports, 2012, 2, 968.	3.3	103
23	Shortcut to Adiabaticity in the Lipkin-Meshkov-Glick Model. Physical Review Letters, 2015, 114, 177206.	7.8	101
24	Observable quantum entanglement due to gravity. Npj Quantum Information, 2020, 6, .	6.7	100
25	Optomechanics for quantum technologies. Nature Physics, 2022, 18, 15-24.	16.7	100
26	Orthogonality catastrophe as a consequence of qubit embedding in an ultracold Fermi gas. Physical Review A, 2011, 84, .	2.5	99
27	Proposal for a Noninterferometric Test of Collapse Models in Optomechanical Systems. Physical Review Letters, 2014, 112, .	7.8	97
28	Parametric feedback cooling of levitated optomechanics in a parabolic mirror trap. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 1421.	2.1	95
29	Nonequilibrium Quantum Landauer Principle. Physical Review Letters, 2015, 114, 060602.	7.8	94
30	Daemonic ergotropy: enhanced work extraction from quantum correlations. Npj Quantum Information, 2017, 3, .	6.7	89
31	Entanglement detection in hybrid optomechanical systems. Physical Review A, 2011, 83, .	2.5	88
32	Memory-keeping effects and forgetfulness in the dynamics of a qubit coupled to a spin chain. Physical Review A, 2011, 83, .	2.5	88
33	Machine Learning-Based Classification of Vector Vortex Beams. Physical Review Letters, 2020, 124, 160401.	7.8	88
34	Landauerâ€™s Principle in Multipartite Open Quantum System Dynamics. Physical Review Letters, 2015, 115, 120403.	7.8	85
35	Single-Photon Excitation of Surface Plasmon Polaritons. Physical Review Letters, 2008, 101, 190504.	7.8	81
36	Simulation of quantum random walks using the interference of a classical field. Physical Review A, 2004, 69, .	2.5	79

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37	Non-Markovianity and system-environment correlations in a microscopic collision model. Physical Review A, 2014, 89, .	2.5	79
38	Macroscopic Quantum Resonators (MAQRO): 2015 update. EPJ Quantum Technology, 2016, 3, .	6.3	77
39	Entanglement between two superconducting qubits via interaction with nonclassical radiation. Physical Review B, 2004, 69, .	3.2	74
40	Faithful nonclassicality indicators and extremal quantum correlations in two-qubit states. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 352002.	2.1	73
41	Entanglement Reciprocation between Qubits and Continuous Variables. Physical Review Letters, 2006, 96, 080501.	7.8	71
42	Hamiltonian Tomography in an Access-Limited Setting without State Initialization. Physical Review Letters, 2009, 102, 187203.	7.8	70
43	Assessing the Nonequilibrium Thermodynamics in a Quenched Quantum Many-Body System via Single Projective Measurements. Physical Review X, 2014, 4, .	8.9	68
44	Implications of non-Markovian quantum dynamics for the Landauer bound. New Journal of Physics, 2016, 18, 123018.	2.9	68
45	Wigner Entropy Production Rate. Physical Review Letters, 2017, 118, 220601.	7.8	68
46	Experimental Engineering of Arbitrary Qudit States with Discrete-Time Quantum Walks. Physical Review Letters, 2019, 122, 020503.	7.8	68
47	Programmable linear quantum networks with a multimode fibre. Nature Photonics, 2020, 14, 139-142.	31.4	67
48	Dynamical entanglement transfer for quantum-information networks. Physical Review A, 2004, 70, .	2.5	66
49	Dynamical role of system-environment correlations in non-Markovian dynamics. Physical Review A, 2012, 86, .	2.5	66
50	Reconfigurable Long-Range Phonon Dynamics in Optomechanical Arrays. Physical Review Letters, 2014, 112, 133604.	7.8	66
51	Thermodynamics of Weakly Coherent Collisional Models. Physical Review Letters, 2019, 123, 140601.	7.8	66
52	Qubit-assisted thermometry of a quantum harmonic oscillator. Physical Review A, 2012, 86, .	2.5	64
53	Revealing Nonclassicality of Inaccessible Objects. Physical Review Letters, 2017, 119, 120402.	7.8	64
54	Experimental Distribution of Entanglement with Separable Carriers. Physical Review Letters, 2013, 111, 230504.	7.8	62

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55	Global quantum correlations in finite-size spin chains. New Journal of Physics, 2013, 15, 043033.	2.9	59
56	Failure of Local Realism Revealed by Extremely-Coarse-Grained Measurements. Physical Review Letters, 2009, 102, 060403.	7.8	58
57	Experimental Determination of Irreversible Entropy Production in out-of-Equilibrium Mesoscopic Quantum Systems. Physical Review Letters, 2018, 121, 160604.	7.8	58
58	Quantum-state transfer in imperfect artificial spin networks. Physical Review A, 2005, 71, .	2.5	56
59	Cold-Atom-Induced Control of an Optomechanical Device. Physical Review Letters, 2010, 104, 243602.	7.8	56
60	Distributing fully optomechanical quantum correlations. Physical Review A, 2011, 83, .	2.5	56
61	Testing wave-function-collapse models using parametric heating of a trapped nanosphere. Physical Review A, 2016, 94, .	2.5	56
62	Non-Markovianity, coherence, and system-environment correlations in a long-range collision model. Physical Review A, 2017, 96, .	2.5	56
63	Testing the gravitational field generated by a quantum superposition. New Journal of Physics, 2019, 21, 093052.	2.9	55
64	Transitionless quantum driving in open quantum systems. New Journal of Physics, 2014, 16, 053017.	2.9	54
65	Entanglement control in hybrid optomechanical systems. Physical Review A, 2012, 86, .	2.5	52
66	An out-of-equilibrium non-Markovian quantum heat engine. Quantum Science and Technology, 2019, 4, 025002.	5.8	51
67	Propagation of nonclassical correlations across a quantum spin chain. Physical Review A, 2011, 84, .	2.5	49
68	Shortcut-to-adiabaticity Otto engine: A twist to finite-time thermodynamics. Physical Review E, 2019, 99, 022110.	2.1	48
69	Engineering Nonclassicality in a Mechanical System through Photon Subtraction. Physical Review Letters, 2011, 106, 183601.	7.8	46
70	Enhanced dynamical entanglement transfer with multiple qubits. Physical Review A, 2006, 73, .	2.5	45
71	A photonic Carnot engine powered by a spin-star network. Europhysics Letters, 2017, 117, 50002.	2.0	41
72	Non-interferometric test of the continuous spontaneous localization model based on rotational optomechanics. New Journal of Physics, 2018, 20, 083022.	2.9	41

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73	Multipartite optomechanical entanglement from competing nonlinearities. Physical Review A, 2012, 86, .	2.5	40
74	Out-of-equilibrium thermodynamics of quantum optomechanical systems. New Journal of Physics, 2015, 17, 035016.	2.9	40
75	Present status and future challenges of non-interferometric tests of collapse models. Nature Physics, 2022, 18, 243-250.	16.7	40
76	Multipartite nonlocality in a thermalized Ising spin chain. Physical Review A, 2010, 82, .	2.5	38
77	Role of environmental correlations in the non-Markovian dynamics of a spin system. Physical Review A, 2011, 84, .	2.5	38
78	Experimental Quantum Networking Protocols via Four-Qubit Hyperentangled Dicke States. Physical Review Letters, 2012, 109, 173604.	7.8	38
79	Quantum physics in space. Physics Reports, 2022, 951, 1-70.	25.6	38
80	Interaction-induced correlations and non-Markovianity of quantum dynamics. Physical Review A, 2013, 87, .	2.5	37
81	Work extraction and energy storage in the Dicke model. Physical Review E, 2016, 94, 052122.	2.1	37
82	Vibrational coherent quantum computation. Physical Review A, 2005, 71, .	2.5	36
83	Experimental Demonstration of Decoherence-Free One-Way Information Transfer. Physical Review Letters, 2007, 99, 250503.	7.8	35
84	Selectable linear or quadratic coupling in an optomechanical system. Physical Review A, 2013, 87, .	2.5	35
85	Experimental signature of quantum Darwinism in photonic cluster states. Physical Review A, 2018, 98, .	2.5	35
86	Unconditional preparation of nonclassical states via linear-and-quadratic optomechanics. Physical Review A, 2018, 98, .	2.5	34
87	Optomechanical to mechanical entanglement transformation. New Journal of Physics, 2008, 10, 095014.	2.9	33
88	Quantum-information processing with noisy cluster states. Physical Review A, 2005, 72, .	2.5	32
89	Thermal transport in out-of-equilibrium quantum harmonic chains. Physical Review E, 2015, 91, 042116.	2.1	32
90	Energetic cost of quantum control protocols. New Journal of Physics, 2019, 21, 103048.	2.9	32

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91	Robust multipartite entanglement generation via a collision model. Physical Review A, 2019, 99, .	2.5	32
92	Shortcut-to-adiabaticity quantum Otto refrigerator. Physical Review Research, 2020, 2, .	3.6	32
93	Extraction of Singlet States from Noninteracting High-Dimensional Spins. Physical Review Letters, 2008, 100, 150501.	7.8	31
94	Hybrid optomechanics for Quantum Technologies. Quantum Measurements and Quantum Metrology, 2014, 2, .	3.3	31
95	Entanglement classification via neural network quantum states. New Journal of Physics, 2020, 22, 045001.	2.9	31
96	Non-local quantum gates: A cavity-quantum-electrodynamics implementation. Journal of Modern Optics, 2003, 50, 2075-2094.	1.3	30
97	Non-equilibrium thermodynamics of harmonically trapped bosons. New Journal of Physics, 2016, 18, 103035.	2.9	30
98	Nonlinearity as a resource for nonclassicality in anharmonic systems. Physical Review A, 2016, 93, .	2.5	29
99	Global and local thermometry schemes in coupled quantum systems. New Journal of Physics, 2017, 19, 103003.	2.9	29
100	Quantum state engineering using one-dimensional discrete-time quantum walks. Physical Review A, 2017, 96, .	2.5	29
101	Reinforcement Learning Approach to Nonequilibrium Quantum Thermodynamics. Physical Review Letters, 2021, 126, 020601.	7.8	29
102	Natural three-qubit interactions in one-way quantum computing. Physical Review A, 2006, 73, .	2.5	28
103	Tuning non-Markovianity by spin-dynamics control. Physical Review A, 2013, 87, .	2.5	28
104	Entanglement Replication in Driven Dissipative Many-Body systems. Physical Review Letters, 2013, 110, 040503.	7.8	28
105	Testing the foundation of quantum physics in space via Interferometric and non-interferometric experimentsÂwith mesoscopic nanoparticles. Communications Physics, 2021, 4, .	5.3	28
106	GLOBAL QUANTUM CORRELATIONS IN THE ISING MODEL. International Journal of Quantum Information, 2011, 09, 1685-1699.	1.1	27
107	Long-range multipartite entanglement close to a first-order quantum phase transition. Physical Review A, 2014, 89, .	2.5	27
108	Nested entangled states for distributed quantum channels. Physical Review A, 2008, 77, .	2.5	26

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109	Testing nonlocal realism with entangled coherent states. Physical Review A, 2010, 81, .	2.5	26
110	Control-limited perfect state transfer, quantum stochastic resonance, and many-body entangling gate in imperfect qubit registers. Physical Review A, 2008, 77, .	2.5	25
111	Experimental extractable work-based multipartite separability criteria. Npj Quantum Information, 2017, 3, .	6.7	25
112	Probing quantum features of photosynthetic organisms. Npj Quantum Information, 2018, 4, .	6.7	25
113	Experimental Assessment of Entropy Production in a Continuously Measured Mechanical Resonator. Physical Review Letters, 2020, 125, 080601.	7.8	25
114	Concentration and purification of entanglement for qubit systems with ancillary cavity fields. Physical Review A, 2007, 75, .	2.5	24
115	Characterizing multipartite symmetric Dicke states under the effects of noise. New Journal of Physics, 2009, 11, 073039.	2.9	24
116	Faithful test of nonlocal realism with entangled coherent states. Physical Review A, 2011, 83, .	2.5	24
117	Geometric-phase backaction in a mesoscopic qubit-oscillator system. Physical Review A, 2012, 85, .	2.5	24
118	Competition between memory-keeping and memory-erasing decoherence channels. Physical Review A, 2014, 90, .	2.5	24
119	Collisional unfolding of quantum Darwinism. Physical Review A, 2019, 99, .	2.5	24
120	Experimental characterization of the energetics of quantum logic gates. Npj Quantum Information, 2020, 6, .	6.7	24
121	Entropy production in continuously measured Gaussian quantum systems. Npj Quantum Information, 2020, 6, .	6.7	24
122	Hybrid methods for witnessing entanglement in a microscopic-macroscopic system. Physical Review A, 2011, 84, .	2.5	23
123	Role of information backflow in the emergence of quantum Darwinism. Physical Review A, 2019, 100, .	2.5	23
124	Quantum technologies in space. Experimental Astronomy, 2021, 51, 1677-1694.	3.7	23
125	Entanglement generation and protection by detuning modulation. Physical Review A, 2006, 74, .	2.5	22
126	Information-flux approach to multiple-spin dynamics. Physical Review A, 2007, 76, .	2.5	22

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127	Extremal quantum correlations: Experimental study with two-qubit states. Physical Review A, 2011, 84, .	2.5	22
128	Activating optomechanical entanglement. Scientific Reports, 2011, 1, 199.	3.3	22
129	Photon Production from the Vacuum Close to the Superradiant Transition: Linking the Dynamical Casimir Effect to the Kibble-Zurek Mechanism. Physical Review Letters, 2012, 108, 093603.	7.8	22
130	Einstein-Podolsky-Rosen steering and quantum steering ellipsoids: Optimal two-qubit states and projective measurements. Physical Review A, 2017, 95, .	2.5	22
131	Ultra-cold single-atom quantum heat engines. New Journal of Physics, 2019, 21, 063019.	2.9	22
132	Work extraction from coherently activated maps via quantum switch. Physical Review A, 2022, 105, .	2.5	22
133	A tutorial on optimal control and reinforcement learning methods for quantum technologies. Physics Letters, Section A: General, Atomic and Solid State Physics, 2022, 434, 128054.	2.1	22
134	Cross-Kerr-based information transfer processes. New Journal of Physics, 2006, 8, 23-23.	2.9	21
135	Solitonic behaviour in coupled multi atomâ€“cavity systems. New Journal of Physics, 2009, 11, 013059.	2.9	20
136	Manipulating and protecting entanglement by means of spin environments. New Journal of Physics, 2010, 12, 083046.	2.9	20
137	Nonlinearity and nonclassicality in a nanomechanical resonator. EPJ Quantum Technology, 2015, 2, .	6.3	20
138	Nonclassicality of optomechanical devices in experimentally realistic operating regimes. Physical Review A, 2013, 88, .	2.5	19
139	Characterization of Bose-Hubbard models with quantum nondemolition measurements. Physical Review A, 2014, 90, .	2.5	19
140	Multisplitter Interaction for Entanglement Distribution. Physical Review Letters, 2005, 94, 070501.	7.8	18
141	Critical assessment of two-qubit post-Markovian master equations. Physical Review A, 2012, 85, .	2.5	18
142	Determining stationary-state quantum properties directly from system-environment interactions. Physical Review A, 2016, 94, .	2.5	18
143	Unitary unraveling for the dissipative continuous spontaneous localization model: Application to optomechanical experiments. Physical Review A, 2018, 98, .	2.5	18
144	End-point measurement approach to assess quantum coherence in energy fluctuations. Physical Review A, 2021, 104, .	2.5	18

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145	Probing the environment of an inaccessible system by a qubit ancilla. Physical Review A, 2010, 81, .	2.5	17
146	Vortex entanglement in Bose-Einstein condensates coupled to Laguerre-Gauss beams. Physical Review A, 2010, 81, .	2.5	17
147	Enhancing non-classicality in mechanical systems. New Journal of Physics, 2013, 15, 033023.	2.9	17
148	Spin-phase-space-entropy production. Physical Review A, 2018, 97, .	2.5	17
149	Anti-Zeno-based dynamical control of the unfolding of quantum Darwinism. Physical Review Research, 2020, 2, .	3.6	17
150	Accumulation of Entanglement in a Continuous Variable Memory. Physical Review Letters, 2007, 98, 140504.	7.8	16
151	Reducing quantum control for spinâ€“spin entanglement distribution. New Journal of Physics, 2009, 11, 113053.	2.9	16
152	Controllable Gaussian-Qubit Interface for Extremal Quantum State Engineering. Physical Review Letters, 2010, 104, 240501.	7.8	15
153	Tripartite nonlocality and continuous-variable entanglement in thermal states of trapped ions. Physical Review A, 2011, 84, .	2.5	15
154	Work statistics, irreversible heat and correlations build-up in joining two spin chains. Physica Scripta, 2015, T165, 014023.	2.5	15
155	Quantum-limited estimation of continuous spontaneous localization. Physical Review A, 2017, 95, .	2.5	15
156	Phase-space interference in extensive and nonextensive quantum heat engines. Physical Review E, 2018, 97, 042127.	2.1	15
157	Nonequilibrium thermodynamics of continuously measured quantum systems: A circuit QED implementation. Physical Review B, 2018, 98, .	3.2	15
158	Talbot-Lau effect beyond the point-particle approximation. Physical Review A, 2019, 100, .	2.5	15
159	Supervised learning of time-independent Hamiltonians for gate design. New Journal of Physics, 2020, 22, 065001.	2.9	15
160	Hybrid cluster state proposal for a quantum game. New Journal of Physics, 2005, 7, 226-226.	2.9	14
161	One-way quantum computing in a decoherence-free subspace. New Journal of Physics, 2007, 9, 201-201.	2.9	14
162	Dissipative scheme to approach the boundary of two-qubit entangled mixed states. Physical Review A, 2009, 79, .	2.5	14

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163	Using macroscopic entanglement to close the detection loophole in Bell-inequality tests. Physical Review A, 2012, 85, .	2.5	14
164	Testing genuine multipartite nonlocality in phase space. Physical Review A, 2013, 87, .	2.5	14
165	Detecting the work statistics through Ramsey-like interferometry. International Journal of Quantum Information, 2014, 12, 1461007.	1.1	14
166	Full counting statistics approach to the quantum non-equilibrium Landauer bound. New Journal of Physics, 2017, 19, 103038.	2.9	14
167	The entropic cost of quantum generalized measurements. Npj Quantum Information, 2018, 4, .	6.7	14
168	Quantum work statistics and resource theories: Bridging the gap through RÃ©nyi divergences. Physical Review E, 2019, 99, 050101.	2.1	14
169	Quantum simulation of multiphoton and nonlinear dissipative spin-boson models. Physical Review A, 2019, 99, .	2.5	14
170	Quantum State Engineering by Shortcuts to Adiabaticity in Interacting Spin-Boson Systems. Physical Review Letters, 2020, 124, 180401.	7.8	14
171	Measurement-based cooling of a nonlinear mechanical resonator. Physical Review B, 2020, 101, .	3.2	14
172	Reinforcement learning-enhanced protocols for coherent population-transfer in three-level quantum systems. New Journal of Physics, 2021, 23, 093035.	2.9	14
173	Nonequilibrium readiness and precision of Gaussian quantum thermometers. Physical Review Research, 2020, 2, .	3.6	14
174	Qubit state guidance without feedback. New Journal of Physics, 2005, 7, 43-43.	2.9	13
175	Physical model for the generation of ideal resources in multipartite quantum networking. Physical Review A, 2010, 82, .	2.5	13
176	Quantum state transfer via temporal kicking of information. Physical Review A, 2010, 81, .	2.5	13
177	Dynamics of interacting Dicke model in a coupled-cavity array. Physical Review A, 2014, 90, .	2.5	13
178	Localizationlike effect in two-dimensional alternate quantum walks with periodic coin operations. Physical Review A, 2015, 91, .	2.5	13
179	Thermodynamics of trajectories and local fluctuation theorems for harmonic quantum networks. New Journal of Physics, 2016, 18, 013009.	2.9	13
180	Detecting Gaussian entanglement via extractable work. Physical Review A, 2017, 96, .	2.5	13

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181	Quantum Darwinism in a Composite System: Objectivity versus Classicality. Entropy, 2021, 23, 995.	2.2	13
182	Perspectives for quantum state engineering via high nonlinearity in a double-EIT regime. Journal of Modern Optics, 2003, 50, 2565-2582.	1.3	12
183	A DEEPER INSIGHT INTO QUANTUM STATE TRANSFER FROM AN INFORMATION FLUX VIEWPOINT. International Journal of Quantum Information, 2008, 06, 659-665.	1.1	12
184	Violations of Bellâ€™s inequality for Gaussian states with homodyne detection and nonlinear interactions. Physical Review A, 2009, 79, .	2.5	12
185	Passing quantum correlations to qubits using any two-mode state. Physical Review A, 2009, 80, .	2.5	12
186	Simple trapped-ion architecture for high-fidelity Toffoli gates. Physical Review A, 2011, 84, .	2.5	12
187	Structural change of vortex patterns in anisotropic Bose-Einstein condensates. Physical Review A, 2011, 83, .	2.5	12
188	Non-Markovian qubit dynamics in a circuit-QED setup. Physical Review A, 2015, 91, .	2.5	12
189	Equilibration and nonclassicality of a double-well potential. Scientific Reports, 2016, 6, 19730.	3.3	12
190	Information-reality complementarity in photonic weak measurements. Physical Review A, 2018, 97, .	2.5	12
191	Quantum Darwinism in a structured spin environment. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 416, 127675.	2.1	12
192	Dynamical learning of a photonics quantum-state engineering process. Advanced Photonics, 2021, 3, .	11.8	12
193	Entanglement generation in harmonic chains: Tagging by squeezing. Physical Review A, 2005, 72, .	2.5	11
194	Entanglement of mixed macroscopic superpositions: An entangling-power study. Physical Review A, 2006, 73, .	2.5	11
195	Testing quantum contextuality of continuous-variable states. Physical Review A, 2011, 83, .	2.5	11
196	Cavity-aided quantum parameter estimation in a bosonic double-well Josephson junction. Physical Review A, 2015, 91, .	2.5	11
197	Engineering single-phonon number states of a mechanical oscillator via photon subtraction. Physical Review A, 2016, 94, .	2.5	11
198	Wigner entropy production and heat transport in linear quantum lattices. Physical Review A, 2019, 99, .	2.5	11

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199	Enhanced detection techniques of orbital angular momentum states in the classical and quantum regimes. New Journal of Physics, 2021, 23, 073014.	2.9	11
200	Informational Steady States and Conditional Entropy Production in Continuously Monitored Systems. PRX Quantum, 2022, 3, .	9.2	11
201	Violation of Bell's inequalities with preamplified homodyne detection. Physical Review A, 2013, 87, .	2.5	10
202	Effective cutting of a quantum spin chain by bond impurities. Physical Review A, 2013, 88, .	2.5	10
203	Thermodynamics of trajectories of a quantum harmonic oscillator coupled toNbaths. Physical Review A, 2015, 92, .	2.5	10
204	Violation of Bell inequalities in larger Hilbert spaces: robustness and challenges. New Journal of Physics, 2016, 18, 013021.	2.9	10
205	Excessive distribution of quantum entanglement. Physical Review A, 2016, 93, .	2.5	10
206	Divisible quantum dynamics satisfies temporal Tsirelsonâ€™s bound. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 055302.	2.1	10
207	Irreversibility at zero temperature from the perspective of the environment. Physical Review A, 2018, 97, .	2.5	10
208	Daemonic Ergotropy: Generalised Measurements and Multipartite Settings. Entropy, 2019, 21, 771.	2.2	10
209	Spin-Boson Model as A Simulator of Non-Markovian Multiphoton Jaynes-Cummings Models. Symmetry, 2019, 11, 695.	2.2	10
210	Entanglement transfer, accumulation and retrieval via quantum-walk-based qubitâ€“qudit dynamics. New Journal of Physics, 2021, 23, 023012.	2.9	10
211	Implications of non-Markovian dynamics on information-driven engine. Journal of Physics Communications, 2020, 4, 085016.	1.2	10
212	Rising time of entanglement between scattering spins. Physical Review B, 2009, 80, .	3.2	9
213	Structural change in multipartite entanglement sharing: A random matrix approach. Physical Review A, 2009, 80, .	2.5	9
214	Driven optomechanical systems for mechanical entanglement distribution. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 154010.	1.5	9
215	Quantum circuits for spin and flavor degrees of freedom of quarks forming nucleons. Quantum Information Processing, 2012, 11, 67-75.	2.2	9
216	Squeezing of mechanical motion via qubit-assisted control. New Journal of Physics, 2015, 17, 013034.	2.9	9

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217	Quantum state reconstruction of an oscillator network in an optomechanical setting. Physical Review A, 2016, 94, .	2.5	9
218	Quantum Work Statistics with Initial Coherence. Entropy, 2020, 22, 1223.	2.2	9
219	Mixed state entanglement classification using artificial neural networks. New Journal of Physics, 2021, 23, 063033.	2.9	9
220	Genuine multipartite nonlocality of entangled thermal states. Physical Review A, 2010, 82, .	2.5	8
221	Multipartite entanglement swapping and mechanical cluster states. Physical Review A, 2019, 99, .	2.5	8
222	Characterization of the entanglement of two squeezed states. Physical Review A, 2006, 74, .	2.5	7
223	RESILIENCE OF SINGLET-STATE EXTRACTION AGAINST NON-OPTIMAL RESONANCE CONDITIONS. International Journal of Quantum Information, 2008, 06, 759-764.	1.1	7
224	Non-locality of two ultracold trapped atoms. New Journal of Physics, 2011, 13, 023016.	2.9	7
225	Transferring entanglement to the steady state of flying qubits. Physical Review A, 2012, 86, .	2.5	7
226	Limitations of a measurement-assisted optomechanical route to quantum macroscopicity of superposition states. Physical Review A, 2015, 92, .	2.5	7
227	Experimental linear-optics simulation of multipartite non-locality in the ground state of a quantum Ising ring. Scientific Reports, 2015, 4, 7184.	3.3	7
228	Dynamical symmetries and crossovers in a three-spin system with collective dissipation. New Journal of Physics, 2015, 17, 015010.	2.9	7
229	Nonequilibrium quantum bounds to Landauer's principle: Tightness and effectiveness. Physical Review A, 2017, 96, .	2.5	7
230	Characterizing Irreversibility in Open Quantum Systems. Fundamental Theories of Physics, 2018, , 395-410.	0.3	7
231	Assessing the role of initial correlations in the entropy production rate for nonequilibrium harmonic dynamics. Physical Review Research, 2020, 2, .	3.6	7
232	DYNAMICAL AND STEADY-STATE REQUIREMENTS FOR EFFECTIVE ENTANGLEMENT TRANSFER. International Journal of Quantum Information, 2005, 03, 213-217.	1.1	6
233	Decoherence-based exploration ofd-dimensional one-way quantum computation: Information transfer and basic gates. Physical Review A, 2006, 74, .	2.5	6
234	AN ECONOMICAL ROUTE TO ONE-WAY QUANTUM COMPUTATION. International Journal of Quantum Information, 2006, 04, 689-703.	1.1	6

#	Article	IF	Citations
235	Generation of a coherent superposition of a travelling wave field. Journal of Modern Optics, 2007, 54, 1999-2008.	1.3	6
236	Tomographic characterization of correlations in a photonic tripartite state. New Journal of Physics, 2012, 14, 085006.	2.9	6
237	Non-Markovian effects on the nonlocality of a qubit-oscillator system. Physical Review A, 2012, 85, .	2.5	6
238	Optomechanical interface for probing matter-wave coherence. Scientific Reports, 2013, 3, 3378.	3.3	6
239	Tests of quantum gravity-induced non-locality: Hamiltonian formulation of a non-local harmonic oscillator. Classical and Quantum Gravity, 2019, 36, 155006.	4.0	6
240	Reading a Qubit Quantum State with a Quantum Meter: Time Unfolding of Quantum Darwinism and Quantum Information Flux. Open Systems and Information Dynamics, 2019, 26, 1950023.	1.2	6
241	Non-local quantum gates: a cavity-quantum-electrodynamics implementation. Journal of Modern Optics, 2003, 50, 2075-2094.	1.3	6
242	Ultrafast critical ground state preparation via bangâ€“bang protocols. New Journal of Physics, 2020, 22, 093050.	2.9	6
243	Nonequilibrium Quantum Thermodynamics of a Particle Trapped in a Controllable Time-Varying Potential. PRX Quantum, 2022, 3, .	9.2	6
244	Harnessing nonadiabatic excitations promoted by a quantum critical point: Quantum battery and spin squeezing. Physical Review Research, 2022, 4, .	3.6	6
245	On the mechanism for optomechanical entanglement and its revelation. Journal of Physics B: Atomic, Molecular and Optical Physics, 2008, 41, 155503.	1.5	5
246	A no-go result on the purification of quantum states. Scientific Reports, 2013, 3, 1387.	3.3	5
247	Vibrational assisted conduction in a molecular wire. Quantum Science and Technology, 2017, 2, 025006.	5.8	5
248	Robust quantum state engineering through coherent localization in biased-coin quantum walks. EPJ Quantum Technology, 2018, 5, 1.	6.3	5
249	An optomechanical platform for quantum hypothesis testing for collapse models. New Journal of Physics, 2021, 23, 043022.	2.9	5
250	Versatile Atomic Magnetometry Assisted by Bayesian Inference. Physical Review Applied, 2021, 16, .	3.8	5
251	Test quantum mechanics in space â€" invest US$1 billion. Nature, 2021, 596, 32-34.	27.8	5
252	Noise resilience and entanglement evolution in two nonequivalent classes of quantum algorithms. Physical Review A, 2007, 75, .	2.5	4

#	Article	IF	Citations
253	Entanglement generation between two spin-s magnetic impurities in a solid via electron scattering. Solid State Sciences, 2009, 11, 931-934.	3.2	4
254	TELEPORTING BIPARTITE ENTANGLEMENT USING MAXIMALLY ENTANGLED MIXED CHANNELS. International Journal of Quantum Information, 2010, 08, 105-119.	1.1	4
255	Glued trees algorithm under phase damping. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 338-343.	2.1	4
256	Prospects for near-field interferometric tests of collapse models. Physical Review A, 2021, 103, .	2.5	4
257	Informational steady states and conditional entropy production in continuously monitored systems: The case of Gaussian systems. Physical Review A, 2022, 105, .	2.5	4
258	Probing mechanical quantum coherence with an ultracold-atom meter. Physical Review A, 2011, 84, .	2.5	3
259	Performance of dynamical decoupling in bosonic environments and under pulse-timing fluctuations. Physical Review A, 2016, 94, .	2.5	3
260	Out of equilibrium thermodynamics of quantum harmonic chains. Journal of Statistical Mechanics: Theory and Experiment, 2019, 2019, 104014.	2.3	3
261	Opto-Mechanical Test of Collapse Models. Fundamental Theories of Physics, 2021, , 205-215.	0.3	3
262	BYPASSING STATE INITIALIZATION IN HAMILTONIAN TOMOGRAPHY ON SPIN-CHAINS. International Journal of Quantum Information, 2011, 09, 181-187.	1.1	2
263	ESTIMATION OF PURITY FOR A QUANTUM HARMONIC OSCILLATOR INITIALLY PREPARED IN A DISPLACED THERMAL STATE. International Journal of Quantum Information, 2012, 10, 1241015.	1.1	2
264	Nonequilibrium properties of trapped ions under sudden application of a laser. Physical Review A, 2016, 94, .	2.5	2
265	A macrorealistic test in hybrid quantum optomechanics. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 075401.	1.5	2
266	Perspectives for quantum state engineering via high nonlinearity in a double-EIT regime. Journal of Modern Optics, 2003, 50, 2565-2582.	1.3	2
267	INTERACTION OF JOSEPHSON QUBITS WITH STRONG QED CAVITY MODES: DYNAMICAL ENTANGLEMENT TRANSFER AND NAVIGATION. , 2005, , .		1
268	ENTANGLEMENT DISTRIBUTION WITH GLOBAL CONTROL IN A STAR-SHAPED MULTI-SPLITTER. International Journal of Quantum Information, 2006, 04, 551-561.	1.1	1
269	Structural changes in quasi-one-dimensional many-electron systems: From linear to zigzag and beyond. Physical Review A, 2010, 82, .	2.5	1
270	Publisherâ€™s Note: Cold-Atom-Induced Control of an Optomechanical Device [Phys. Rev. Lett.104, 243602 (2010)]. Physical Review Letters, 2010, 105, .	7.8	1

#	Article	IF	Citations
271	When Casimir meets Kibbleâ€“Zurek. Physica Scripta, 2012, T151, 014071.	2.5	1
272	Phase-space behavior and conditional dynamics of an optomechanical system. Physical Review A, 2013, 88, .	2.5	1
273	Macroscopicity in an optomechanical matter-wave interferometer. Optics Communications, 2015, 337, 53-56.	2.1	1
274	On chip analysis of path-polarization hyperentangled cluster photon states. , 2017, , .		1
275	Experimental nonlocality-based network diagnostics of multipartite entangled states. Scientific Reports, 2017, 7, 17122.	3.3	1
276	Structure of Multipartite Entanglement in Random Cluster-Like Photonic Systems. Entropy, 2017, 19, 473.	2.2	1
277	Experimental Quantum Darwinism simulator using photonic cluster states. , 2019, , .		1
278	Non-resonant interactions and multipartite entanglement in a system of coupled cavities. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 949.	2.1	1
279	Transfer of Entanglement from a Gaussian Field to Remote Qubits. AIP Conference Proceedings, 2004, , .	0.4	0
280	Towards variance-matrix characterization of complementarity relations in a continuous variable system. Journal of Modern Optics, 2008, 55, 3049-3061.	1.3	0
281	Experimental study of non-classicality indicators and extremal quantum correlations in two-qubit states. , 2011, , .		0
282	Detecting non-locality in macroscopic systems. , 2011, , .		0
283	Dynamics of the driven Dicke model: Time dependent mean field and quantum fluctuations. , 2016, , .		0
284	Approximate supervised learning of quantum gates via ancillary qubits. International Journal of Quantum Information, 2018, 16, 1840004.	1.1	0
285	Distributing entanglement with separable states: assessment of encoding and decoding imperfections. Quantum Information Processing, 2021, 20, 1.	2.2	0
286	Quantum State Transfer with Limited Resources. , 2014, , 123-147.		0
287	Quantum feedback control of mechanical squeezing. , 2014, , .		0
288	Engineering of Quantum States through Quantum Walk in the Angular Momentum. , 2019, , .		0

#	Article	IF	Citations
289	Macroscopic quantumness of optically conditioned mechanical systems. New Journal of Physics, 2020, 22, 093075.	2.9	0
290	Real-time optimization of quantum state engineering protocol. , 2021, , .		0
291	Modeling mechanical equilibration processes of closed quantum systems: A case study. Physical Review E, 2022, 105, 014127.	2.1	0