Martin B Plenio

List of Publications by Year
in descending order

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444	41,276	2975	2828
papers	citations	93 h-index	191 g-index

450	450	450	13533
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Colloquium: Area laws for the entanglement entropy. Reviews of Modern Physics, 2010, 82, 277-306.	45.6	1,945
2	Quantifying Coherence. Physical Review Letters, 2014, 113, 140401.	7.8	1,865
3	Quantifying Entanglement. Physical Review Letters, 1997, 78, 2275-2279.	7.8	1,584
4	The quantum-jump approach to dissipative dynamics in quantum optics. Reviews of Modern Physics, 1998, 70, 101-144.	45.6	1,174
5	Entanglement measures and purification procedures. Physical Review A, 1998, 57, 1619-1633.	2.5	1,119
6	Colloquium: Quantum coherence as a resource. Reviews of Modern Physics, 2017, 89, .	45.6	1,108
7	Logarithmic Negativity: A Full Entanglement Monotone That is not Convex. Physical Review Letters, 2005, 95, 090503.	7.8	913
8	Strongly interacting polaritons in coupled arrays of cavities. Nature Physics, 2006, 2, 849-855.	16.7	830
9	Improvement of Frequency Standards with Quantum Entanglement. Physical Review Letters, 1997, 79, 3865-3868.	7.8	782
10	Entanglement and Non-Markovianity of Quantum Evolutions. Physical Review Letters, 2010, 105, 050403.	7.8	765
11	Dephasing-assisted transport: quantum networks and biomolecules. New Journal of Physics, 2008, 10, 113019.	2.9	762
12	Quantum non-Markovianity: characterization, quantification and detection. Reports on Progress in Physics, 2014, 77, 094001.	20.1	702
13	Highly efficient energy excitation transfer in light-harvesting complexes: The fundamental role of noise-assisted transport. Journal of Chemical Physics, 2009, 131, .	3.0	527
14	Quantum telecloning and multiparticle entanglement. Physical Review A, 1999, 59, 156-161.	2.5	509
15	Distilling Gaussian States with Gaussian Operations is Impossible. Physical Review Letters, 2002, 89, 137903.	7.8	490
16	The role of non-equilibrium vibrational structures in electronic coherence and recoherence in pigmentâ€“protein complexes. Nature Physics, 2013, 9, 113-118.	16.7	481
17	Quantum Metrology in Non-Markovian Environments. Physical Review Letters, 2012, 109, 233601.	7.8	477
18	Cavity-loss-induced generation of entangled atoms. Physical Review A, 1999, 59, 2468-2475.	2.5	468

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19	Proposal for Teleportation of an Atomic State via Cavity Decay. Physical Review Letters, 1999, 83, 5158-5161.	7.8	428
20	Vibrations, quanta and biology. Contemporary Physics, 2013, 54, 181-207.	1.8	426
21	Quantum manyâ€body phenomena in coupled cavity arrays. Laser and Photonics Reviews, 2008, 2, 527-556.	8.7	399
22	Efficient quantum state tomography. Nature Communications, 2010, 1, 149.	12.8	394
23	Quantum Speed Limits in Open System Dynamics. Physical Review Letters, 2013, 110, 050403.	7.8	356
24	Efficient Simulation of Strong System-Environment Interactions. Physical Review Letters, 2010, 105, 050404.	7.8	348
25	Entanglement properties of the harmonic chain. Physical Review A, 2002, 66, .	2.5	318
26	Entropy, Entanglement, and Area: Analytical Results for Harmonic Lattice Systems. Physical Review Letters, 2005, 94, 060503.	7.8	303
27	INTRODUCTION TO THE BASICS OF ENTANGLEMENT THEORY IN CONTINUOUS-VARIABLE SYSTEMS. International Journal of Quantum Information, 2003, 01, 479-506.	1.1	283
28	Entangled Light from White Noise. Physical Review Letters, 2002, 88, 197901.	7.8	280
29	Quantum Phase Transition and Universal Dynamics in the Rabi Model. Physical Review Letters, 2015, 115, 180404.	7.8	279
30	Optimal local implementation of nonlocal quantum gates. Physical Review A, 2000, 62, .	2.5	273
31	Quantum information processing and communication. European Physical Journal D, 2005, 36, 203-228.	1.3	272
32	Tomography of quantum detectors. Nature Physics, 2009, 5, 27-30.	16.7	267
33	Teleportation, entanglement and thermodynamics in the quantum world. Contemporary Physics, 1998, 39, 431-446.	1.8	266
34	Noise-assisted energy transfer in quantum networks and light-harvesting complexes. New Journal of Physics, 2010, 12, 065002.	2.9	262
35	Steady State Entanglement in the Mechanical Vibrations of Two Dielectric Membranes. Physical Review Letters, 2008, 101, 200503.	7.8	261
36	Entanglement-Assisted Local Manipulation of Pure Quantum States. Physical Review Letters, 1999, 83, 3566-3569.	7.8	256

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37	A comparison of entanglement measures. Journal of Modern Optics, 1999, 46, 145-154.	1.3	246
38	Dynamics and manipulation of entanglement in coupled harmonic systems with many degrees of freedom. New Journal of Physics, 2004, 6, 36-36.	2.9	235
39	Submillihertz magnetic spectroscopy performed with a nanoscale quantum sensor. Science, 2017, 356, 832-837.	12.6	231
40	Observation of the Kibbleâ€“Zurek scaling law for defect formation in ion crystals. Nature Communications, 2013, 4, 2290.	12.8	221
41	Topological defect formation and spontaneous symmetry breaking in ion Coulomb crystals. Nature Communications, 2013, 4, 2291.	12.8	220
42	Exact mapping between system-reservoir quantum models and semi-infinite discrete chains using orthogonal polynomials. Journal of Mathematical Physics, 2010, 51, .	1.1	214
43	Nuclear magnetic resonance spectroscopy with single spin sensitivity. Nature Communications, 2014, 5, 4703.	12.8	211
44	Robust Creation of Entanglement between Ions in Spatially Separate Cavities. Physical Review Letters, 2003, 91, 067901.	7.8	209
45	A large-scale quantum simulator on a diamond surface at room temperature. Nature Physics, 2013, 9, 168-173.	16.7	208
46	Quantum remote control: Teleportation of unitary operations. Physical Review A, 2001, 63, .	2.5	207
47	Multiparticle entanglement purification protocols. Physical Review A, 1998, 57, R4075-R4078.	2.5	205
48	Quantum gates and memory using microwave-dressed states. Nature, 2011, 476, 185-188.	27.8	202
49	Diamond Quantum Devices in Biology. Angewandte Chemie - International Edition, 2016, 55, 6586-6598.	13.8	202
50	The physics of forgetting: Landauer's erasure principle and information theory. Contemporary Physics, 2001, 42, 25-60.	1.8	199
51	Entanglement Cost under Positive-Partial-Transpose-Preserving Operations. Physical Review Letters, 2003, 90, 027901.	7.8	199
52	Three-Spin Interactions in Optical Lattices and Criticality in Cluster Hamiltonians. Physical Review Letters, 2004, 93, 056402.	7.8	190
53	Detection of a Few Metallo-Protein Molecules Using Color Centers in Nanodiamonds. Nano Letters, 2013, 13, 3305-3309.	9.1	184
54	Observation of Entangled States of a Fully Controlled 20-Qubit System. Physical Review X, 2018, 8, .	8.9	183

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55	Entanglement and entangling power of the dynamics in light-harvesting complexes. Physical Review A, 2010, 81, .	2.5	181
56	Statistical inference, distinguishability of quantum states, and quantum entanglement. Physical Review A, 1997, 56, 4452-4455.	2.5	174
57	Towards Quantum Entanglement in Nanoelectromechanical Devices. Physical Review Letters, 2004, 93, 190402.	7.8	174
58	Entanglement-area law for general bosonic harmonic lattice systems. Physical Review A, 2006, 73, .	2.5	173
59	Markovian master equations: a critical study. New Journal of Physics, 2010, 12, 113032.	2.9	171
60	Detecting and Polarizing Nuclear Spins with Double Resonance on a Single Electron Spin. Physical Review Letters, 2013, 111, 067601.	7.8	170
61	Entanglement quantification and purification in continuous-variable systems. Physical Review A, 2000, 61, .	2.5	165
62	Driving non-Gaussian to Gaussian states with linear optics. Physical Review A, 2003, 67, .	2.5	165
63	Non-Markovianity-Assisted Steady State Entanglement. Physical Review Letters, 2012, 108, 160402.	7.8	161
64	Effective Spin Systems in Coupled Microcavities. Physical Review Letters, 2007, 99, 160501.	7.8	158
65	Color Centers in Hexagonal Boron Nitride Monolayers: A Group Theory and Ab Initio Analysis. ACS Photonics, 2018, 5, 1967-1976.	6.6	157
66	Efficient tomography of a quantum many-bodyÂsystem. Nature Physics, 2017, 13, 1158-1162.	16.7	153
67	Tracking the coherent generation of polaron pairs in conjugated polymers. Nature Communications, 2016, 7, 13742.	12.8	149
68	Optimal local discrimination of two multipartite pure states. Physics Letters, Section A: General, Atomic and Solid State Physics, 2001, 288, 62-68.	2.1	145
69	Robust dynamical decoupling with concatenated continuous driving. New Journal of Physics, 2012, 14, 113023.	2.9	145
70	Converting Nonclassicality into Entanglement. Physical Review Letters, 2016, 116, 080402.	7.8	145
71	Minimal Conditions for Local Pure-State Entanglement Manipulation. Physical Review Letters, 1999, 83, 1455-1458.	7.8	144
72	Entanglement theory and the second law of thermodynamics. Nature Physics, 2008, 4, 873-877.	16.7	141

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73	Remote control of restricted sets of operations: Teleportation of angles. Physical Review A, 2002, 65, .	2.5	140
74	Fast quantum gates for cold trapped ions. Physical Review A, 2000, 62, .	2.5	132
75	Quantum memory for entangled continuous-variable states. Nature Physics, 2011, 7, 13-16.	16.7	130
76	Vibronic origin of long-lived coherence in an artificial molecular light harvester. Nature Communications, 2015, 6, 7755.	12.8	129
77	Quantum Metrology Enhanced by Repetitive Quantum Error Correction. Physical Review Letters, 2016, 116, 230502.	7.8	125
78	High efficiency transfer of quantum information and multiparticle entanglement generation in translation-invariant quantum chains. New Journal of Physics, 2005, 7, 73-73.	2.9	124
79	Extracting Entanglement from Identical Particles. Physical Review Letters, 2014, 112, 150501.	7.8	124
80	Entangling Power of Passive Optical Elements. Physical Review Letters, 2003, 90, 047904.	7.8	120
81	Structural Defects in Ion Chains by Quenching the External Potential: The Inhomogeneous Kibble-Zurek Mechanism. Physical Review Letters, 2010, 105, 075701.	7.8	120
82	Origin of long-lived oscillations in 2D-spectra of a quantum vibronic model: Electronic versus vibrational coherence. Journal of Chemical Physics, 2013, 139, 235102.	3.0	119
83	Coherence and decoherence in biological systems: principles of noise-assisted transport and the origin of long-lived coherences. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 3638-3657.	3.4	103
84	Realistic lower bounds for the factorization time of large numbers on a quantum computer. Physical Review A, 1996, 53, 2986-2990.	2.5	102
85	On the quantification of entanglement in infinite-dimensional quantum systems. Journal of Physics A, 2002, 35, 3911-3923.	1.6	101
86	Nonperturbative Treatment of non-Markovian Dynamics of Open Quantum Systems. Physical Review Letters, 2018, 120, 030402.	7.8	101
87	Mixed state dense coding and its relation to entanglement measures. Journal of Modern Optics, 2000, 47, 291-310.	1.3	99
88	Strong Photon Nonlinearities and Photonic Mott Insulators. Physical Review Letters, 2007, 99, 103601.	7.8	99
89	Resource Theory of Superposition. Physical Review Letters, 2017, 119, 230401.	7.8	99
90	Basics of quantum computation. Progress in Quantum Electronics, 1998, 22, 1-39.	7.0	98

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91	When are correlations quantum?â€”verification and quantification of entanglement by simple measurements. New Journal of Physics, 2006, 8, 266-266.	2.9	97
92	Generic Entanglement Can Be Generated Efficiently. Physical Review Letters, 2007, 98, 130502.	7.8	95
93	Generalized Polaron Ansatz for the Ground State of the Sub-Ohmic Spin-Boson Model: An Analytic Theory of the Localization Transition. Physical Review Letters, 2011, 107, 160601.	7.8	95
94	Pulsed Laser Cooling for Cavity Optomechanical Resonators. Physical Review Letters, 2012, 108, 153601.	7.8	94
95	Coherent control of quantum systems as a resource theory. Quantum Science and Technology, 2016, 1, 01LT01.	5.8	94
96	Distillation of continuous-variable entanglement with optical means. Annals of Physics, 2004, 311, 431-458.	2.8	92
97	Electron-Mediated Nuclear-Spin Interactions between Distant Nitrogen-Vacancy Centers. Physical Review Letters, 2011, 107, 150503.	7.8	92
98	Controlling and Measuring Quantum Transport of Heat in Trapped-Ion Crystals. Physical Review Letters, 2013, 111, 040601.	7.8	90
99	Critical and noncritical long-range entanglement in Klein-Gordon fields. Physical Review A, 2009, 80, .	2.5	89
100	Mappings of open quantum systems onto chain representations and Markovian embeddings. Journal of Mathematical Physics, 2014, 55, .	1.1	89
101	Quantifying Operations with an Application to Coherence. Physical Review Letters, 2019, 122, 190405.	7.8	89
102	Decoherence limits to quantum computation using trapped ions. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 1997, 453, 2017-2041.	2.1	87
103	Exploiting Structured Environments for Efficient Energy Transfer: The Phonon Antenna Mechanism. Journal of Physical Chemistry Letters, 2013, 4, 903-907.	4.6	86
104	Quantum Phase Transition in the Finite Jaynes-Cummings Lattice Systems. Physical Review Letters, 2016, 117, 123602.	7.8	86
105	Efficient Factorization with a Single Pure Qubit andlogNMixed Qubits. Physical Review Letters, 2000, 85, 3049-3052.	7.8	85
106	Robust optical polarization of nuclear spin baths using Hamiltonian engineering of nitrogen-vacancy center quantum dynamics. Science Advances, 2018, 4, eaat8978.	10.3	84
107	Quantum-information distribution via entanglement. Physical Review A, 2000, 61, .	2.5	83
108	Double Well Potentials and Quantum Phase Transitions in Ion Traps. Physical Review Letters, 2008, 101, 260504.	7.8	83

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109	Non-additive dissipation in open quantum networks out of equilibrium. New Journal of Physics, 2018, 20, 033005.	2.9	83
110	Efficient Simulation of Finite-Temperature Open Quantum Systems. Physical Review Letters, 2019, 123, 090402.	7.8	83
111	Broadcasting of entanglement via local copying. Physical Review A, 1997, 55, 3327-3332.	2.5	81
112	Entangling atoms and ions in dissipative environments. Journal of Modern Optics, 2000, 47, 2583-2598.	1.3	81
113	Scalable quantum computation via local control of only two qubits. Physical Review A, 2010, 81, .	2.5	80
114	Robust trapped-ion quantum logic gates by continuous dynamical decoupling. Physical Review A, 2012, 85, .	2.5	80
115	Macroscopic dark periods without a metastable state. Physical Review A, 1992, 46, 373-379.	2.5	79
116	Ordering states with entanglement measures. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 268, 31-34.	2.1	79
117	A Generalization of Quantum Steinâ€™s Lemma. Communications in Mathematical Physics, 2010, 295, 791-828.	2.2	79
118	Dissipative phase transition in the open quantum Rabi model. Physical Review A, 2018, 97, .	2.5	79
119	Enhancing light-harvesting power with coherent vibrational interactions: A quantum heat engine picture. Journal of Chemical Physics, 2015, 143, 155102.	3.0	75
120	Probing the Dynamics of a Superradiant Quantum Phase Transition with a Single Trapped Ion. Physical Review Letters, 2017, 118, 073001.	7.8	75
121	Mapping coherence in measurement via full quantum tomography of a hybrid optical detector. Nature Photonics, 2012, 6, 364-368.	31.4	74
122	Chemical Compass Model for Avian Magnetoreception as a Quantum Coherent Device. Physical Review Letters, 2013, 111, 230503.	7.8	74
123	Measuring measurement: theory and practice. New Journal of Physics, 2009, 11, 093038.	2.9	73
124	Scalable Reconstruction of Density Matrices. Physical Review Letters, 2013, 111, 020401.	7.8	73
125	Light-Shift-Induced Quantum Gates for Ions in Thermal Motion. Physical Review Letters, 2001, 87, 127901.	7.8	72
126	Asymptotic Relative Entropy of Entanglement. Physical Review Letters, 2001, 87, 217902.	7.8	72

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127	Quantum-information processing in strongly detuned optical cavities. Physical Review A, 2002, 65, .	2.5	72
128	Spin Chains and Channels with Memory. Physical Review Letters, 2007, 99, 120504.	7.8	72
129	Spontaneous nucleation of structural defects in inhomogeneous ion chains. New Journal of Physics, 2010, 12, 115003.	2.9	72
130	Diamond-based single-molecule magnetic resonance spectroscopy. New Journal of Physics, 2013, 15, 013020.	2.9	71
131	Entanglement dynamics in chains of qubits with noise and disorder. New Journal of Physics, 2007, 9, 79-79.	2.9	68
132	Bloch-Redfield equations for modeling light-harvesting complexes. Journal of Chemical Physics, 2015, 142, 064104.	3.0	68
133	Quantum coherence in ion channels: resonances, transport and verification. New Journal of Physics, 2010, 12, 085001.	2.9	67
134	Hybrid sensors based on colour centres in diamond and piezoactive layers. Nature Communications, 2014, 5, 4065.	12.8	67
135	Excitation and entanglement transfer versus spectral gap. New Journal of Physics, 2006, 8, 94-94.	2.9	66
136	Nanoscale Dynamic Readout of a Chemical Redox Process Using Radicals Coupled with Nitrogen-Vacancy Centers in Nanodiamonds. ACS Nano, 2020, 14, 12938-12950.	14.6	66
137	Quantum and Classical Correlations in Quantum Brownian Motion. Physical Review Letters, 2002, 89, 137902.	7.8	65
138	Optically induced dynamic nuclear spin polarisation in diamond. New Journal of Physics, 2016, 18, 013040.	2.9	65
139	Noise-Enhanced Classical and Quantum Capacities in Communication Networks. Physical Review Letters, 2010, 105, 190501.	7.8	64
140	Measuring Entanglement in Condensed Matter Systems. Physical Review Letters, 2011, 106, 020401.	7.8	64
141	Spatial entanglement of bosons in optical lattices. Nature Communications, 2013, 4, 2161.	12.8	64
142	Robust dynamical decoupling sequences for individual-nuclear-spin addressing. Physical Review A, 2015, 92, .	2.5	64
143	An Introduction to Entanglement Theory. , 2014, , 173-209.		64
144	Quantum error correction in the presence of spontaneous emission. Physical Review A, 1997, 55, 67-71.	2.5	63

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145	Statistics Dependence of the Entanglement Entropy. Physical Review Letters, 2007, 98, 220603.	7.8	63
146	Realising a quantum absorption refrigerator with an atom-cavity system. Quantum Science and Technology, 2016, 1, 015001.	5.8	63
147	Ultrasensitive Magnetometer using a Single Atom. Physical Review Letters, 2016, 116, 240801.	7.8	63
148	Stochastic Resonance Phenomena in Quantum Many-Body Systems. Physical Review Letters, 2007, 98, .	7.8	62
149	Bounds on relative entropy of entanglement for multi-party systems. Journal of Physics A, 2001, 34, 6997-7002.	1.6	61
150	Efficient simulation of non-Markovian system-environment interaction. New Journal of Physics, 2016, 18, 023035.	2.9	60
151	Experimental measurement of the quantum geometric tensor using coupled qubits in diamond. National Science Review, 2020, 7, 254-260.	9.5	59
152	Coherence with incoherent light: A new type of quantum beat for a single atom. Physical Review A, 1993, 47, 2186-2190.	2.5	58
153	A Reversible Theory of Entanglement and its Relation to the Second Law. Communications in Mathematical Physics, 2010, 295, 829-851.	2.2	58
154	Operator monotones, the reduction criterion and the relative entropy. Journal of Physics A, 2000, 33, L193-L197.	1.6	56
155	The emergence of typical entanglement in two-party random processes. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 8081-8108.	2.1	56
156	Excited-state quantum phase transition in the Rabi model. Physical Review A, 2016, 94, .	2.5	56
157	Methods for Detecting Acceleration Radiation in a Bose-Einstein Condensate. Physical Review Letters, 2008, 101, 110402.	7.8	55
158	Compact Continuous-Variable Entanglement Distillation. Physical Review Letters, 2012, 108, 060502.	7.8	54
159	Quantum limits for the magnetic sensitivity of a chemical compass. Physical Review A, 2012, 85, .	2.5	53
160	Protected ultrastrong coupling regime of the two-photon quantum Rabi model with trapped ions. Physical Review A, 2017, 95, .	2.5	53
161	Initialization and Readout of Nuclear Spins via a Negatively Charged Silicon-Vacancy Center in Diamond. Physical Review Letters, 2019, 122, 190503.	7.8	53
162	Spin-Mechanical Scheme with Color Centers in Hexagonal Boron Nitride Membranes. Physical Review Letters, 2017, 119, 233602.	7.8	53

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163	Density Matrix Renormalization Group in the Heisenberg Picture. Physical Review Letters, 2009, 102, 057202.	7.8	52
164	Coupling of nitrogen vacancy centres in nanodiamonds by means of phonons. New Journal of Physics, 2013, 15, 083014.	2.9	52
165	Fate of photon blockade in the deep strong-coupling regime. Physical Review A, 2016, 94, .	2.5	52
166	Toward Hyperpolarization of Oil Molecules via Single Nitrogen Vacancy Centers in Diamond. Nano Letters, 2018, 18, 1882-1887.	9.1	51
167	Motional Dynamical Decoupling for Interferometry with Macroscopic Particles. Physical Review Letters, 2020, 125, 023602.	7.8	51
168	Robust generation of entanglement between two cavities mediated by short interactions with an atom. Physical Review A, 2003, 67, .	2.5	50
169	Squeezing the limit: quantum benchmarks for the teleportation and storage of squeezed states. New Journal of Physics, 2008, 10, 113014.	2.9	50
170	Power of symmetric extensions for entanglement detection. Physical Review A, 2009, 80, .	2.5	50
171	Dissipation-Assisted Quantum Information Processing with Trapped Ions. Physical Review Letters, 2013, 110, 110502.	7.8	50
172	Optical hyperpolarization of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi mathvariant="normal">C</mml:mi><mml:mprescripts /><mml:none /><mml:mn>13</mml:mn></mml:mmultiscripts></mml:mrow></mml:math>nuclear spins in nanodiamond ensembles. Physical Review B, 2015, 92, .	3.2	50
173	Classical Information and Distillable Entanglement. Physical Review Letters, 2000, 84, 1611-1614.	7.8	49
174	Ground-State Approximation for Strongly Interacting Spin Systems in Arbitrary Spatial Dimension. Physical Review Letters, 2006, 97, 107206.	7.8	49
175	The inhomogeneous Kibbleâ€“Zurek mechanism: vortex nucleation during Boseâ€“Einstein condensation. New Journal of Physics, 2011, 13, 083022.	2.9	49
176	Precise Experimental Investigation of Eigenmodes in a Planar Ion Crystal. Physical Review Letters, 2012, 109, 263003.	7.8	49
177	Testing quantum gravity by nanodiamond interferometry with nitrogen-vacancy centers. Physical Review A, 2014, 90, .	2.5	49
178	Optimized auxiliary oscillators for the simulation of general open quantum systems. Physical Review A, 2020, 101, .	2.5	47
179	Universal Quantum Computing with Arbitrary Continuous-Variable Encoding. Physical Review Letters, 2016, 117, 100501.	7.8	45
180	Quantum Coherence of Discrete Kink Solitons in Ion Traps. Physical Review Letters, 2010, 104, 043004.	7.8	44

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181	Coherent optimal control of photosynthetic molecules. Physical Review A, 2012, 85, .	2.5	44
182	Publisherâ€™s Note: Logarithmic Negativity: A Full Entanglement Monotone That Is not Convex [Phys. Rev. Lett.95, 090503 (2005)]. Physical Review Letters, 2005, 95, .	7.8	43
183	Quantum beats revisited: a quantum jump approach. Journal of the European Optical Society Part B: Quantum Optics, 1994, 6, 15-25.	1.2	42
184	Spectral structures induced by electron shelving. Physical Review A, 1995, 52, 3333-3343.	2.5	42
185	Quantum technology: from research to application. Applied Physics B: Lasers and Optics, 2016, 122, 1.	2.2	42
186	A trapped-ion simulator for spin-boson models with structured environments. New Journal of Physics, 2018, 20, 073002.	2.9	42
187	Exact matrix product solutions in the Heisenberg picture of an open quantum spin chain. New Journal of Physics, 2010, 12, 025005.	2.9	41
188	The nature of the low energy band of the Fenna-Matthews-Olson complex: Vibronic signatures. Journal of Chemical Physics, 2012, 136, 155102.	3.0	41
189	Simulating Bosonic Baths with Error Bars. Physical Review Letters, 2015, 115, 130401.	7.8	41
190	Journeys from quantum optics to quantum technology. Progress in Quantum Electronics, 2017, 54, 19-45.	7.0	41
191	Coherence and non-classicality of quantum Markov processes. Quantum Science and Technology, 2019, 4, 01LT01.	5.8	39
192	Criticality-Enhanced Quantum Sensing via Continuous Measurement. PRX Quantum, 2022, 3, .	9.2	39
193	Recursive quantum detector tomography. New Journal of Physics, 2012, 14, 115005.	2.9	38
194	Self-assembling hybrid diamondâ€“biological quantum devices. New Journal of Physics, 2014, 16, 093002.	2.9	38
195	Controllable Non-Markovianity for a Spin Qubit in Diamond. Physical Review Letters, 2018, 121, 060401.	7.8	38
196	Inhibition of spontaneous decay by continuous measurements. Proposal for realizable experiment. Optics Communications, 1996, 123, 278-286.	2.1	37
197	Fast and Robust Laser Cooling of Trapped Systems. Physical Review Letters, 2010, 104, 043003.	7.8	37
198	Arrays of waveguide-coupled optical cavities that interact strongly with atoms. New Journal of Physics, 2011, 13, 113002.	2.9	37

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199	Hot entanglement in a simple dynamical model. Journal of Modern Optics, 2003, 50, 881-889.	1.3	36
200	Frustrated Quantum Spin Models with Cold Coulomb Crystals. Physical Review Letters, 2011, 107, 207209.	7.8	36
201	Noise-Resilient Quantum Computing with a Nitrogen-Vacancy Center and Nuclear Spins. Physical Review Letters, 2016, 117, 130502.	7.8	36
202	Connecting nth order generalised quantum Rabi models: Emergence of nonlinear spin-boson coupling via spin rotations. Npj Quantum Information, 2018, 4, .	6.7	36
203	When Is a Non-Markovian Quantum Process Classical?. Physical Review X, 2020, 10, .	8.9	36
204	A Complex Comprising a Cyanine Dye Rotaxane and a Porphyrin Nanoring as a Model Lightâ€Harvesting System. Angewandte Chemie - International Edition, 2020, 59, 16455-16458.	13.8	36
205	Quantum diffusion with disorder, noise and interaction. New Journal of Physics, 2013, 15, 045007.	2.9	35
206	Realistic and verifiable coherent control of excitonic states in a light-harvesting complex. New Journal of Physics, 2014, 16, 045007.	2.9	35
207	Robust techniques for polarization and detection of nuclear spin ensembles. Physical Review B, 2017, 96, .	3.2	35
208	Dissipation-Assisted Matrix Product Factorization. Physical Review Letters, 2019, 123, 100502.	7.8	35
209	Quantum coherence and state conversion: theory and experiment. Npj Quantum Information, 2020, 6, .	6.7	35
210	Conditions for the Local Manipulation of Gaussian States. Physical Review Letters, 2002, 89, 097901.	7.8	34
211	Entanglement on mixed stabilizer states: normal forms and reduction procedures. New Journal of Physics, 2005, 7, 170-170.	2.9	34
212	Classical simulability, entanglement breaking, and quantum computation thresholds. Physical Review A, 2005, 71, .	2.5	34
213	Dissipative ground-state preparation of a spin chain by a structured environment. New Journal of Physics, 2013, 15, 073027.	2.9	34
214	Inverse counting statistics for stochastic and open quantum systems: the characteristic polynomial approach. New Journal of Physics, 2014, 16, 033030.	2.9	34
215	Superfast Laser Cooling. Physical Review Letters, 2010, 104, 183001.	7.8	33
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