

Peter Zoller

List of Publications by Year in descending order

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612
papers

80,868
citations

334

137
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636
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636
docs citations

636
times ranked

19994
citing authors

#	ARTICLE	IF	CITATIONS
1	Cold Bosonic Atoms in Optical Lattices. <i>Physical Review Letters</i> , 1998, 81, 3108-3111.	2.9	3,154
2	Quantum Computations with Cold Trapped Ions. <i>Physical Review Letters</i> , 1995, 74, 4091-4094.	2.9	3,086
3	Long-distance quantum communication with atomic ensembles and linear optics. <i>Nature</i> , 2001, 414, 413-418.	13.7	2,891
4	Quantum Repeaters: The Role of Imperfect Local Operations in Quantum Communication. <i>Physical Review Letters</i> , 1998, 81, 5932-5935.	2.9	2,526
5	Quantum State Transfer and Entanglement Distribution among Distant Nodes in a Quantum Network. <i>Physical Review Letters</i> , 1997, 78, 3221-3224.	2.9	1,845
6	Inseparability Criterion for Continuous Variable Systems. <i>Physical Review Letters</i> , 2000, 84, 2722-2725.	2.9	1,712
7	Dipole Blockade and Quantum Information Processing in Mesoscopic Atomic Ensembles. <i>Physical Review Letters</i> , 2001, 87, 037901.	2.9	1,290
8	Quantum Noise. Springer Series in Synergetics, 2000, , .	0.2	1,222
9	Fast Quantum Gates for Neutral Atoms. <i>Physical Review Letters</i> , 2000, 85, 2208-2211.	2.9	1,197
10	Chiral quantum optics. <i>Nature</i> , 2017, 541, 473-480.	13.7	1,007
11	Quantum states and phases in driven open quantum systems with cold atoms. <i>Nature Physics</i> , 2008, 4, 878-883.	6.5	911
12	A toolbox for lattice-spin models with polar molecules. <i>Nature Physics</i> , 2006, 2, 341-347.	6.5	890
13	The cold atom Hubbard toolbox. <i>Annals of Physics</i> , 2005, 315, 52-79.	1.0	839
14	An open-system quantum simulator with trapped ions. <i>Nature</i> , 2011, 470, 486-491.	13.7	823
15	Many-particle entanglement with Bose-Einstein condensates. <i>Nature</i> , 2001, 409, 63-66.	13.7	809
16	Decoherence, Continuous Observation, and Quantum Computing: A Cavity QED Model. <i>Physical Review Letters</i> , 1995, 75, 3788-3791.	2.9	713
17	Entanglement of Atoms via Cold Controlled Collisions. <i>Physical Review Letters</i> , 1999, 82, 1975-1978.	2.9	712
18	Creation of effective magnetic fields in optical lattices: the Hofstadter butterfly for cold neutral atoms. <i>New Journal of Physics</i> , 2003, 5, 56-56.	1.2	661

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19	Quasiparticle engineering and entanglement propagation in a quantum many-body system. Nature, 2014, 511, 202-205.	13.7	656
20	A Rydberg quantum simulator. Nature Physics, 2010, 6, 382-388.	6.5	644
21	Geometric Manipulation of Trapped Ions for Quantum Computation. Science, 2001, 292, 1695-1697.	6.0	641
22	Goals and opportunities in quantum simulation. Nature Physics, 2012, 8, 264-266.	6.5	639
23	Dynamics of a Quantum Phase Transition. Physical Review Letters, 2005, 95, 105701.	2.9	616
24	Quantum Reservoir Engineering with Laser Cooled Trapped Ions. Physical Review Letters, 1996, 77, 4728-4731.	2.9	607
25	Majorana Fermions in Equilibrium and in Driven Cold-Atom Quantum Wires. Physical Review Letters, 2011, 106, 220402.	2.9	606
26	Two-orbital S U(N) magnetism with ultracold alkaline-earth atoms. Nature Physics, 2010, 6, 289-295.	6.5	572
27	Quantum repeaters based on entanglement purification. Physical Review A, 1999, 59, 169-181.	1.0	567
28	Condensed Matter Theory of Dipolar Quantum Gases. Chemical Reviews, 2012, 112, 5012-5061.	23.0	567
29	Sonic Analog of Gravitational Black Holes in Bose-Einstein Condensates. Physical Review Letters, 2000, 85, 4643-4647.	2.9	556
30	Observation of chiral edge states with neutral fermions in synthetic Hall ribbons. Science, 2015, 349, 1510-1513.	6.0	551
31	Bose-Einstein Condensation in Trapped Dipolar Gases. Physical Review Letters, 2000, 85, 1791-1794.	2.9	548
32	Complete Characterization of a Quantum Process: The Two-Bit Quantum Gate. Physical Review Letters, 1997, 78, 390-393.	2.9	546
33	Preparation of entangled states by quantum Markov processes. Physical Review A, 2008, 78, .	1.0	540
34	Real-time dynamics of lattice gauge theories with a few-qubit quantum computer. Nature, 2016, 534, 516-519.	13.7	512
35	Monte Carlo simulation of the atomic master equation for spontaneous emission. Physical Review A, 1992, 45, 4879-4887.	1.0	511
36	Topological quantum matter with ultracold gases in optical lattices. Nature Physics, 2016, 12, 639-645.	6.5	510

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37	Cavity opto-mechanics using an optically levitated nanosphere. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 1005-1010.	3.3	493
38	Repulsively bound atom pairs in an optical lattice. Nature, 2006, 441, 853-856.	13.7	491
39	Universal Digital Quantum Simulation with Trapped Ions. Science, 2011, 334, 57-61.	6.0	483
40	Creation of entangled states of distant atoms by interference. Physical Review A, 1999, 59, 1025-1033.	1.0	481
41	A scalable quantum computer with ions in an array of microtraps. Nature, 2000, 404, 579-581.	13.7	449
42	Reduced Quantum Fluctuations in Resonance Fluorescence. Physical Review Letters, 1981, 47, 709-711.	2.9	432
43	Strongly Correlated 2D Quantum Phases with Cold Polar Molecules: Controlling the Shape of the Interaction Potential. Physical Review Letters, 2007, 98, 060404.	2.9	429
44	High-Temperature Superfluidity of Fermionic Atoms in Optical Lattices. Physical Review Letters, 2002, 89, 220407.	2.9	396
45	Topology by dissipation in atomic quantum wires. Nature Physics, 2011, 7, 971-977.	6.5	396
46	Optomechanical Transducers for Long-Distance Quantum Communication. Physical Review Letters, 2010, 105, 220501.	2.9	391
47	Self-verifying variational quantum simulation of lattice models. Nature, 2019, 569, 355-360.	13.7	387
48	Quantum superposition states of Bose-Einstein condensates. Physical Review A, 1998, 57, 1208-1218.	1.0	375
49	Probing Rényi entanglement entropy via randomized measurements. Science, 2019, 364, 260-263.	6.0	375
50	Optomechanical Quantum Information Processing with Photons and Phonons. Physical Review Letters, 2012, 109, 013603.	2.9	374
51	A coherent all-electrical interface between polar molecules and mesoscopic superconducting resonators. Nature Physics, 2006, 2, 636-642.	6.5	372
52	Cold Atoms in Non-Abelian Gauge Potentials: From the Hofstadter "Moth" to Lattice Gauge Theory. Physical Review Letters, 2005, 95, 010403.	2.9	370
53	Synthesis of arbitrary quantum states via adiabatic transfer of Zeeman coherence. Physical Review Letters, 1993, 71, 3095-3098.	2.9	357
54	Fault-tolerant architecture for quantum computation using electrically controlled semiconductor spins. Nature Physics, 2005, 1, 177-183.	6.5	357

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55	Wave-function quantum stochastic differential equations and quantum-jump simulation methods. <i>Physical Review A</i> , 1992, 46, 4363-4381.	1.0	354
56	Low Energy Excitations of a Bose-Einstein Condensate: A Time-Dependent Variational Analysis. <i>Physical Review Letters</i> , 1996, 77, 5320-5323.	2.9	349
57	Hybrid Quantum Processors: Molecular Ensembles as Quantum Memory for Solid State Circuits. <i>Physical Review Letters</i> , 2006, 97, 033003.	2.9	348
58	A quantum spin transducer based on nanoelectromechanical resonator arrays. <i>Nature Physics</i> , 2010, 6, 602-608.	6.5	346
59	Autoionizing states in strong laser fields. <i>Physical Review A</i> , 1981, 24, 379-397.	1.0	344
60	Dynamics of Bose-Einstein condensates: Variational solutions of the Gross-Pitaevskii equations. <i>Physical Review A</i> , 1997, 56, 1424-1432.	1.0	325
61	Laser Cooling of a Nanomechanical Resonator Mode to its Quantum Ground State. <i>Physical Review Letters</i> , 2004, 92, 075507.	2.9	324
62	Measuring Entanglement Growth in Quench Dynamics of Bosons in an Optical Lattice. <i>Physical Review Letters</i> , 2012, 109, 020505.	2.9	303
63	Quantum Kibble-Zurek mechanism and critical dynamics on a programmable Rydberg simulator. <i>Nature</i> , 2019, 568, 207-211.	13.7	298
64	Spectroscopic observation of SU(N)-symmetric interactions in Sr orbital magnetism. <i>Science</i> , 2014, 345, 1467-1473.	6.0	290
65	Atomic Bose and Anderson Glasses in Optical Lattices. <i>Physical Review Letters</i> , 2003, 91, 080403.	2.9	280
66	Quantum information processing and communication. <i>European Physical Journal D</i> , 2005, 36, 203-228.	0.6	272
67	Simulating lattice gauge theories within quantum technologies. <i>European Physical Journal D</i> , 2020, 74, 1.	0.6	272
68	Quantum Communication between Atomic Ensembles Using Coherent Light. <i>Physical Review Letters</i> , 2000, 85, 5643-5646.	2.9	268
69	Strongly Correlated Gases of Rydberg-Dressed Atoms: Quantum and Classical Dynamics. <i>Physical Review Letters</i> , 2010, 104, 223002.	2.9	267
70	Dynamical Phase Transitions and Instabilities in Open Atomic Many-Body Systems. <i>Physical Review Letters</i> , 2010, 105, 015702.	2.9	260
71	Dark squeezed states of the motion of a trapped ion. <i>Physical Review Letters</i> , 1993, 70, 556-559.	2.9	253
72	Mesoscopic Rydberg Gate Based on Electromagnetically Induced Transparency. <i>Physical Review Letters</i> , 2009, 102, 170502.	2.9	251

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73	Extended Bose-Hubbard models with ultracold magnetic atoms. <i>Science</i> , 2016, 352, 201-205.	6.0	249
74	Laser cooling of trapped ions in a standing wave. <i>Physical Review A</i> , 1992, 46, 2668-2681.	1.0	248
75	Quantum Phases of Cold Polar Molecules in 2D Optical Lattices. <i>Physical Review Letters</i> , 2010, 104, 125301.	2.9	247
76	Quantum Computation using Vortices and Majorana Zero Modes of a Superfluid of Fermionic Cold Atoms. <i>Physical Review Letters</i> , 2007, 98, 010506.	2.9	244
77	Hybrid quantum devices and quantum engineering. <i>Physica Scripta</i> , 2009, T137, 014001.	1.2	243
78	Atomic Quantum Simulation of Dynamical Gauge Fields Coupled to Fermionic Matter: From String Breaking to Evolution after a Quench. <i>Physical Review Letters</i> , 2012, 109, 175302.	2.9	241
79	Three-body interactions with cold polar molecules. <i>Nature Physics</i> , 2007, 3, 726-731.	6.5	234
80	Coherent atomic mirrors and beam splitters by adiabatic passage in multilevel systems. <i>Physical Review A</i> , 1991, 44, R4118-R4121.	1.0	233
81	Laser excitation of electronic wave packets in rydberg atoms. <i>Physics Reports</i> , 1991, 199, 231-280.	10.3	226
82	Speed Optimized Two-Qubit Gates with Laser Coherent Control Techniques for Ion Trap Quantum Computing. <i>Physical Review Letters</i> , 2003, 91, 157901.	2.9	226
83	Phonon-Induced Spin-Spin Interactions in Diamond Nanostructures: Application to Spin Squeezing. <i>Physical Review Letters</i> , 2013, 110, 156402.	2.9	226
84	Preparation of Fock states by observation of quantum jumps in an ion trap. <i>Physical Review Letters</i> , 1993, 70, 762-765.	2.9	224
85	Spin-based all-optical quantum computation with quantum dots: Understanding and suppressing decoherence. <i>Physical Review A</i> , 2003, 68, .	1.0	224
86	Quantum jumps in atomic systems. <i>Physical Review A</i> , 1987, 35, 198-207.	1.0	223
87	Quantum optics of chiral spin networks. <i>Physical Review A</i> , 2015, 91, .	1.0	220
88	Engineered Open Systems and Quantum Simulations with Atoms and Ions. <i>Advances in Atomic, Molecular and Optical Physics</i> , 2012, , 1-80.	2.3	219
89	Quantum Computing with Alkaline-Earth-Metal Atoms. <i>Physical Review Letters</i> , 2008, 101, 170504.	2.9	218
90	Atomic Quantum Simulation of $U = \sum_{i,j} \mathbf{U}_{ij} \cdot \mathbf{N}_i \cdot \mathbf{N}_j$	2.9	217

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91	Many-particle entanglement in two-component Bose-Einstein condensates. <i>Physical Review A</i> , 2003, 67, .	1.0	212
92	Monte Carlo simulation of master equations in quantum optics for vacuum, thermal, and squeezed reservoirs. <i>Physical Review A</i> , 1992, 46, 4382-4396.	1.0	211
93	12-Anyons in Small Atomic Bose-Einstein Condensates. <i>Physical Review Letters</i> , 2001, 87, 010402.	2.9	211
94	Topology by dissipation. <i>New Journal of Physics</i> , 2013, 15, 085001.	1.2	210
95	Measuring multipartite entanglement through dynamic susceptibilities. <i>Nature Physics</i> , 2016, 12, 778-782.	6.5	210
96	Dynamical localization of atomic-beam deflection by a modulated standing light wave. <i>Physical Review A</i> , 1992, 45, R19-R22.	1.0	208
97	Sonic black holes in dilute Bose-Einstein condensates. <i>Physical Review A</i> , 2001, 63, .	1.0	208
98	Generation and detection of Rydberg wave packets by short laser pulses. <i>Physical Review A</i> , 1986, 34, 1058-1064.	1.0	206
99	Ideal Quantum Communication over Noisy Channels: A Quantum Optical Implementation. <i>Physical Review Letters</i> , 1997, 78, 4293-4296.	2.9	206
100	Supersolid Droplet Crystal in a Dipole-Blockaded Gas. <i>Physical Review Letters</i> , 2010, 105, 135301.	2.9	206
101	Atomic Three-Body Loss as a Dynamical Three-Body Interaction. <i>Physical Review Letters</i> , 2009, 102, 040402.	2.9	200
102	Apparatus for measuring pressure–volume–temperature relationships of polymers to 350 Å°C and 2200 kg/cm ² . <i>Review of Scientific Instruments</i> , 1976, 47, 948-952.	0.6	198
103	Squeezing and Entanglement of Atomic Beams. <i>Physical Review Letters</i> , 2000, 85, 3991-3994.	2.9	197
104	Preparation of macroscopic superpositions in many-atom systems. <i>Physical Review A</i> , 1994, 50, R2799-R2802.	1.0	194
105	Creation of Dark Solitons and Vortices in Bose-Einstein Condensates. <i>Physical Review Letters</i> , 1998, 80, 2972-2975.	2.9	194
106	Strong Coupling of a Mechanical Oscillator and a Single Atom. <i>Physical Review Letters</i> , 2009, 103, 063005.	2.9	192
107	Quantum gates with neutral atoms: Controlling collisional interactions in time-dependent traps. <i>Physical Review A</i> , 2000, 61, .	1.0	190
108	Quantum nondemolition measurements of photon number by atomic beam deflection. <i>Physical Review Letters</i> , 1991, 67, 1716-1719.	2.9	188

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109	Entanglement Purification of Gaussian Continuous Variable Quantum States. <i>Physical Review Letters</i> , 2000, 84, 4002-4005.	2.9	183
110	Cold polar molecules in two-dimensional traps: Tailoring interactions with external fields for novel quantum phases. <i>Physical Review A</i> , 2007, 76, .	1.0	182
111	Cavity-assisted squeezing of a mechanical oscillator. <i>Physical Review A</i> , 2009, 79, .	1.0	178
112	Photonic Channels for Quantum Communication. <i>Science</i> , 1998, 279, 205-208.	6.0	177
113	Creation of a Molecular Condensate by Dynamically Melting a Mott Insulator. <i>Physical Review Letters</i> , 2002, 89, 040402.	2.9	177
114	Quantum-state mapping between multilevel atoms and cavity light fields. <i>Physical Review A</i> , 1995, 51, 1578-1596.	1.0	176
115	Anomalous diffusion and Lévy walks in optical lattices. <i>Physical Review A</i> , 1996, 53, 3409-3430.	1.0	176
116	Quantum simulation of dynamical maps with trapped ions. <i>Nature Physics</i> , 2013, 9, 361-367.	6.5	175
117	Atomic Quantum Dots Coupled to a Reservoir of a Superfluid Bose-Einstein Condensate. <i>Physical Review Letters</i> , 2005, 94, 040404.	2.9	170
118	A quantum annealing architecture with all-to-all connectivity from local interactions. <i>Science Advances</i> , 2015, 1, e1500838.	4.7	162
119	Entropies from Random Quenches in Atomic Hubbard and Spin Models. <i>Physical Review Letters</i> , 2018, 120, 050406.	2.9	159
120	Feedback Cooling of a Single Trapped Ion. <i>Physical Review Letters</i> , 2006, 96, 043003.	2.9	158
121	Ground-state cooling of mechanical resonators. <i>Physical Review B</i> , 2004, 69, .	1.1	157
122	Coupled Ion-Nanomechanical Systems. <i>Physical Review Letters</i> , 2004, 93, 266403.	2.9	155
123	Establishing Einstein-Podolsky-Rosen Channels between Nanomechanics and Atomic Ensembles. <i>Physical Review Letters</i> , 2009, 102, 020501.	2.9	155
124	Direct imaging of topological edge states in cold-atom systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 6736-6741.	3.3	153
125	Photonic Circuits with Time Delays and Quantum Feedback. <i>Physical Review Letters</i> , 2016, 116, 093601.	2.9	153
126	Momentum transfer in laser-cooled cesium by adiabatic passage in a light field. <i>Physical Review Letters</i> , 1994, 72, 997-1000.	2.9	152

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127	Coherent atomic waveguides from hollow optical fibers: Quantized atomic motion. <i>Physical Review A</i> , 1994, 50, 2680-2690.	1.0	151
128	Designing Frustrated Quantum Magnets with Laser-Dressed Rydberg Atoms. <i>Physical Review Letters</i> , 2015, 114, 173002.	2.9	150
129	Quantum Chaos in an Ion Trap: The Delta-Kicked Harmonic Oscillator. <i>Physical Review Letters</i> , 1997, 79, 4790-4793.	2.9	149
130	Optical Pumping of Quantum-Dot Nuclear Spins. <i>Physical Review Letters</i> , 2003, 91, 017402.	2.9	149
131	Creation of a Dipolar Superfluid in Optical Lattices. <i>Physical Review Letters</i> , 2003, 90, 110401.	2.9	147
132	Driven-dissipative preparation of entangled states in cascaded quantum-optical networks. <i>New Journal of Physics</i> , 2012, 14, 063014.	1.2	147
133	Continuous observation of interference fringes from Bose condensates. <i>Physical Review A</i> , 1996, 54, R3714-R3717.	1.0	146
134	Single-photon nonlinearities in two-mode optomechanics. <i>Physical Review A</i> , 2013, 87, .	1.0	146
135	Topological Quantum Optics in Two-Dimensional Atomic Arrays. <i>Physical Review Letters</i> , 2017, 119, 023603.	2.9	145
136	Atomic Quantum Simulator for Lattice Gauge Theories and Ring Exchange Models. <i>Physical Review Letters</i> , 2005, 95, 040402.	2.9	143
137	Continuous mode cooling and phonon routers for phononic quantum networks. <i>New Journal of Physics</i> , 2012, 14, 115004.	1.2	143
138	Quantum Spin Dimers from Chiral Dissipation in Cold-Atom Chains. <i>Physical Review Letters</i> , 2014, 113, 237203.	2.9	143
139	Quantum computations with atoms in optical lattices: Marker qubits and molecular interactions. <i>Physical Review A</i> , 2004, 70, .	1.0	139
140	Theory of an atom laser. <i>Physical Review A</i> , 1996, 54, R1757-R1760.	1.0	138
141	Laser-driven atoms in half-cavities. <i>Physical Review A</i> , 2002, 66, .	1.0	138
142	Nonequilibrium dynamics of bosonic atoms in optical lattices: Decoherence of many-body states due to spontaneous emission. <i>Physical Review A</i> , 2010, 82, .	1.0	136
143	Constrained Dynamics via the Zeno Effect in Quantum Simulation: Implementing Non-Abelian Lattice Gauge Theories with Cold Atoms. <i>Physical Review Letters</i> , 2014, 112, 120406.	2.9	136
144	Mixed-State Entanglement from Local Randomized Measurements. <i>Physical Review Letters</i> , 2020, 125, 200501.	2.9	136

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145	Spin-Charge Separation in Ultracold Quantum Gases. <i>Physical Review Letters</i> , 2003, 90, 020401.	2.9	135
146	Coherent Quantum Optical Control with Subwavelength Resolution. <i>Physical Review Letters</i> , 2008, 100, 093005.	2.9	135
147	Alkaline-Earth-Metal Atoms as Few-Qubit Quantum Registers. <i>Physical Review Letters</i> , 2009, 102, 110503.	2.9	135
148	Non-Lorentzian laser line shapes and the reversed peak asymmetry in double optical resonance. <i>Physical Review A</i> , 1980, 21, 1289-1296.	1.0	133
149	Nonlinear Quantum Optomechanics via Individual Intrinsic Two-Level Defects. <i>Physical Review Letters</i> , 2013, 110, 193602.	2.9	130
150	Quantum jumps in atomic systems. <i>European Journal of Physics</i> , 1988, 9, 250-256.	0.3	128
151	Quantum collapse and revival in the motion of a single trapped ion. <i>Physical Review A</i> , 1994, 49, 1202-1207.	1.0	128
152	Generation of squeezed states of nanomechanical resonators by reservoir engineering. <i>Physical Review B</i> , 2004, 70, .	1.1	127
153	Quantum kinetic theory: A quantum kinetic master equation for condensation of a weakly interacting Bose gas without a trapping potential. <i>Physical Review A</i> , 1997, 55, 2902-2921.	1.0	126
154	A coherent nonlinear mechanism for optical bistability from three level atoms. <i>Optics Communications</i> , 1980, 34, 260-264.	1.0	124
155	Interfacing Quantum-Optical and Solid-State Qubits. <i>Physical Review Letters</i> , 2004, 92, 247902.	2.9	123
156	Kinetics of Bose-Einstein Condensation in a Trap. <i>Physical Review Letters</i> , 1997, 79, 1793-1796.	2.9	119
157	Optomechanical transducers for quantum-information processing. <i>Physical Review A</i> , 2011, 84, .	1.0	119
158	Universal photonic quantum computation via time-delayed feedback. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 11362-11367.	3.3	117
159	Interference of Bose condensates. <i>Physical Review A</i> , 1996, 54, 2185-2196.	1.0	116
160	Tensor Networks for Lattice Gauge Theories and Atomic Quantum Simulation. <i>Physical Review Letters</i> , 2014, 112, .	2.9	116
161	Holonomic quantum computation with neutral atoms. <i>Physical Review A</i> , 2002, 66, .	1.0	113
162	Spectrum of squeezing in resonance fluorescence. <i>Optics Communications</i> , 1984, 52, 145-149.	1.0	110

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163	Quantum Simulation of a Lattice Schwinger Model in a Chain of Trapped Ions. <i>Physical Review X</i> , 2013, 3, .	2.8	109
164	Nanoplasmonic Lattices for Ultracold Atoms. <i>Physical Review Letters</i> , 2012, 109, 235309.	2.9	108
165	Stability and collective excitations of a two-component Bose-Einstein condensed gas: A moment approach. <i>Physical Review A</i> , 1997, 56, 2978-2983.	1.0	106
166	Three-dimensional theory for interaction between atomic ensembles and free-space light. <i>Physical Review A</i> , 2002, 66, .	1.0	106
167	Single Atom Transistor in a 1D Optical Lattice. <i>Physical Review Letters</i> , 2004, 93, 140408.	2.9	106
168	Quantum Spin-Ice and Dimer Models with Rydberg Atoms. <i>Physical Review X</i> , 2014, 4, .	2.8	106
169	Real-Time Dynamics in U(1) Lattice Gauge Theories with Tensor Networks. <i>Physical Review X</i> , 2016, 6, .	2.8	106
170	Simulation of quantum dynamics with quantum optical systems. <i>Quantum Information and Computation</i> , 2003, 3, 15-37.	0.1	106
171	Quantum Gates with Trapped Ions. <i>Physical Review Letters</i> , 1998, 81, 1322-1325.	2.9	105
172	Laser cooling of trapped three-level ions: Designing two-level systems for sideband cooling. <i>Physical Review A</i> , 1994, 49, 2771-2779.	1.0	103
173	Spin-based optical quantum computation via Pauli blocking in semiconductor quantum dots. <i>Europhysics Letters</i> , 2003, 62, 175-181.	0.7	103
174	U(1) Wilson lattice gauge theories in digital quantum simulators. <i>New Journal of Physics</i> , 2017, 19, 103020.	1.2	103
175	Laser Probing of Atomic Cooper Pairs. <i>Physical Review Letters</i> , 2000, 85, 487-490.	2.9	102
176	Defect-Suppressed Atomic Crystals in an Optical Lattice. <i>Physical Review Letters</i> , 2003, 91, 110403.	2.9	102
177	Quantum Information Scrambling in a Trapped-Ion Quantum Simulator with Tunable Range Interactions. <i>Physical Review Letters</i> , 2020, 124, 240505.	2.9	102
178	Motion tomography of a single trapped ion. <i>Physical Review A</i> , 1996, 53, R1966-R1969.	1.0	101
179	Quantum Kinetic Theory of Condensate Growth: Comparison of Experiment and Theory. <i>Physical Review Letters</i> , 1998, 81, 5266-5269.	2.9	101
180	Single-atom cavity QED and optomechanics. <i>Physical Review A</i> , 2010, 81, .	1.0	101

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181	Quantum State Transfer via Noisy Photonic and Phononic Waveguides. <i>Physical Review Letters</i> , 2017, 118, 133601.	2.9	100
182	Trapped ions in the strong-excitation regime: Ion interferometry and nonclassical states. <i>Physical Review A</i> , 1996, 54, 1532-1540.	1.0	98
183	Rydberg electrons in laser fields: A finite-range-interaction problem. <i>Physical Review A</i> , 1987, 36, 5178-5188.	1.0	97
184	Quantum kinetic theory. III. Quantum kinetic master equation for strongly condensed trapped systems. <i>Physical Review A</i> , 1998, 58, 536-556.	1.0	97
185	Quantum communication with dark photons. <i>Physical Review A</i> , 1999, 59, 2659-2664.	1.0	97
186	Anyonic interferometry and protected memories in atomic spin lattices. <i>Nature Physics</i> , 2008, 4, 482-488.	6.5	97
187	Nonlinear matter wave dynamics with a chaotic potential. <i>Physical Review A</i> , 2000, 62, .	1.0	96
188	New Frontiers in Quantum Information With Atoms and Ions. <i>Physics Today</i> , 2004, 57, 38-44.	0.3	96
189	Trapping and Manipulation of Isolated Atoms Using Nanoscale Plasmonic Structures. <i>Physical Review Letters</i> , 2009, 103, 123004.	2.9	96
190	Topological Flat Bands from Dipolar Spin Systems. <i>Physical Review Letters</i> , 2012, 109, 266804.	2.9	96
191	Absorption spectrum of a two-level system in a squeezed vacuum. <i>Optics Communications</i> , 1987, 64, 523-528.	1.0	95
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