Immanuel Bloch

List of Publications by Year
in descending order

184	46,832	2975 93	5120 166
papers	citations	h-index	g-index

188	188	188	12889
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Many-body physics with ultracold gases. Reviews of Modern Physics, 2008, 80, 885-964.	45.6	6,386
2	Quantum phase transition from a superfluid to a Mott insulator in a gas of ultracold atoms. Nature, 2002, 415, 39-44.	27.8	4,939
3	Quantum simulations with ultracold quantum gases. Nature Physics, 2012, 8, 267-276.	16.7	1,612
4	Tonksâ€“Girardeau gas of ultracold atoms in an optical lattice. Nature, 2004, 429, 277-281.	27.8	1,385
5	Observation of many-body localization of interacting fermions in a quasirandom optical lattice. Science, 2015, 349, 842-845.	12.6	1,222
6	Realization of the Hofstadter Hamiltonian with Ultracold Atoms in Optical Lattices. Physical Review Letters, 2013, 111, 185301.	7.8	1,102
7	Ultracold quantum gases in optical lattices. Nature Physics, 2005, 1, 23-30.	16.7	1,084
8	Single-atom-resolved fluorescence imaging of an atomic Mott insulator. Nature, 2010, 467, 68-72.	27.8	1,084
9	Collapse and revival of the matter wave field of a Boseâ€“Einstein condensate. Nature, 2002, 419, 51-54.	27.8	1,036
10	Colloquium : Many-body localization, thermalization, and entanglement. Reviews of Modern Physics, 2019, 91, .	45.6	1,005
11	Quantum simulations with ultracold atoms in optical lattices. Science, 2017, 357, 995-1001.	12.6	824
12	Measuring the Chern number of Hofstadter bands with ultracold bosonic atoms. Nature Physics, 2015, 11, 162-166.	16.7	777
13	Probing the relaxation towards equilibrium in an isolated strongly correlated one-dimensional BoseÂgas. Nature Physics, 2012, 8, 325-330.	16.7	762
14	Direct measurement of the Zak phase in topological Bloch bands. Nature Physics, 2013, 9, 795-800.	16.7	751
15	Controlled collisions for multi-particle entanglement of optically trapped atoms. Nature, 2003, 425, 937-940.	27.8	698
16	Exploring the many-body localization transition in two dimensions. Science, 2016, 352, 1547-1552.	12.6	694
17	Light-cone-like spreading of correlations in a quantum many-body system. Nature, 2012, 481, 484-487.	27.8	645
18	Experimental Realization of Strong Effective Magnetic Fields in an Optical Lattice. Physical Review Letters, 2011, 107, 255301.	7.8	629

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19	Metallic and Insulating Phases of Repulsively Interacting Fermions in a 3D Optical Lattice. Science, 2008, 322, 1520-1525.	12.6	620
20	Single-spin addressing in an atomic Mott insulator. Nature, 2011, 471, 319-324.	27.8	592
21	Time-Resolved Observation and Control of Superexchange Interactions with Ultracold Atoms in Optical Lattices. Science, 2008, 319, 295-299.	12.6	566
22	Exploring Phase Coherence in a 2D Lattice of Bose-Einstein Condensates. Physical Review Letters, 2001, 87, 160405.	7.8	565
23	Direct observation of second-order atom tunnelling. Nature, 2007, 448, 1029-1032.	27.8	511
24	Spatial quantum noise interferometry in expanding ultracold atom clouds. Nature, 2005, 434, 481-484.	27.8	470
25	Atom Laser with a cw Output Coupler. Physical Review Letters, 1999, 82, 3008-3011.	7.8	458
26	Observation of spatially ordered structures in a two-dimensional Rydberg gas. Nature, 2012, 491, 87-91.	27.8	451
27	A Thouless quantum pump with ultracold bosonic atoms in an optical superlattice. Nature Physics, 2016, 12, 350-354.	16.7	449
28	Quantum dynamics of a mobile spin impurity. Nature Physics, 2013, 9, 235-241.	16.7	418
29	Coherent Transport of Neutral Atoms in Spin-Dependent Optical Lattice Potentials. Physical Review Letters, 2003, 91, 010407.	7.8	388
30	Observation of chiral currents with ultracold atoms in bosonic ladders. Nature Physics, 2014, 10, 588-593.	16.7	375
31	The quantum technologies roadmap: a European community view. New Journal of Physics, 2018, 20, 080201.	2.9	358
32	Microscopic observation of magnon bound states and their dynamics. Nature, 2013, 502, 76-79.	27.8	345
33	Fermionic transport and out-of-equilibrium dynamics in a homogeneous Hubbard modelÂwithÂultracold atoms. Nature Physics, 2012, 8, 213-218.	16.7	336
34	Quantum coherence and entanglement with ultracold atoms in optical lattices. Nature, 2008, 453, 1016-1022.	27.8	302
35	Coupling Identical one-dimensional Many-Body Localized Systems. Physical Review Letters, 2016, 116, 140401.	7.8	293
36	Exploring 4D quantum Hall physics with a 2D topological charge pump. Nature, 2018, 553, 55-58.	27.8	292

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37	Spin- and density-resolved microscopy of antiferromagnetic correlations in Fermi-Hubbard chains. Science, 2016, 353, 1257-1260.	12.6	291
38	Observation of two-orbital spin-exchange interactions with ultracold SU(N)-symmetric fermions. Nature Physics, 2014, 10, 779-784.	16.7	283
39	The â€˜Higgsâ€™ amplitude mode at the two-dimensional superfluid/Mott insulator transition. Nature, 2012, 487, 454-458.	27.8	280
40	Measurement of the spatial coherence of a trapped Bose gas at the phase transition. Nature, 2000, 403, 166-170.	27.8	258
41	Many-body interferometry of a Rydberg-dressed spinÂlattice. Nature Physics, 2016, 12, 1095-1099.	16.7	258
42	Time-resolved observation of coherent multi-body interactions in quantum phase revivals. Nature, 2010, 465, 197-201.	27.8	251
43	Observation of Correlated Particle-Hole Pairs and String Order in Low-Dimensional Mott Insulators. Science, 2011, 334, 200-203.	12.6	246
44	Crystallization in Ising quantum magnets. Science, 2015, 347, 1455-1458.	12.6	240
45	Expansion Dynamics of Interacting Bosons in Homogeneous Lattices in One and Two Dimensions. Physical Review Letters, 2013, 110, 205301.	7.8	236
46	Periodically driving a many-body localized quantum system. Nature Physics, 2017, 13, 460-464.	16.7	226
47	Free fermion antibunching in a degenerate atomic Fermi gas released from an optical lattice. Nature, 2006, 444, 733-736.	27.8	221
48	Floquet approach to â„2 lattice gauge theories with ultracold atoms in optical lattices. Nature Physics, 2019, 15, 1168-1173.	16.7	214
49	An Aharonov-Bohm interferometer for determining Bloch band topology. Science, 2015, 347, 288-292.	12.6	212
50	Resonant control of spin dynamics in ultracold quantum gases by microwave dressing. Physical Review A, 2006, 73, .	2.5	200
51	Bose-Einstein condensation in a quadrupole-Ioffe-configuration trap. Physical Review A, 1998, 58, R2664-R2667.	2.5	199
52	Observation of Slow Dynamics near the Many-Body Localization Transition in One-Dimensional Quasiperiodic Systems. Physical Review Letters, 2017, 119, 260401.	7.8	190
53	Negative Absolute Temperature for Motional Degrees of Freedom. Science, 2013, 339, 52-55.	12.6	189
54	Probing Slow Relaxation and Many-Body Localization in Two-Dimensional Quasiperiodic Systems. Physical Review X, 2017, 7, .	8.9	182

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55	State Preparation and Dynamics of Ultracold Atoms in Higher Lattice Orbitals. Physical Review Letters, 2007, 99, 200405.	7.8	180
56	Formation of Spatial Shell Structure in the Superfluid to Mott Insulator Transition. Physical Review Letters, 2006, 97, 060403.	7.8	179
57	Single-Particle Mobility Edge in a One-Dimensional Quasiperiodic Optical Lattice. Physical Review Letters, 2018, 120, 160404.	7.8	178
58	Coulomb Functions for Reactions of Protons and Alpha-Particles with the Lighter Nuclei. Reviews of Modern Physics, 1951, 23, 147-182.	45.6	170
59	Signatures of Many-Body Localization in a Controlled Open Quantum System. Physical Review X, 2017, 7, .	8.9	169
60	Precision measurement of spin-dependent interaction strengths for spin-1 and spin-287Rb atoms. New Journal of Physics, 2006, 8, 152-152.	2.9	168
61	Far-from-Equilibrium Spin Transport in Heisenberg Quantum Magnets. Physical Review Letters, 2014, 113, 147205.	7.8	168
62	Suppression of the critical temperature for superfluidity near the Mott transition. Nature Physics, 2010, 6, 998-1004.	16.7	165
63	Realization of an anomalous Floquet topological system with ultracold atoms. Nature Physics, 2020, 16, 1058-1063.	16.7	163
64	Microscopic Observation of Pauli Blocking in Degenerate Fermionic Lattice Gases. Physical Review Letters, 2015, 115, 263001.	7.8	161
65	A subradiant optical mirror formed by a single structured atomic layer. Nature, 2020, 583, 369-374.	27.8	160
66	Coherent Many-Body Spin Dynamics in a Long-Range Interacting Ising Chain. Physical Review X, 2017, 7, .	8.9	156
67	Phase Coherence of an Atomic Mott Insulator. Physical Review Letters, 2005, 95, 050404.	7.8	153
68	Emergence of coherence and the dynamics of quantum phase transitions. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3641-3646.	7.1	152
69	Observation of Many-Body Localization in a One-Dimensional System with a Single-Particle Mobility Edge. Physical Review Letters, 2019, 122, 170403.	7.8	151
70	Designing Frustrated Quantum Magnets with Laser-Dressed Rydberg Atoms. Physical Review Letters, 2015, 114, 173002.	7.8	150
71	Revealing hidden antiferromagnetic correlations in doped Hubbard chains via string correlators. Science, 2017, 357, 484-487.	12.6	144
72	Controlling Correlated Tunneling and Superexchange Interactions with ac-Driven Optical Lattices. Physical Review Letters, 2011, 107, 210405.	7.8	142

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73	Coherent Collisional Spin Dynamics in Optical Lattices. Physical Review Letters, 2005, 95, 190405.	7.8	138
74	Role of Interactions in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi>Rb</mml:mi><mml:mprescripts /><mml:none /><mml:mn>87</mml:mn></mml:mmultiscripts><mml:mtext mathvariant="normal">â^'</mml:mtext><mml:mmultiscripts><mml:mi mathvariant="bold">K</mml:mi><mml:mprescripts /><mml:none /><mml:mn>40</mml:mn></mml:mmultiscripts></mml:math>Bose-Fermi Mixtures in a 3D Optical Lattice.	7.8	138
75	Electromagnetically Induced Transparency and Light Storage in an Atomic Mott Insulator. Physical Review Letters, 2009, 103, 033003.	7.8	136
76	Observation of an Orbital Interaction-Induced Feshbach Resonance in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Yb</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>173</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math>. Physical Review Letters, 2015, 115, 265302.	7.8	136
77	Bloch state tomography using Wilson lines. Science, 2016, 352, 1094-1097.	12.6	136
78	Counting Atoms Using Interaction Blockade in an Optical Superlattice. Physical Review Letters, 2008, 101, 090404.	7.8	127
79	Direct Probing of the Mott Crossover in the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>SU</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mi>N</mml:mi><mml:mo) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 492 Td (stretchy="false">) 6, .	8.9	125
80	Many-body Landauâ€“Zener dynamics in coupled one-dimensional Bose liquids. Nature Physics, 2011, 7, 61-67.	16.7	124
81	Interference pattern and visibility of a Mott insulator. Physical Review A, 2005, 72, .	2.5	123
82	Observing non-ergodicity due to kinetic constraints in tilted Fermi-Hubbard chains. Nature Communications, 2021, 12, 4490.	12.8	123
83	State Selective Production of Molecules in Optical Lattices. Physical Review Letters, 2004, 93, 073002.	7.8	120
84	Entanglement Interferometry for Precision Measurement of Atomic Scattering Properties. Physical Review Letters, 2004, 92, 160406.	7.8	112
85	Magnetic transport of trapped cold atoms over a large distance. Physical Review A, 2001, 63, .	2.5	110
86	Quantum Spin Dynamics of Mode-Squeezed Luttinger Liquids in Two-Component Atomic Gases. Physical Review Letters, 2008, 100, 140401.	7.8	108
87	Imaging magnetic polarons in the doped Fermiâ€“Hubbard model. Nature, 2019, 572, 358-362.	27.8	106
88	Optimal control of complex atomic quantum systems. Scientific Reports, 2016, 6, 34187.	3.3	105
89	Probing Real-Space and Time-Resolved Correlation Functions with Many-Body Ramsey Interferometry. Physical Review Letters, 2013, 111, 147205.	7.8	104
90	Spatially Resolved Detection of a Spin-Entanglement Wave in a Bose-Hubbard Chain. Physical Review Letters, 2015, 115, 035302.	7.8	99

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91	Localized Magnetic Moments with Tunable Spin Exchange in a Gas of Ultracold Fermions. Physical Review Letters, 2018, 120, 143601.	7.8	98
92	Expansion of a Quantum Gas Released from an Optical Lattice. Physical Review Letters, 2008, 101, 155303.	7.8	97
93	Interferometric Approach to Measuring Band Topology in 2D Optical Lattices. Physical Review Letters, 2013, 110, 165304.	7.8	96
94	Microscopic Characterization of Scalable Coherent Rydberg Superatoms. Physical Review X, 2015, 5, .	8.9	96
95	Probing Number Squeezing of Ultracold Atoms across the Superfluid-Mott Insulator Transition. Physical Review Letters, 2006, 96, 090401.	7.8	94
96	Exploring quantum matter with ultracold atoms in optical lattices. Journal of Physics B: Atomic, Molecular and Optical Physics, 2005, 38, S629-S643.	1.5	92
97	Controlling and Detecting Spin Correlations of Ultracold Atoms in Optical Lattices. Physical Review Letters, 2010, 105, 265303.	7.8	91
98	Quantum information processing in optical lattices and magnetic microtraps. Fortschritte Der Physik, 2006, 54, 702-718.	4.4	89
99	Anomalous Expansion of Attractively Interacting Fermionic Atoms in an Optical Lattice. Science, 2010, 327, 1621-1624.	12.6	83
100	Modeling the adiabatic creation of ultracold polar <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msup><mml:mrow /><mml:mn>23</mml:mn></mml:msup><mml:msup><mml:mi>Na</mml:mi><mml:mn>40</mml:mn></mml:msup><mml:mi mathvariant="normal">K</mml:mi></mml:mrow></mml:math> molecules. Physical Review A, 2018, 97, .	2.5	81
101	Time-resolved observation of spin-charge deconfinement in fermionic Hubbard chains. Science, 2020, 367, 186-189.	12.6	81
102	Experimental Realization of Plaquette Resonating Valence-Bond States with Ultracold Atoms in Optical Superlattices. Physical Review Letters, 2012, 108, 205301.	7.8	80
103	Floquet Prethermalization in a Bose-Hubbard System. Physical Review X, 2020, 10, .	8.9	77
104	Dynamical Quasicondensation of Hard-Core Bosons at Finite Momenta. Physical Review Letters, 2015, 115, 175301.	7.8	76
105	Quantum gas microscopy of Kardar-Parisi-Zhang superdiffusion. Science, 2022, 376, 716-720.	12.6	76
106	Coherent Interaction of a Single Fermion with a Small Bosonic Field. Physical Review Letters, 2011, 106, 115305.	7.8	73
107	Interaction Dependent Heating and Atom Loss in a Periodically Driven Optical Lattice. Physical Review Letters, 2017, 119, 200402.	7.8	73
108	Optics with an Atom Laser Beam. Physical Review Letters, 2001, 87, 030401.	7.8	70

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109	Quantum gases in optical lattices. Physics World, 2004, 17, 25-29.	0.0	66
110	Quantum Gases. Science, 2008, 319, 1202-1203.	12.6	65
111	Boseâ€“Einstein condensates in 1D- and 2D optical lattices. Applied Physics B: Lasers and Optics, 2001, 73, 769-772.	2.2	64
112	Many-Body Delocalization in the Presence of a Quantum Bath. Physical Review X, 2019, 9, .	8.9	62
113	Spin Pumping and Measurement of Spin Currents in Optical Superlattices. Physical Review Letters, 2016, 117, 170405.	7.8	60
114	Sympathetic cooling of85Rband87Rb. Physical Review A, 2001, 64, .	2.5	58
115	Quantum many-body dynamics of coupled double-well superlattices. Physical Review A, 2008, 78, .	2.5	56
116	Direct observation of incommensurate magnetism in Hubbard chains. Nature, 2019, 565, 56-60.	27.8	55
117	Coherent Light Scattering from a Two-Dimensional Mott Insulator. Physical Review Letters, 2011, 106, 215301.	7.8	53
118	Single-site- and single-atom-resolved measurement of correlation functions. Applied Physics B: Lasers and Optics, 2013, 113, 27-39.	2.2	53
119	Experimental realization of strong effective magnetic fields in optical superlattice potentials. Applied Physics B: Lasers and Optics, 2013, 113, 1-11.	2.2	53
120	Extending Rotational Coherence of Interacting Polar Molecules in a Spin-Decoupled Magic Trap. Physical Review Letters, 2018, 121, 253401.	7.8	50
121	Observation of Coherent Multiorbital Polarons in a Two-Dimensional Fermi Gas. Physical Review Letters, 2019, 122, 193604.	7.8	49
122	Microscopic evolution of doped Mott insulators from polaronic metal to Fermi liquid. Science, 2021, 374, 82-86.	12.6	48
123	Quantum gas microscopy of Rydberg macrodimers. Science, 2019, 364, 664-667.	12.6	47
124	Collisions of ultracold molecules in bright and dark optical dipole traps. Physical Review Research, 2021, 3, .	3.6	47
125	Robust Bilayer Charge Pumping for Spin- and Density-Resolved Quantum Gas Microscopy. Physical Review Letters, 2020, 125, 010403.	7.8	44
126	Minimum instances of topological matter in an optical plaquette. Physical Review A, 2008, 77, .	2.5	43

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127	Realizing the symmetry-protected Haldane phase in Fermiâ€“Hubbard ladders. Nature, 2022, 606, 484-488.	27.8	42
128	Nonequilibrium Mass Transport in the 1D Fermi-Hubbard Model. Physical Review Letters, 2018, 121, 130402.	7.8	39
129	Exploring Quantum Matter with Ultracold Atoms in Optical Lattices. Advances in Atomic, Molecular and Optical Physics, 2005, 52, 1-47.	2.3	38
130	Achieving the NÃ©el state in an optical lattice. Physical Review A, 2008, 77, .	2.5	38
131	Preparation and Detection of Magnetic Quantum Phases in Optical Superlattices. Physical Review Letters, 2007, 99, 140601.	7.8	36
132	Adiabatic loading of a Boseâ€“Einstein condensate in a 3D optical lattice. Journal of Modern Optics, 2007, 54, 735-743.	1.3	36
133	Stimulated focusing and deflection of an atomic beam using picosecond laser pulses. Physical Review A, 1997, 56, R3354-R3357.	2.5	33
134	State-Dependent Optical Lattices for the Strontium Optical Qubit. Physical Review Letters, 2020, 124, 203201.	7.8	33
135	Tunable spin-orbit coupling for ultracold atoms in two-dimensional optical lattices. Physical Review A, 2017, 95, .	2.5	32
136	Landau-Zener Sweeps and Sudden Quenches in Coupled Bose-Hubbard Chains. Physical Review Letters, 2011, 106, 155302.	7.8	30
137	Realizing Distance-Selective Interactions in a Rydberg-Dressed Atom Array. Physical Review Letters, 2022, 128, 113602.	7.8	24
138	Effect of Interactions on Harmonically Confined Bose-Fermi Mixtures in Optical Lattices. Physical Review Letters, 2011, 106, 155301.	7.8	22
139	Parametric Instabilities of Interacting Bosons in Periodically Driven 1D Optical Lattices. Physical Review X, 2020, 10, .	8.9	21
140	Strong pairing in mixed-dimensional bilayer antiferromagnetic Mott insulators. Nature Physics, 2022, 18, 651-656.	16.7	20
141	Fast and dense magneto-optical traps for strontium. Physical Review A, 2019, 99, .	2.5	18
142	Tune-Out and Magic Wavelengths for Ground-State <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Na</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>23</mml:mn></mml:mrow></mml:mmultiscripts><mml:mmultiscripts><mml:mrow><mml:mi mathvariant="normal">K</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:m	7.8	18
143	Quantum simulations come of age. Nature Physics, 2018, 14, 1159-1161.	16.7	15
144	Quantum phase transition from a superfluid to a Mott insulator in an ultracold gas of atoms. Physica B: Condensed Matter, 2003, 329-333, 11-12.	2.7	13

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145	Efficient conversion of closed-channel-dominated Feshbach molecules of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi>Na</mml:mi><mml:mprescripts /><mml:none /><mml:mn>23</mml:mn></mml:mmultiscripts><mml:mmultiscripts><mml:mi mathvariant="normal">K</mml:mi><mml:mprescripts /><mml:none /><mml:mn>40</mml:mn></mml:mmultiscripts></mml:mrow></mml:math> to their absolute ground state. Physical Review A, 2021, 104, .	2.5	11
146	Suppression of Unitary Three-Body Loss in a Degenerate Bose-Fermi Mixture. Physical Review Letters, 2022, 128, 153401.	7.8	11
147	Probing first-order spatial coherence of a Bose-Einstein condensate. Journal of Modern Optics, 2000, 47, 2725-2732.	1.3	10
148	Boseâ€“Einstein correlations in one and two dimensions in deep inelastic scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 583, 231-246.	4.1	10
149	Boseâ€“Einstein correlations of charged and neutral kaons in deep inelastic scattering at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 652, 1-12.	4.1	10
150	Fast long-distance transport of cold cesium atoms. Physical Review A, 2022, 105, .	2.5	10
151	Microscopic electronic structure tomography of Rydberg macrodimers. Physical Review Research, 2021, 3, .	3.6	9
152	Atomlaser: Aus Boseâ€Einsteinâ€Kondensaten lassen sich kohÃrente Materiewellen auskoppeln. Physik Journal, 2000, 56, 47-50.	0.1	8
153	Measurement of meson production in scattering at low. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 649, 111-121.	4.1	7
154	Crossed optical cavities with large mode diameters. Optics Letters, 2021, 46, 250.	3.3	7
155	<title>Atom optics with permanent magnetic components</title>. , 1997, , .		6
156	MICROSCOPY OF MANY-BODY STATES IN OPTICAL LATTICES. Annual Review of Cold Atoms and Molecules, 2015, , 181-199.	2.8	6
157	Benchmarking a Novel Efficient Numerical Method for Localized 1D Fermi-Hubbard Systems on a Quantum Simulator. PRX Quantum, 2021, 2, .	9.2	6
158	Coherent cold collisions with neutral atoms in optical lattices. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2003, 361, 1409-1416.	3.4	5
159	Exploring strongly correlated quantum manyâ€body systems with ultracold atoms in optical lattices. Physica Status Solidi (B): Basic Research, 2010, 247, 530-536.	1.5	4
160	Coherent and incoherent spectral broadening in a photonic crystal fiber. Optics Letters, 2007, 32, 1767.	3.3	3
161	Paired in one dimension. Nature, 2010, 467, 535-536.	27.8	3
162	Quantum simulation â€•an exciting adventure. Annalen Der Physik, 2013, 525, A153.	2.4	2

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163	Europeâ€™s Quantum Flagship is taking off. Europhysics News, 2018, 49, 30-34.	0.3	2
164	Ultracold Atoms and Molecules in Optical Lattices. Contemporary Concepts of Condensed Matter Science, 2012, 5, 121-156.	0.5	1
165	Probing and Controlling Quantum Matter Using Ultracold Quantum Gases in Optical Lattices. , 2014, , 31-63.		1
166	Probing first-order spatial coherence of a Bose-Einstein condensate. Journal of Modern Optics, 2000, 47, 2725-2732.	1.3	1
167	Probing and Controlling Strongly Correlated Quantum Many-Body Systems Using Ultracold Quantum Gases. , 0, , 253-273.		0
168	<title>Stimulated light forces using picosecond laser pulses</title>. , 1997, , .		0
169	Generating And Manipulating Atom Laser Beams. , 2002, , 117-128.		0
170	Controlled collisions with neutral atoms in optical lattices. , 2003, , .		0
171	Controlled collisions with neutral atoms in optical lattices. , 2003, , .		0
172	COHERENT SPIN OSCILLATIONS DRIVEN BY COLLISIONS IN AN OPTICAL LATTICE. , 2005, , .		0
173	Engineering Multiparticle Entanglement with Neutral Atoms in Optical Lattices. AIP Conference Proceedings, 2005, , .	0.4	0
174	Strongly Correlated Quantum Matter in Optical Lattices. AIP Conference Proceedings, 2006, , .	0.4	0
175	Ultracold atoms in optical lattices. , 2007, , .		0
176	Ultracold atoms in optical lattices. , 2007, , .		0
177	STRONGLY CORRELATED BOSONS AND FERMIONS IN OPTICAL LATTICES. , 2009, , .		0
178	STRONGLY CORRELATED BOSONS AND FERMIONS IN OPTICAL LATTICES. , 2010, , .		0
179	Quantum simulations using ultracold atoms. , 2013, , .		0
180	Quantum leaps for simulation. Physics World, 2013, 26, 47-51.	0.0	0

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181	Quantum dynamics of a single, mobile spin impurity. , 2013, , .		0
182	From Diode Laser to Atom Laser. , 2002, , 275-280.		0
183	Beyond mean field physics with Bose-Einstein condensates in optical lattices. , 2003, , .		0
184	Large Scale Quantum Simulations Using Ultracold Atomic Gases in Optical Lattices. , 2018, , .		0