

Immanuel Bloch

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2720135/publications.pdf>

Version: 2024-02-01

184
papers

46,832
citations

2975
93
h-index

5120
166
g-index

188
all docs

188
docs citations

188
times ranked

12889
citing authors

#	ARTICLE	IF	CITATIONS
1	Realizing Distance-Selective Interactions in a Rydberg-Dressed Atom Array. Physical Review Letters, 2022, 128, 113602.	7.8	24
2	Suppression of Unitary Three-Body Loss in a Degenerate Bose-Fermi Mixture. Physical Review Letters, 2022, 128, 153401.	7.8	11
3	Strong pairing in mixed-dimensional bilayer antiferromagnetic Mott insulators. Nature Physics, 2022, 18, 651-656.	16.7	20
4	Fast long-distance transport of cold cesium atoms. Physical Review A, 2022, 105, .	2.5	10
5	Quantum gas microscopy of Kardar-Parisi-Zhang superdiffusion. Science, 2022, 376, 716-720.	12.6	76
6	Realizing the symmetry-protected Haldane phase in Fermiâ€“Hubbard ladders. Nature, 2022, 606, 484-488.	27.8	42
7	Crossed optical cavities with large mode diameters. Optics Letters, 2021, 46, 250.	3.3	7
8	Microscopic electronic structure tomography of Rydberg macrodimers. Physical Review Research, 2021, 3, .	3.6	9
9	Observing non-ergodicity due to kinetic constraints in tilted Fermi-Hubbard chains. Nature Communications, 2021, 12, 4490.	12.8	123
10	Collisions of ultracold molecules in bright and dark optical dipole traps. Physical Review Research, 2021, 3, .	3.6	47
11	Microscopic evolution of doped Mott insulators from polaronic metal to Fermi liquid. Science, 2021, 374, 82-86.	12.6	48
12	Efficient conversion of closed-channel-dominated Feshbach molecules of Na to their absolute ground state. Physical Review A, 2021, 104, .	2.5	11
13	Benchmarking a Novel Efficient Numerical Method for Localized 1D Fermi-Hubbard Systems on a Quantum Simulator. PRX Quantum, 2021, 2, .	9.2	6
14	Time-resolved observation of spin-charge deconfinement in fermionic Hubbard chains. Science, 2020, 367, 186-189.	12.6	81
15	Tune-Out and Magic Wavelengths for Ground-State Na . Physical Review A, 2020, 101, 013612.	7.8	18
16	A subradiant optical mirror formed by a single structured atomic layer. Nature, 2020, 583, 369-374.	27.8	160
17	State-Dependent Optical Lattices for the Strontium Optical Qubit. Physical Review Letters, 2020, 124, 203201.	7.8	33
18	Floquet Prethermalization in a Bose-Hubbard System. Physical Review X, 2020, 10, .	8.9	77

#	ARTICLE	IF	CITATIONS
19	Realization of an anomalous Floquet topological system with ultracold atoms. <i>Nature Physics</i> , 2020, 16, 1058-1063.	16.7	163
20	Robust Bilayer Charge Pumping for Spin- and Density-Resolved Quantum Gas Microscopy. <i>Physical Review Letters</i> , 2020, 125, 010403.	7.8	44
21	Parametric Instabilities of Interacting Bosons in Periodically Driven 1D Optical Lattices. <i>Physical Review X</i> , 2020, 10, .	8.9	21
22	Imaging magnetic polarons in the doped Fermiâ€“Hubbard model. <i>Nature</i> , 2019, 572, 358-362.	27.8	106
23	Fast and dense magneto-optical traps for strontium. <i>Physical Review A</i> , 2019, 99, .	2.5	18
24	Many-Body Delocalization in the Presence of a Quantum Bath. <i>Physical Review X</i> , 2019, 9, .	8.9	62
25	< i>Colloquium</i> : Many-body localization, thermalization, and entanglement. <i>Reviews of Modern Physics</i> , 2019, 91, .	45.6	1,005
26	Quantum gas microscopy of Rydberg macrodimers. <i>Science</i> , 2019, 364, 664-667.	12.6	47
27	Observation of Coherent Multiorbital Polarons in a Two-Dimensional Fermi Gas. <i>Physical Review Letters</i> , 2019, 122, 193604.	7.8	49
28	Observation of Many-Body Localization in a One-Dimensional System with a Single-Particle Mobility Edge. <i>Physical Review Letters</i> , 2019, 122, 170403.	7.8	151
29	Floquet approach to â„“2 lattice gauge theories with ultracold atoms in optical lattices. <i>Nature Physics</i> , 2019, 15, 1168-1173.	16.7	214
30	Direct observation of incommensurate magnetism in Hubbard chains. <i>Nature</i> , 2019, 565, 56-60.	27.8	55
31	Single-Particle Mobility Edge in a One-Dimensional Quasiperiodic Optical Lattice. <i>Physical Review Letters</i> , 2018, 120, 160404.	7.8	178
32	Localized Magnetic Moments with Tunable Spin Exchange in a Gas of Ultracold Fermions. <i>Physical Review Letters</i> , 2018, 120, 143601.	7.8	98
33	Modeling the adiabatic creation of ultracold polar Na_{23} molecules. <i>Physical Review A</i> , 2018, 97, .	2.5	81
34	Exploring 4D quantum Hall physics with a 2D topological charge pump. <i>Nature</i> , 2018, 553, 55-58.	27.8	292
35	Extending Rotational Coherence of Interacting Polar Molecules in a Spin-Decoupled Magic Trap. <i>Physical Review Letters</i> , 2018, 121, 253401.	7.8	50
36	Europeâ€“s Quantum Flagship is taking off. <i>Europhysics News</i> , 2018, 49, 30-34.	0.3	2

#	ARTICLE	IF	CITATIONS
37	Quantum simulations come of age. <i>Nature Physics</i> , 2018, 14, 1159-1161.	16.7	15
38	Nonequilibrium Mass Transport in the 1D Fermi-Hubbard Model. <i>Physical Review Letters</i> , 2018, 121, 130402.	7.8	39
39	The quantum technologies roadmap: a European community view. <i>New Journal of Physics</i> , 2018, 20, 080201.	2.9	358
40	Large Scale Quantum Simulations Using Ultracold Atomic Gases in Optical Lattices. , 2018, , .	0	
41	Periodically driving a many-body localized quantum system. <i>Nature Physics</i> , 2017, 13, 460-464.	16.7	226
42	Signatures of Many-Body Localization in a Controlled Open Quantum System. <i>Physical Review X</i> , 2017, 7, .	8.9	169
43	Revealing hidden antiferromagnetic correlations in doped Hubbard chains via string correlators. <i>Science</i> , 2017, 357, 484-487.	12.6	144
44	Quantum simulations with ultracold atoms in optical lattices. <i>Science</i> , 2017, 357, 995-1001.	12.6	824
45	Coherent Many-Body Spin Dynamics in a Long-Range Interacting Ising Chain. <i>Physical Review X</i> , 2017, 7, .	8.9	156
46	Interaction Dependent Heating and Atom Loss in a Periodically Driven Optical Lattice. <i>Physical Review Letters</i> , 2017, 119, 200402.	7.8	73
47	Tunable spin-orbit coupling for ultracold atoms in two-dimensional optical lattices. <i>Physical Review A</i> , 2017, 95, .	2.5	32
48	Observation of Slow Dynamics near the Many-Body Localization Transition in One-Dimensional Quasiperiodic Systems. <i>Physical Review Letters</i> , 2017, 119, 260401.	7.8	190
49	Probing Slow Relaxation and Many-Body Localization in Two-Dimensional Quasiperiodic Systems. <i>Physical Review X</i> , 2017, 7, .	8.9	182
50	Optimal control of complex atomic quantum systems. <i>Scientific Reports</i> , 2016, 6, 34187.	3.3	105
51	Bloch state tomography using Wilson lines. <i>Science</i> , 2016, 352, 1094-1097.	12.6	136
52	Many-body interferometry of a Rydberg-dressed spin- $\frac{1}{2}$ lattice. <i>Nature Physics</i> , 2016, 12, 1095-1099.	16.7	258
53	Spin- and density-resolved microscopy of antiferromagnetic correlations in Fermi-Hubbard chains. <i>Science</i> , 2016, 353, 1257-1260.	12.6	291
54	Coupling Identical one-dimensional Many-Body Localized Systems. <i>Physical Review Letters</i> , 2016, 116, 140401.	7.8	293

#	ARTICLE		IF	CITATIONS
55	<i>Probing of the Mott Crossover in the</i> $\langle \text{mml:math} \rangle$ $\text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"}$ $\text{display}=\text{"inline"}$ $\langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{SU} \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle \text{stretchy}=\text{"false"} \langle \text{mml:mo} \rangle \langle \text{mml:mi} \rangle \text{N} \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle \text{Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 732 Td } \langle \text{mml:math} \rangle \text{stretchy}=\text{"false"} \rangle$			
56	6, . Spin Pumping and Measurement of Spin Currents in Optical Superlattices. Physical Review Letters, 2016, 117, 170405.	7.8	60	
57	Exploring the many-body localization transition in two dimensions. Science, 2016, 352, 1547-1552.	12.6	694	
58	A Thouless quantum pump with ultracold bosonic atoms in an optical superlattice. Nature Physics, 2016, 12, 350-354.	16.7	449	
59	MICROSCOPY OF MANY-BODY STATES IN OPTICAL LATTICES. Annual Review of Cold Atoms and Molecules, 2015, , 181-199.	2.8	6	
60	Spatially Resolved Detection of a Spin-Entanglement Wave in a Bose-Hubbard Chain. Physical Review Letters, 2015, 115, 035302.	7.8	99	
61	Dynamical Quasicondensation of Hard-Core Bosons at Finite Momenta. Physical Review Letters, 2015, 115, 175301.	7.8	76	
62	Microscopic Observation of Pauli Blocking in Degenerate Fermionic Lattice Gases. Physical Review Letters, 2015, 115, 263001.	7.8	161	
63	<i>Observation of an Orbital Interaction-Induced Feshbach Resonance in</i> $\langle \text{mml:math} \rangle$ $\text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"}$ $\text{display}=\text{"inline"}$ $\langle \text{mml:mrow} \rangle \langle \text{mml:mmultiscripts} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{Yb} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mprescripts} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 173 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mmultiscripts} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$. Physical Review Letters, 2015, 115, 265302.	7.8	136	
64	Microscopic Characterization of Scalable Coherent Rydberg Superatoms. Physical Review X, 2015, 5, .	8.9	96	
65	Designing Frustrated Quantum Magnets with Laser-Dressed Rydberg Atoms. Physical Review Letters, 2015, 114, 173002.	7.8	150	
66	Crystallization in Ising quantum magnets. Science, 2015, 347, 1455-1458.	12.6	240	
67	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	
68	Observation of many-body localization of interacting fermions in a quasirandom optical lattice. Science, 2015, 349, 842-845.	12.6	1,222	
69	Measuring the Chern number of Hofstadter bands with ultracold bosonic atoms. Nature Physics, 2015, 11, 162-166.	16.7	777	
70	An Aharonov-Bohm interferometer for determining Bloch band topology. Science, 2015, 347, 288-292.	12.6	212	
71	Far-from-Equilibrium Spin Transport in Heisenberg Quantum Magnets. Physical Review Letters, 2014, 113, 147205.	7.8	168	
72	Observation of two-orbital spin-exchange interactions with ultracold SU(N)-symmetric fermions. Nature Physics, 2014, 10, 779-784.	16.7	283	

#	ARTICLE	IF	CITATIONS
73	Observation of chiral currents with ultracold atoms in bosonic ladders. <i>Nature Physics</i> , 2014, 10, 588-593.	16.7	375
74	Probing and Controlling Quantum Matter Using Ultracold Quantum Gases in Optical Lattices. , 2014, , 31-63.	1	
75	Single-site- and single-atom-resolved measurement of correlation functions. <i>Applied Physics B: Lasers and Optics</i> , 2013, 113, 27-39.	2.2	53
76	Microscopic observation of magnon bound states and their dynamics. <i>Nature</i> , 2013, 502, 76-79.	27.8	345
77	Realization of the Hofstadter Hamiltonian with Ultracold Atoms in Optical Lattices. <i>Physical Review Letters</i> , 2013, 111, 185301.	7.8	1,102
78	Direct measurement of the Zak phase in topological Bloch bands. <i>Nature Physics</i> , 2013, 9, 795-800.	16.7	751
79	Quantum simulation – an exciting adventure. <i>Annalen Der Physik</i> , 2013, 525, A153.	2.4	2
80	Quantum dynamics of a mobile spin impurity. <i>Nature Physics</i> , 2013, 9, 235-241.	16.7	418
81	Experimental realization of strong effective magnetic fields in optical superlattice potentials. <i>Applied Physics B: Lasers and Optics</i> , 2013, 113, 1-11.	2.2	53
82	Expansion Dynamics of Interacting Bosons in Homogeneous Lattices in One and Two Dimensions. <i>Physical Review Letters</i> , 2013, 110, 205301.	7.8	236
83	Probing Real-Space and Time-Resolved Correlation Functions with Many-Body Ramsey Interferometry. <i>Physical Review Letters</i> , 2013, 111, 147205.	7.8	104
84	Interferometric Approach to Measuring Band Topology in 2D Optical Lattices. <i>Physical Review Letters</i> , 2013, 110, 165304.	7.8	96
85	Negative Absolute Temperature for Motional Degrees of Freedom. <i>Science</i> , 2013, 339, 52-55.	12.6	189
86	Quantum simulations using ultracold atoms. , 2013, , .	0	
87	Quantum leaps for simulation. <i>Physics World</i> , 2013, 26, 47-51.	0.0	0
88	Quantum dynamics of a single, mobile spin impurity. , 2013, , .	0	
89	Experimental Realization of Plaquette Resonating Valence-Bond States with Ultracold Atoms in Optical Superlattices. <i>Physical Review Letters</i> , 2012, 108, 205301.	7.8	80
90	Fermionic transport and out-of-equilibrium dynamics in a homogeneous Hubbard model with Ultracold atoms. <i>Nature Physics</i> , 2012, 8, 213-218.	16.7	336

#	ARTICLE	IF	CITATIONS
91	Light-cone-like spreading of correlations in a quantum many-body system. <i>Nature</i> , 2012, 481, 484-487.	27.8	645
92	Observation of spatially ordered structures in a two-dimensional Rydberg gas. <i>Nature</i> , 2012, 491, 87-91.	27.8	451
93	Ultracold Atoms and Molecules in Optical Lattices. <i>Contemporary Concepts of Condensed Matter Science</i> , 2012, 5, 121-156.	0.5	1
94	Probing the relaxation towards equilibrium in an isolated strongly correlated one-dimensional Boseâgas. <i>Nature Physics</i> , 2012, 8, 325-330.	16.7	762
95	Quantum simulations with ultracold quantum gases. <i>Nature Physics</i> , 2012, 8, 267-276.	16.7	1,612
96	The â€˜Higgsâ€™ amplitude mode at the two-dimensional superfluid/Mott insulator transition. <i>Nature</i> , 2012, 487, 454-458.	27.8	280
97	Observation of Correlated Particle-Hole Pairs and String Order in Low-Dimensional Mott Insulators. <i>Science</i> , 2011, 334, 200-203.	12.6	246
98	Coherent Light Scattering from a Two-Dimensional Mott Insulator. <i>Physical Review Letters</i> , 2011, 106, 215301.	7.8	53
99	Experimental Realization of Strong Effective Magnetic Fields in an Optical Lattice. <i>Physical Review Letters</i> , 2011, 107, 255301.	7.8	629
100	Landau-Zener Sweeps and Sudden Quenches in Coupled Bose-Hubbard Chains. <i>Physical Review Letters</i> , 2011, 106, 155302.	7.8	30
101	Many-body Landauâ“Zener dynamics in coupled one-dimensional Bose liquids. <i>Nature Physics</i> , 2011, 7, 61-67.	16.7	124
102	Single-spin addressing in an atomic Mott insulator. <i>Nature</i> , 2011, 471, 319-324.	27.8	592
103	Controlling Correlated Tunneling and Superexchange Interactions with ac-Driven Optical Lattices. <i>Physical Review Letters</i> , 2011, 107, 210405.	7.8	142
104	Effect of Interactions on Harmonically Confined Bose-Fermi Mixtures in Optical Lattices. <i>Physical Review Letters</i> , 2011, 106, 155301.	7.8	22
105	Coherent Interaction of a Single Fermion with a Small Bosonic Field. <i>Physical Review Letters</i> , 2011, 106, 115305.	7.8	73
106	STRONGLY CORRELATED BOSONS AND FERMIONS IN OPTICAL LATTICES. , 2010, , .	0	
107	Exploring strongly correlated quantum manyâbody systems with ultracold atoms in optical lattices. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 530-536.	1.5	4
108	Time-resolved observation of coherent multi-body interactions in quantum phase revivals. <i>Nature</i> , 2010, 465, 197-201.	27.8	251

#	ARTICLE	IF	CITATIONS
109	Single-atom-resolved fluorescence imaging of an atomic Mott insulator. <i>Nature</i> , 2010, 467, 68-72.	27.8	1,084
110	Paired in one dimension. <i>Nature</i> , 2010, 467, 535-536.	27.8	3
111	Suppression of the critical temperature for superfluidity near the Mott transition. <i>Nature Physics</i> , 2010, 6, 998-1004.	16.7	165
112	Controlling and Detecting Spin Correlations of Ultracold Atoms in Optical Lattices. <i>Physical Review Letters</i> , 2010, 105, 265303.	7.8	91
113	Anomalous Expansion of Attractively Interacting Fermionic Atoms in an Optical Lattice. <i>Science</i> , 2010, 327, 1621-1624.	12.6	83
114	Electromagnetically Induced Transparency and Light Storage in an Atomic Mott Insulator. <i>Physical Review Letters</i> , 2009, 103, 033003.	7.8	136
115	STRONGLY CORRELATED BOSONS AND FERMIONS IN OPTICAL LATTICES. , 2009, , .	0	
116	Role of Interactions in $\langle\text{mml:math}\text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"}\text{ display="inline">\rangle\langle\text{mml:mmultiscripts}\rangle\langle\text{mml:mi}\text{ Rb}\langle\text{mml:mi}\rangle\langle\text{mml:mprescripts}\rangle\langle\text{mml:none}\rangle\langle\text{mml:mn}\text{ 87}\langle\text{mml:mn}\rangle\langle\text{mml:mmultiscripts}\rangle\langle\text{mml:mtext}\text{ mathvariant="normal">\rangle\langle\text{mml:mtext}\rangle\langle\text{mml:mmultiscripts}\rangle\langle\text{mml:mi}\text{ K}\langle\text{mml:mi}\rangle\langle\text{mml:mprescripts}\rangle\langle\text{mml:none}\rangle\langle\text{mml:mn}\text{ 40}\langle\text{mml:mn}\rangle\langle\text{mml:mmultiscripts}\rangle\langle\text{mml:math}\text{ Bose-Fermi Mixtures in a 3D Optical Lattice.}\text{ Quantum coherence and entanglement with ultracold atoms in optical lattices. }\text{Nature}, 2008, 453, 1016-1022.$	7.8	138
117	Quantum Spin Dynamics of Mode-Squeezed Luttinger Liquids in Two-Component Atomic Gases. <i>Physical Review Letters</i> , 2008, 100, 140401.	27.8	302
118	Expansion of a Quantum Gas Released from an Optical Lattice. <i>Physical Review Letters</i> , 2008, 101, 155303.	7.8	97
120	Many-body physics with ultracold gases. <i>Reviews of Modern Physics</i> , 2008, 80, 885-964.	45.6	6,386
121	Time-Resolved Observation and Control of Superexchange Interactions with Ultracold Atoms in Optical Lattices. <i>Science</i> , 2008, 319, 295-299.	12.6	566
122	Quantum Gases. <i>Science</i> , 2008, 319, 1202-1203.	12.6	65
123	Metallic and Insulating Phases of Repulsively Interacting Fermions in a 3D Optical Lattice. <i>Science</i> , 2008, 322, 1520-1525.	12.6	620
124	Quantum many-body dynamics of coupled double-well superlattices. <i>Physical Review A</i> , 2008, 78, .	2.5	56
125	Minimum instances of topological matter in an optical plaquette. <i>Physical Review A</i> , 2008, 77, .	2.5	43
126	Achieving the NÃ©el state in an optical lattice. <i>Physical Review A</i> , 2008, 77, .	2.5	38

#	ARTICLE	IF	CITATIONS
127	Counting Atoms Using Interaction Blockade in an Optical Superlattice. <i>Physical Review Letters</i> , 2008, 101, 090404.	7.8	127
128	Ultracold atoms in optical lattices. , 2007, , .	0	
129	Preparation and Detection of Magnetic Quantum Phases in Optical Superlattices. <i>Physical Review Letters</i> , 2007, 99, 140601.	7.8	36
130	State Preparation and Dynamics of Ultracold Atoms in Higher Lattice Orbitals. <i>Physical Review Letters</i> , 2007, 99, 200405.	7.8	180
131	Ultracold atoms in optical lattices. , 2007, , .	0	
132	Coherent and incoherent spectral broadening in a photonic crystal fiber. <i>Optics Letters</i> , 2007, 32, 1767.	3.3	3
133	Adiabatic loading of a Bose-Einstein condensate in a 3D optical lattice. <i>Journal of Modern Optics</i> , 2007, 54, 735-743.	1.3	36
134	Measurement of meson production in scattering at low. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2007, 649, 111-121.	4.1	7
135	Bose-Einstein correlations of charged and neutral kaons in deep inelastic scattering at HERA. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2007, 652, 1-12.	4.1	10
136	Direct observation of second-order atom tunnelling. <i>Nature</i> , 2007, 448, 1029-1032.	27.8	511
137	Strongly Correlated Quantum Matter in Optical Lattices. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	0
138	Quantum information processing in optical lattices and magnetic microtraps. <i>Fortschritte Der Physik</i> , 2006, 54, 702-718.	4.4	89
139	Free fermion antibunching in a degenerate atomic Fermi gas released from an optical lattice. <i>Nature</i> , 2006, 444, 733-736.	27.8	221
140	Probing Number Squeezing of Ultracold Atoms across the Superfluid-Mott Insulator Transition. <i>Physical Review Letters</i> , 2006, 96, 090401.	7.8	94
141	Formation of Spatial Shell Structure in the Superfluid to Mott Insulator Transition. <i>Physical Review Letters</i> , 2006, 97, 060403.	7.8	179
142	Resonant control of spin dynamics in ultracold quantum gases by microwave dressing. <i>Physical Review A</i> , 2006, 73, .	2.5	200
143	Precision measurement of spin-dependent interaction strengths for spin-1 and spin-287Rb atoms. <i>New Journal of Physics</i> , 2006, 8, 152-152.	2.9	168
144	COHERENT SPIN OSCILLATIONS DRIVEN BY COLLISIONS IN AN OPTICAL LATTICE. , 2005, , .	0	

#	ARTICLE	IF	CITATIONS
145	Ultracold quantum gases in optical lattices. <i>Nature Physics</i> , 2005, 1, 23-30.	16.7	1,084
146	Spatial quantum noise interferometry in expanding ultracold atom clouds. <i>Nature</i> , 2005, 434, 481-484.	27.8	470
147	Engineering Multiparticle Entanglement with Neutral Atoms in Optical Lattices. <i>AIP Conference Proceedings</i> , 2005, , .	0.4	0
148	Exploring Quantum Matter with Ultracold Atoms in Optical Lattices. <i>Advances in Atomic, Molecular and Optical Physics</i> , 2005, 52, 1-47.	2.3	38
149	Exploring quantum matter with ultracold atoms in optical lattices. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2005, 38, S629-S643.	1.5	92
150	Coherent Collisional Spin Dynamics in Optical Lattices. <i>Physical Review Letters</i> , 2005, 95, 190405.	7.8	138
151	Phase Coherence of an Atomic Mott Insulator. <i>Physical Review Letters</i> , 2005, 95, 050404.	7.8	153
152	Interference pattern and visibility of a Mott insulator. <i>Physical Review A</i> , 2005, 72, .	2.5	123
153	Entanglement Interferometry for Precision Measurement of Atomic Scattering Properties. <i>Physical Review Letters</i> , 2004, 92, 160406.	7.8	112
154	Tonks-Girardeau gas of ultracold atoms in an optical lattice. <i>Nature</i> , 2004, 429, 277-281.	27.8	1,385
155	Bose-Einstein correlations in one and two dimensions in deep inelastic scattering. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2004, 583, 231-246.	4.1	10
156	State Selective Production of Molecules in Optical Lattices. <i>Physical Review Letters</i> , 2004, 93, 073002.	7.8	120
157	Quantum gases in optical lattices. <i>Physics World</i> , 2004, 17, 25-29.	0.0	66
158	Quantum phase transition from a superfluid to a Mott insulator in an ultracold gas of atoms. <i>Physica B: Condensed Matter</i> , 2003, 329-333, 11-12.	2.7	13
159	Controlled collisions for multi-particle entanglement of optically trapped atoms. <i>Nature</i> , 2003, 425, 937-940.	27.8	698
160	Coherent Transport of Neutral Atoms in Spin-Dependent Optical Lattice Potentials. <i>Physical Review Letters</i> , 2003, 91, 010407.	7.8	388
161	Controlled collisions with neutral atoms in optical lattices. , 2003, , .	0	
162	Controlled collisions with neutral atoms in optical lattices. , 2003, , .	0	

#	ARTICLE		IF	CITATIONS
163	Coherent cold collisions with neutral atoms in optical lattices. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2003, 361, 1409-1416.		3.4	5
164	Beyond mean field physics with Bose-Einstein condensates in optical lattices. , 2003, , .		0	
165	Generating And Manipulating Atom Laser Beams. , 2002, , 117-128.		0	
166	Collapse and revival of the matter wave field of a Bose-Einstein condensate. <i>Nature</i> , 2002, 419, 51-54.	27.8	1,036	
167	Quantum phase transition from a superfluid to a Mott insulator in a gas of ultracold atoms. <i>Nature</i> , 2002, 415, 39-44.	27.8	4,939	
168	From Diode Laser to Atom Laser. , 2002, , 275-280.		0	
169	Exploring Phase Coherence in a 2D Lattice of Bose-Einstein Condensates. <i>Physical Review Letters</i> , 2001, 87, 160405.	7.8	565	
170	Bose-Einstein condensates in 1D- and 2D optical lattices. <i>Applied Physics B: Lasers and Optics</i> , 2001, 73, 769-772.	2.2	64	
171	Optics with an Atom Laser Beam. <i>Physical Review Letters</i> , 2001, 87, 030401.	7.8	70	
172	Magnetic transport of trapped cold atoms over a large distance. <i>Physical Review A</i> , 2001, 63, .	2.5	110	
173	Sympathetic cooling of ^{85}Rb and ^{87}Rb . <i>Physical Review A</i> , 2001, 64, .	2.5	58	
174	Measurement of the spatial coherence of a trapped Bose gas at the phase transition. <i>Nature</i> , 2000, 403, 166-170.	27.8	258	
175	Probing first-order spatial coherence of a Bose-Einstein condensate. <i>Journal of Modern Optics</i> , 2000, 47, 2725-2732.	1.3	10	
176	Atomlaser: Aus Bose-Einstein-Kondensaten lassen sich kohärente Materiewellen auskoppeln. <i>Physik Journal</i> , 2000, 56, 47-50.	0.1	8	
177	Probing first-order spatial coherence of a Bose-Einstein condensate. <i>Journal of Modern Optics</i> , 2000, 47, 2725-2732.	1.3	1	
178	Atom Laser with a cw Output Coupler. <i>Physical Review Letters</i> , 1999, 82, 3008-3011.	7.8	458	
179	Bose-Einstein condensation in a quadrupole-loffe-configuration trap. <i>Physical Review A</i> , 1998, 58, R2664-R2667.	2.5	199	
180	<title>Atom optics with permanent magnetic components</title>. , 1997, , .		6	

#	ARTICLE	IF	CITATIONS
181	<title>Stimulated light forces using picosecond laser pulses</title>. , 1997, , .		0
182	Stimulated focusing and deflection of an atomic beam using picosecond laser pulses. Physical Review A, 1997, 56, R3354-R3357.	2.5	33
183	Coulomb Functions for Reactions of Protons and Alpha-Particles with the Lighter Nuclei. Reviews of Modern Physics, 1951, 23, 147-182.	45.6	170
184	Probing and Controlling Strongly Correlated Quantum Many-Body Systems Using Ultracold Quantum Gases. , 0, , 253-273.		0