

Eugene A Demler

List of Publications by Year in descending order

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263
papers

23,891
citations

6233

80
h-index

8138

148
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264
all docs

264
docs citations

264
times ranked

11880
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterizing two-dimensional superconductivity via nanoscale noise magnetometry with single-spin qubits. <i>Physical Review B</i> , 2022, 105, .	1.1	14
2	Single-spin qubit magnetic spectroscopy of two-dimensional superconductivity. <i>Physical Review Research</i> , 2022, 4, .	1.3	12
3	Cavity magnon-polaritons in cuprate parent compounds. <i>Physical Review Research</i> , 2022, 4, .	1.3	22
4	Transverse instability and universal decay of spin spiral order in the Heisenberg model. <i>Physical Review B</i> , 2022, 105, .	1.1	4
5	Resonantly enhanced polariton wave mixing and parametric instability in a Floquet medium. <i>Journal of Chemical Physics</i> , 2022, 156, 174110.	1.2	3
6	Strong pairing in mixed-dimensional bilayer antiferromagnetic Mott insulators. <i>Nature Physics</i> , 2022, 18, 651-656.	6.5	20
7	Generalized Fresnel-Floquet equations for driven quantum materials. <i>Physical Review B</i> , 2022, 105, .	1.1	9
8	Probing hydrodynamic sound modes in magnon fluids using spin magnetometers. <i>Physical Review B</i> , 2022, 105, .	1.1	7
9	Quantum generative model for sampling many-body spectral functions. <i>Physical Review B</i> , 2021, 103, .	1.1	5
10	Quantum Simulators: Architectures and Opportunities. <i>PRX Quantum</i> , 2021, 2, .	3.5	229
11	Higgs-Mediated Optical Amplification in a Nonequilibrium Superconductor. <i>Physical Review X</i> , 2021, 11, .	2.8	18
12	Time-Domain Anyon Interferometry in Kitaev Honeycomb Spin Liquids and Beyond. <i>Physical Review Letters</i> , 2021, 126, 177204.	2.9	11
13	Cavity Quantum Electrodynamics at Arbitrary Light-Matter Coupling Strengths. <i>Physical Review Letters</i> , 2021, 126, 153603.	2.9	44
14	Coupling a Mobile Hole to an Antiferromagnetic Spin Background: Transient Dynamics of a Magnetic Polaron. <i>Physical Review X</i> , 2021, 11, .	2.8	33
15	Generalization of group-theoretic coherent states for variational calculations. <i>Physical Review Research</i> , 2021, 3, .	1.3	5
16	Bilayer Wigner crystals in a transition metal dichalcogenide heterostructure. <i>Nature</i> , 2021, 595, 48-52.	13.7	98
17	Correlator convolutional neural networks as an interpretable architecture for image-like quantum matter data. <i>Nature Communications</i> , 2021, 12, 3905.	5.8	22
18	A magnon scattering platform. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	26

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19	Signatures of Wigner crystal of electrons in a monolayer semiconductor. Nature, 2021, 595, 53-57.	13.7	102
20	Higher-order spin-hole correlations around a localized charge impurity. Physical Review Research, 2021, 3, .	1.3	5
21	Microscopic evolution of doped Mott insulators from polaronic metal to Fermi liquid. Science, 2021, 374, 82-86.	6.0	48
22	Exploration of doped quantum magnets with ultracold atoms. Annals of Physics, 2021, 435, 168651.	1.0	35
23	Emergence of a Sharp Quantum Collective Mode in a One-Dimensional Fermi Polaron. Physical Review X, 2021, 11, .	2.8	7
24	Dynamical Quantum Cherenkov Transition of Fast Impurities in Quantum Liquids. Physical Review Letters, 2021, 127, 185302.	2.9	16
25	Role of Equilibrium Fluctuations in Light-Induced Order. Physical Review Letters, 2021, 127, 227401.	2.9	16
26	Transverse Spin Dynamics in the Anisotropic Heisenberg Model Realized with Ultracold Atoms. Physical Review X, 2021, 11, .	2.8	25
27	Thermal radiation and dissipative phase transition in a BEC with local loss. Annals of Physics, 2020, 412, 168021.	1.0	16
28	Parton theory of angle-resolved photoemission spectroscopy spectra in antiferromagnetic Mott insulators. Physical Review B, 2020, 102, .	1.1	31
29	Quantum Electrodynamical Control of Matter: Cavity-Enhanced Ferroelectric Phase Transition. Physical Review X, 2020, 10, .	2.8	72
30	Variational Approach for Many-Body Systems at Finite Temperature. Physical Review Letters, 2020, 125, 180602.	2.9	14
31	Non-Gaussian correlations imprinted by local dephasing in fermionic wires. Physical Review B, 2020, 102, .	1.1	29
32	Universal Prethermal Dynamics in Heisenberg Ferromagnets. Physical Review Letters, 2020, 125, 230601.	2.9	16
33	Spin transport in a tunable Heisenberg model realized with ultracold atoms. Nature, 2020, 588, 403-407.	13.7	140
34	Parametric resonance of Josephson plasma waves: A theory for optically amplified interlayer superconductivity in YBaCuO . Physical Review B, 2020, 102, .	1.1	26
35	Self-similar dynamics of order parameter fluctuations in pump-probe experiments. Physical Review B, 2020, 101, .	1.1	27
36	Quantum approximate Bayesian computation for NMR model inference. Nature Machine Intelligence, 2020, 2, 396-402.	8.3	12

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37	Multiparticle Interactions for Ultracold Atoms in Optical Tweezers: Cyclic Ring-Exchange Terms. <i>Physical Review Letters</i> , 2020, 124, 073601.	2.9	6
38	Fermionic formalism for driven-dissipative multilevel systems. <i>Physical Review A</i> , 2020, 101, .	1.0	16
39	Non-Abelian Symmetries and Disorder: A Broad Nonergodic Regime and Anomalous Thermalization. <i>Physical Review X</i> , 2020, 10, .	2.8	20
40	Rydberg impurity in a Fermi gas: Quantum statistics and rotational blockade. <i>Physical Review Research</i> , 2020, 2, .	1.3	21
41	Ultrafast molecular dynamics in terahertz-STM experiments: Theoretical analysis using the Anderson-Holstein model. <i>Physical Review Research</i> , 2020, 2, .	1.3	9
42	Zero-temperature phases of the two-dimensional Hubbard-Holstein model: A non-Gaussian exact diagonalization study. <i>Physical Review Research</i> , 2020, 2, .	1.3	31
43	Geometry of variational methods: dynamics of closed quantum systems. <i>SciPost Physics</i> , 2020, 9, .	1.5	50
44	Imaging magnetic polarons in the doped Fermi-Hubbard model. <i>Nature</i> , 2019, 572, 358-362.	13.7	106
45	String patterns in the doped Hubbard model. <i>Science</i> , 2019, 365, 251-256.	6.0	102
46	Classifying snapshots of the doped Hubbard model with machine learning. <i>Nature Physics</i> , 2019, 15, 921-924.	6.5	94
47	Efficient variational approach to dynamics of a spatially extended bosonic Kondo model. <i>Physical Review A</i> , 2019, 100, .	1.0	8
48	Quantum Rydberg Central Spin Model. <i>Physical Review Letters</i> , 2019, 123, 183001.	2.9	25
49	Atomtronics with a spin: Statistics of spin transport and nonequilibrium orthogonality catastrophe in cold quantum gases. <i>Physical Review B</i> , 2019, 99, .	1.1	10
50	Transport of Neutral Optical Excitations Using Electric Fields. <i>Physical Review X</i> , 2019, 9, .	2.8	23
51	Ab initio exact diagonalization simulation of the Nagaoka transition in quantum dots. <i>Physical Review B</i> , 2019, 100, .	1.1	12
52	Gaussian time-dependent variational principle for the Bose-Hubbard model. <i>Physical Review B</i> , 2019, 100, .	1.1	20
53	Dicke time crystals in driven-dissipative quantum many-body systems. <i>New Journal of Physics</i> , 2019, 21, 073028.	1.2	90
54	From the moving piston to the dynamical Casimir effect: Explorations with shaken condensates. <i>Physical Review A</i> , 2019, 99, .	1.0	12

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55	Microscopic spinon-charge theory of magnetic polarons in the \mathbb{Z}_2 lattice gauge theory model. Physical Review B, 2019, 99, .		
56	Diagnosing phases of magnetic insulators via noise magnetometry with spin qubits. Physical Review B, 2019, 99, .	1.1	33
57	Floquet approach to \mathbb{Z}_2 lattice gauge theories with ultracold atoms in optical lattices. Nature Physics, 2019, 15, 1168-1173.	6.5	214
58	Coupling ultracold matter to dynamical gauge fields in optical lattices: From flux attachment to \mathbb{Z}_2 lattice gauge theories. Science Advances, 2019, 5, eaav7444.	4.7	75
59	Electron-phonon instability in graphene revealed by global and local noise probes. Science, 2019, 364, 154-157.	6.0	47
60	Many-body interferometry of magnetic polaron dynamics. Physical Review B, 2018, 97, .	1.1	26
61	Selective state spectroscopy and multifractality in disordered Bose-Einstein condensates: a numerical study. Scientific Reports, 2018, 8, 3641.	1.6	3
62	Variational study of fermionic and bosonic systems with non-Gaussian states: Theory and applications. Annals of Physics, 2018, 390, 245-302.	1.0	79
63	Universal many-body response of heavy impurities coupled to a Fermi sea: a review of recent progress. Reports on Progress in Physics, 2018, 81, 024401.	8.1	135
64	Exploring the anisotropic Kondo model in and out of equilibrium with alkaline-earth atoms. Physical Review B, 2018, 97, .	1.1	39
65	Relaxation to a Phase-Locked Equilibrium State in a One-Dimensional Bosonic Josephson Junction. Physical Review Letters, 2018, 120, 173601.	2.9	68
66	Strong-coupling Bose polarons out of equilibrium: Dynamical renormalization-group approach. Physical Review A, 2018, 97, .	1.0	32
67	Probing one-dimensional systems via noise magnetometry with single spin qubits. Physical Review B, 2018, 98, .	1.1	17
68	Publisher's Note: Intertwined and vestigial order with ultracold atoms in multiple cavity modes [Phys. Rev. A 96 , 063828 (2017)]. Physical Review A, 2018, 98, .	1.0	0
69	Variational principle for quantum impurity systems in and out of equilibrium: Application to Kondo problems. Physical Review B, 2018, 98, .	1.1	22
70	Solving Quantum Impurity Problems in and out of Equilibrium with the Variational Approach. Physical Review Letters, 2018, 121, 026805.	2.9	35
71	Meson formation in mixed-dimensional t-J models. , 2018, 5, .		33
72	Observation of discrete time-crystalline order in a disordered dipolar many-body system. Nature, 2017, 543, 221-225.	13.7	689

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73	Depolarization Dynamics in a Strongly Interacting Solid-State Spin Ensemble. <i>Physical Review Letters</i> , 2017, 118, 093601.	2.9	86
74	A cold-atom Fermi-Hubbard antiferromagnet. <i>Nature</i> , 2017, 545, 462-466.	13.7	514
75	Bloch oscillations in the absence of a lattice. <i>Science</i> , 2017, 356, 945-948.	6.0	97
76	Revealing hidden antiferromagnetic correlations in doped Hubbard chains via string correlators. <i>Science</i> , 2017, 357, 484-487.	6.0	144
77	Quantum heat waves in a one-dimensional condensate. <i>Physical Review B</i> , 2017, 95, .	1.1	6
78	Theory of parametrically amplified electron-phonon superconductivity. <i>Physical Review B</i> , 2017, 96, .	1.1	110
79	Quantum correlations at infinite temperature: The dynamical Nagaoka effect. <i>Physical Review B</i> , 2017, 96, .	1.1	22
80	Rare-region effects and dynamics near the many-body localization transition. <i>Annalen Der Physik</i> , 2017, 529, 1600326.	0.9	152
81	Full counting statistics of time-of-flight images. <i>Physical Review A</i> , 2017, 95, .	1.0	30
82	Entanglement and entropy production in coupled single-mode Bose-Einstein condensates. <i>Physical Review A</i> , 2017, 96, .	1.0	4
83	Magnetic noise spectroscopy as a probe of local electronic correlations in two-dimensional systems. <i>Physical Review B</i> , 2017, 95, .	1.1	37
84	Tunable spin-orbit coupling for ultracold atoms in two-dimensional optical lattices. <i>Physical Review A</i> , 2017, 95, .	1.0	32
85	Fermi polaron-polaritons in charge-tunable atomically thin semiconductors. <i>Nature Physics</i> , 2017, 13, 255-261.	6.5	379
86	Bose polarons in ultracold atoms in one dimension: beyond the Fröhlich paradigm. <i>New Journal of Physics</i> , 2017, 19, 103035.	1.2	101
87	Intertwined and vestigial order with ultracold atoms in multiple cavity modes. <i>Physical Review A</i> , 2017, 96, .	1.0	14
88	Quantum-fluctuation-induced time-of-flight correlations of an interacting trapped Bose gas. <i>Physical Review A</i> , 2017, 95, .	1.0	7
89	Auxiliary fermion approach to the resonant inelastic x-ray scattering response in an underdoped cuprate. <i>Physical Review B</i> , 2017, 96, .	1.1	6
90	Superconducting pairing in resonant inelastic x-ray scattering. <i>Physical Review B</i> , 2016, 94, .	1.1	3

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91	Dicke phase transition without total spin conservation. <i>Physical Review A</i> , 2016, 94, .	1.0	37
92	Dynamical Cooper pairing in nonequilibrium electron-phonon systems. <i>Physical Review B</i> , 2016, 94, .	1.1	129
93	Bloch state tomography using Wilson lines. <i>Science</i> , 2016, 352, 1094-1097.	6.0	136
94	Quantum Dynamics of Ultracold Bose Polarons. <i>Physical Review Letters</i> , 2016, 117, 113002.	2.9	134
95	Regimes of heating and dynamical response in driven many-body localized systems. <i>Physical Review B</i> , 2016, 94, .	1.1	28
96	Ultrafast many-body interferometry of impurities coupled to a Fermi sea. <i>Science</i> , 2016, 354, 96-99.	6.0	252
97	Holographic maps of quasiparticle interference. <i>Nature Physics</i> , 2016, 12, 1052-1056.	6.5	13
98	Polaronic mass renormalization of impurities in Bose-Einstein condensates: Correlated Gaussian-wave-function approach. <i>Physical Review A</i> , 2016, 93, .	1.0	45
99	Superconductivity and other collective phenomena in a hybrid Bose-Fermi mixture formed by a polariton condensate and an electron system in two dimensions. <i>Physical Review B</i> , 2016, 93, .	1.1	95
100	Griffiths effects and slow dynamics in nearly many-body localized systems. <i>Physical Review B</i> , 2016, 93, .	1.1	117
101	Weak crystallization theory of metallic alloys. <i>Physical Review B</i> , 2016, 93, .	1.1	5
102	Friedel oscillations as a probe of fermionic quasiparticles. <i>Physical Review B</i> , 2016, 93, .	1.1	30
103	Exploring dynamical phase transitions and prethermalization with quantum noise of excitations. <i>Physical Review B</i> , 2015, 91, .	1.1	65
104	Probing competing and intertwined orders with resonant inelastic x-ray scattering in the hole-doped cuprates. <i>Physical Review B</i> , 2015, 92, .	1.1	4
105	$\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mi} \rangle f_{\pm} \langle \text{mml:mi} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:math} \rangle$ noise and generalized diffusion in random Heisenberg spin systems. <i>Physical Review B</i> , 2015, 92, .	1.1	23
106	Mobile Magnetic Impurities in a Fermi Superfluid: A Route to Designer Molecules. <i>Physical Review Letters</i> , 2015, 114, 045301.	2.9	7
107	Prethermal Floquet Steady States and Instabilities in the Periodically Driven, Weakly Interacting Bose-Hubbard Model. <i>Physical Review Letters</i> , 2015, 115, 205301.	2.9	112
108	Low-frequency conductivity in many-body localized systems. <i>Physical Review B</i> , 2015, 92, .	1.1	165

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109	Far-from-Equilibrium Field Theory of Many-Body Quantum Spin Systems: Prethermalization and Relaxation of Spin Spiral States in Three Dimensions. <i>Physical Review X</i> , 2015, 5, .	2.8	72
110	Dynamical instabilities and transient short-range order in the fermionic Hubbard model. <i>Physical Review B</i> , 2015, 92, .	1.1	16
111	Dynamical stability of a many-body Kapitza pendulum. <i>Annals of Physics</i> , 2015, 360, 694-710.	1.0	75
112	Anomalous Diffusion and Griffiths Effects Near the Many-Body Localization Transition. <i>Physical Review Letters</i> , 2015, 114, 160401.	2.9	322
113	Exploring quasiparticles in high- T_c cuprates through photoemission, tunneling, and x-ray scattering experiments. <i>New Journal of Physics</i> , 2015, 17, 022001.	1.2	17
114	Studying non-equilibrium many-body dynamics using one-dimensional Bose gases. , 2014, , .		5
115	Variational polaron method for Bose-Bose mixtures. <i>Physical Review A</i> , 2014, 89, .	1.0	18
116	Radio-frequency spectroscopy of polarons in ultracold Bose gases. <i>Physical Review A</i> , 2014, 89, .	1.0	85
117	Chiral Prethermalization in Supersonically Split Condensates. <i>Physical Review Letters</i> , 2014, 113, 190401.	2.9	17
118	Hilbert-Glass Transition: New Universality of Temperature-Tuned Many-Body Dynamical Quantum Criticality. <i>Physical Review X</i> , 2014, 4, .	2.8	197
119	Unstable Avoided Crossing in Coupled Spinor Condensates. <i>Physical Review Letters</i> , 2014, 113, 065303.	2.9	30
120	Single-Band Model of Resonant Inelastic X-Ray Scattering by Quasiparticles in High- T_c Superconductors. <i>Physical Review Letters</i> , 2014, 112, 247002.	2.9	39
121	Quantum Flutter: Signatures and Robustness. <i>Physical Review Letters</i> , 2014, 112, 015302.	2.9	45
122	Far-from-Equilibrium Spin Transport in Heisenberg Quantum Magnets. <i>Physical Review Letters</i> , 2014, 113, 147205.	2.9	168
123	Transmon-based simulator of nonlocal electron-phonon coupling: A platform for observing sharp small-polaron transitions. <i>Physical Review B</i> , 2014, 89, .	1.1	29
124	Transport in Two-Dimensional Disordered Semimetals. <i>Physical Review Letters</i> , 2014, 113, 186801.	2.9	20
125	Gopalakrishnan, Martin, and Demler Reply:. <i>Physical Review Letters</i> , 2014, 113, 079603.	2.9	2
126	Quantum Quasicrystals of Spin-Orbit-Coupled Dipolar Bosons. <i>Physical Review Letters</i> , 2013, 111, 185304.	2.9	64

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127	Direct measurement of the Zak phase in topological Bloch bands. <i>Nature Physics</i> , 2013, 9, 795-800.	6.5	751
128	Dissipative Preparation of Spin Squeezed Atomic Ensembles in a Steady State. <i>Physical Review Letters</i> , 2013, 110, 120402.	2.9	139
129	Microscopic Theory of Resonant Soft-X-Ray Scattering in Materials with Charge Order: The Example of Charge Stripes in High-Temperature Cuprate Superconductors. <i>Physical Review Letters</i> , 2013, 110, 137002.	2.9	14
130	Cooling through optimal control of quantum evolution. <i>Physical Review A</i> , 2013, 87, .	1.0	30
131	Polaronic model of two-level systems in amorphous solids. <i>Physical Review B</i> , 2013, 87, .	1.1	38
132	Realizing a Kondo-Correlated State with Ultracold Atoms. <i>Physical Review Letters</i> , 2013, 111, 215304.	2.9	69
133	Universal behavior of repulsive two-dimensional fermions in the vicinity of the quantum freezing point. <i>Europhysics Letters</i> , 2013, 103, 16002.	0.7	13
134	Probing Real-Space and Time-Resolved Correlation Functions with Many-Body Ramsey Interferometry. <i>Physical Review Letters</i> , 2013, 111, 147205.	2.9	104
135	Dissipative Dynamics of a Driven Quantum Spin Coupled to a Bath of Ultracold Fermions. <i>Physical Review Letters</i> , 2013, 111, 265302.	2.9	16
136	Bound states at impurities as a probe of topological superconductivity in nanowires. <i>Physical Review B</i> , 2013, 88, .	1.1	68
137	Proposal for Coherent Coupling of Majorana Zero Modes and Superconducting Qubits Using the $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">4 \langle \text{mml:mi} \rangle \text{€} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ Josephson Effect. <i>Physical Review Letters</i> , 2013, 111, 107007.	2.9	57
138	Interferometric Approach to Measuring Band Topology in 2D Optical Lattices. <i>Physical Review Letters</i> , 2013, 110, 165304.	2.9	96
139	Universal Rephasing Dynamics after a Quantum Quench via Sudden Coupling of Two Initially Independent Condensates. <i>Physical Review Letters</i> , 2013, 110, 090404.	2.9	58
140	Noisy quantum phase transitions: an intuitive approach. <i>Physica Scripta</i> , 2012, T151, 014026.	1.2	1
141	Mott Criticality and Pseudogap in Bose-Fermi Mixtures. <i>Physical Review Letters</i> , 2012, 109, 235304.	2.9	2
142	Dynamics and universality in noise-driven dissipative systems. <i>Physical Review B</i> , 2012, 85, .	1.1	66
143	Clustered Wigner-crystal phases of cold polar molecules in arrays of one-dimensional tubes. <i>Physical Review B</i> , 2012, 86, .	1.1	32
144	Pairing instabilities in quasi-two-dimensional Fermi gases. <i>Physical Review A</i> , 2012, 85, .	1.0	19

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145	Fermi polarons in two dimensions. <i>Physical Review A</i> , 2012, 85, .	1.0	121
146	Quantum flutter of supersonic particles in one-dimensional quantum liquids. <i>Nature Physics</i> , 2012, 8, 881-886.	6.5	67
147	Collective excitations of quasi-two-dimensional trapped dipolar fermions: Transition from collisionless to hydrodynamic regime. <i>Physical Review A</i> , 2012, 86, .	1.0	21
148	Fermionic transport and out-of-equilibrium dynamics in a homogeneous Hubbard model with ultracold atoms. <i>Nature Physics</i> , 2012, 8, 213-218.	6.5	336
149	Time-Dependent Impurity in Ultracold Fermions: Orthogonality Catastrophe and Beyond. <i>Physical Review X</i> , 2012, 2, .	2.8	148
150	Photo control of transport properties in a disordered wire: Average conductance, conductance statistics, and time-reversal symmetry. <i>Annals of Physics</i> , 2012, 327, 1868-1889.	1.0	7
151	Resonant soft X-ray scattering, stripe order, and the electron spectral function in cuprates. <i>Physica C: Superconductivity and Its Applications</i> , 2012, 481, 15-22.	0.6	23
152	The \hat{H} amplitude mode at the two-dimensional superfluid/Mott insulator transition. <i>Nature</i> , 2012, 487, 454-458.	13.7	280
153	Quantum transport of strongly interacting photons in a one-dimensional nonlinear waveguide. <i>Physical Review A</i> , 2012, 85, .	1.0	43
154	Observation of topologically protected bound states in photonic quantum walks. <i>Nature Communications</i> , 2012, 3, 882.	5.8	488
155	Doublon production rate in modulated optical lattices. <i>Physical Review A</i> , 2012, 85, .	1.0	11
156	Measuring Entanglement Entropy of a Generic Many-Body System with a Quantum Switch. <i>Physical Review Letters</i> , 2012, 109, 020504.	2.9	171
157	Majorana Fermions in Equilibrium and in Driven Cold-Atom Quantum Wires. <i>Physical Review Letters</i> , 2011, 106, 220402.	2.9	606
158	Robust optical delay lines with topological protection. <i>Nature Physics</i> , 2011, 7, 907-912.	6.5	1,110
159	Spin-1 atoms in optical superlattices: Single-atom tunneling and entanglement. <i>Physical Review A</i> , 2011, 84, .	1.0	19
160	Density ordering instabilities of quasi-two-dimensional fermionic polar molecules in single-layer and multilayer configurations: Exact treatment of exchange interactions. <i>Physical Review B</i> , 2011, 84, .	1.1	32
161	Transport properties of nonequilibrium systems under the application of light: Photoinduced quantum Hall insulators without Landau levels. <i>Physical Review B</i> , 2011, 84, .	1.1	820
162	Semiclassical solitons in strongly correlated systems of ultracold bosonic atoms in optical lattices. <i>Annals of Physics</i> , 2011, 326, 1775-1805.	1.0	25

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163	Collective phenomena in a quasi-two-dimensional system of fermionic polar molecules: Band renormalization and excitons. <i>Physical Review A</i> , 2011, 84, .	1.0	14
164	Quantum magnetism with polar alkali-metal dimers. <i>Physical Review A</i> , 2011, 84, .	1.0	142
165	Bound states of a localized magnetic impurity in a superfluid of paired ultracold fermions. <i>Physical Review A</i> , 2011, 83, .	1.0	26
166	Relaxation of Fermionic Excitations in a Strongly Attractive Fermi Gas in an Optical Lattice. <i>Physical Review Letters</i> , 2011, 107, 145303.	2.9	8
167	Phase-Sensitive Measurements of Order Parameters for Ultracold Atoms through Two-Particle Interferometry. <i>Physical Review Letters</i> , 2011, 106, 115302.	2.9	22
168	Tunable Superfluidity and Quantum Magnetism with Ultracold Polar Molecules. <i>Physical Review Letters</i> , 2011, 107, 115301.	2.9	257
169	Competition between Pairing and Ferromagnetic Instabilities in Ultracold Fermi Gases near Feshbach Resonances. <i>Physical Review Letters</i> , 2011, 106, 050402.	2.9	115
170	Observation of topologically protected bound states in photonic quantum walks. , 2011, , .		1
171	The dynamics and prethermalization of one-dimensional quantum systems probed through the full distributions of quantum noise. <i>New Journal of Physics</i> , 2011, 13, 073018.	1.2	109
172	Exploring topological phases with quantum walks. <i>Physical Review A</i> , 2010, 82, .	1.0	397
173	Quantum critical states and phase transitions in the presence of non-equilibrium noise. <i>Nature Physics</i> , 2010, 6, 806-810.	6.5	132
174	Ramsey Interference in One-Dimensional Systems: The Full Distribution Function of Fringe Contrast as a Probe of Many-Body Dynamics. <i>Physical Review Letters</i> , 2010, 104, 255302.	2.9	56
175	Superfluidity and Dimerization in a Multilayered System of Fermionic Polar Molecules. <i>Physical Review Letters</i> , 2010, 105, 220406.	2.9	70
176	Adiabatic preparation of many-body states in optical lattices. <i>Physical Review A</i> , 2010, 81, .	1.0	49
177	Anomalous Expansion of Attractively Interacting Fermionic Atoms in an Optical Lattice. <i>Science</i> , 2010, 327, 1621-1624.	6.0	83
178	Lifetime of double occupancies in the Fermi-Hubbard model. <i>Physical Review B</i> , 2010, 82, .	1.1	95
179	Finding the Elusive Sliding Phase in the Superfluid-Normal Phase Transition Smeared by Axis Disorder. <i>Physical Review Letters</i> , 2010, 105, 085302.	2.9	16
180	Photonic Phase Gate via an Exchange of Fermionic Spin Waves in a Spin Chain. <i>Physical Review Letters</i> , 2010, 105, 060502.	2.9	36

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