

# Eugene Demler

## List of Publications by Year in descending order

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257  
papers

25,016  
citations

6091

82  
h-index

7703

152  
g-index

266  
all docs

266  
docs citations

266  
times ranked

15417  
citing authors

#	ARTICLE	IF	CITATIONS
1	Exciton Transport in a Germanium Quantum Dot Ladder. <i>Physical Review X</i> , 2024, 14, .	9.1	0
2	Pairing dome from an emergent Feshbach resonance in a strongly repulsive bilayer model. <i>Physical Review B</i> , 2024, 110, .	3.3	0
3	Digital quantum simulation of NMR experiments. <i>Science Advances</i> , 2023, 9, .	10.9	2
4	Characterizing two-dimensional superconductivity via nanoscale noise magnetometry with single-spin qubits. <i>Physical Review B</i> , 2022, 105, .	3.3	15
5	Single-spin qubit magnetic spectroscopy of two-dimensional superconductivity. <i>Physical Review Research</i> , 2022, 4, .	3.6	13
6	Cavity magnon-polaritons in cuprate parent compounds. <i>Physical Review Research</i> , 2022, 4, .	3.6	27
7	Transverse instability and universal decay of spin spiral order in the Heisenberg model. <i>Physical Review B</i> , 2022, 105, .	3.3	4
8	Resonantly enhanced polariton wave mixing and parametric instability in a Floquet medium. <i>Journal of Chemical Physics</i> , 2022, 156, 174110.	3.1	4
9	Strong pairing in mixed-dimensional bilayer antiferromagnetic Mott insulators. <i>Nature Physics</i> , 2022, 18, 651-656.	11.8	24
10	Generalized Fresnel-Floquet equations for driven quantum materials. <i>Physical Review B</i> , 2022, 105, .	3.3	10
11	Probing hydrodynamic sound modes in magnon fluids using spin magnetometers. <i>Physical Review B</i> , 2022, 105, .	3.3	7
12	Quantum generative model for sampling many-body spectral functions. <i>Physical Review B</i> , 2021, 103, .	3.3	5
13	Quantum Simulators: Architectures and Opportunities. <i>PRX Quantum</i> , 2021, 2, .	9.3	286
14	Higgs-Mediated Optical Amplification in a Nonequilibrium Superconductor. <i>Physical Review X</i> , 2021, 11, .	9.1	23
15	Time-Domain Anyon Interferometry in Kitaev Honeycomb Spin Liquids and Beyond. <i>Physical Review Letters</i> , 2021, 126, 177204.	8.0	14
16	Cavity Quantum Electrodynamics at Arbitrary Light-Matter Coupling Strengths. <i>Physical Review Letters</i> , 2021, 126, 153603.	8.0	52
17	Coupling a Mobile Hole to an Antiferromagnetic Spin Background: Transient Dynamics of a Magnetic Polaron. <i>Physical Review X</i> , 2021, 11, .	9.1	38
18	Generalization of group-theoretic coherent states for variational calculations. <i>Physical Review Research</i> , 2021, 3, .	3.6	5

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19	Bilayer Wigner crystals in a transition metal dichalcogenide heterostructure. Nature, 2021, 595, 48-52.	36.2	118
20	Correlator convolutional neural networks as an interpretable architecture for image-like quantum matter data. Nature Communications, 2021, 12, 3905.	13.2	27
21	A magnon scattering platform. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.6	32
22	Signatures of Wigner crystal of electrons in a monolayer semiconductor. Nature, 2021, 595, 53-57.	36.2	126
23	Higher-order spin-hole correlations around a localized charge impurity. Physical Review Research, 2021, 3, .	3.6	9
24	Exploration of doped quantum magnets with ultracold atoms. Annals of Physics, 2021, 435, 168651.	2.9	48
25	Emergence of a Sharp Quantum Collective Mode in a One-Dimensional Fermi Polaron. Physical Review X, 2021, 11, .	9.1	11
26	Dynamical Quantum Cherenkov Transition of Fast Impurities in Quantum Liquids. Physical Review Letters, 2021, 127, 185302.	8.0	21
27	Role of Equilibrium Fluctuations in Light-Induced Order. Physical Review Letters, 2021, 127, 227401.	8.0	17
28	Transverse Spin Dynamics in the Anisotropic Heisenberg Model Realized with Ultracold Atoms. Physical Review X, 2021, 11, .	9.1	33
29	Thermal radiation and dissipative phase transition in a BEC with local loss. Annals of Physics, 2020, 412, 168021.	2.9	19
30	Parton theory of angle-resolved photoemission spectroscopy spectra in antiferromagnetic Mott insulators. Physical Review B, 2020, 102, .	3.3	34
31	Quantum Electrodynamical Control of Matter: Cavity-Enhanced Ferroelectric Phase Transition. Physical Review X, 2020, 10, .	9.1	86
32	Variational Approach for Many-Body Systems at Finite Temperature. Physical Review Letters, 2020, 125, 180602.	8.0	14
33	Non-Gaussian correlations imprinted by local dephasing in fermionic wires. Physical Review B, 2020, 102, .	3.3	34
34	Universal Prethermal Dynamics in Heisenberg Ferromagnets. Physical Review Letters, 2020, 125, 230601.	8.0	16
35	Spin transport in a tunable Heisenberg model realized with ultracold atoms. Nature, 2020, 588, 403-407.	36.2	166
36	Parametric resonance of Josephson plasma waves: A theory for optically amplified interlayer superconductivity in $\text{YBaCuO}$ . Physical Review B, 2020, 102, .	3.3	34

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37	Self-similar dynamics of order parameter fluctuations in pump-probe experiments. <i>Physical Review B</i> , 2020, 101, .	3.3	28
38	Quantum approximate Bayesian computation for NMR model inference. <i>Nature Machine Intelligence</i> , 2020, 2, 396-402.	15.2	13
39	Multiparticle Interactions for Ultracold Atoms in Optical Tweezers: Cyclic Ring-Exchange Terms. <i>Physical Review Letters</i> , 2020, 124, 073601.	8.0	7
40	Fermionic formalism for driven-dissipative multilevel systems. <i>Physical Review A</i> , 2020, 101, .	2.5	16
41	Non-Abelian Symmetries and Disorder: A Broad Nonergodic Regime and Anomalous Thermalization. <i>Physical Review X</i> , 2020, 10, .	9.1	20
42	Rydberg impurity in a Fermi gas: Quantum statistics and rotational blockade. <i>Physical Review Research</i> , 2020, 2, .	3.6	22
43	Ultrafast molecular dynamics in terahertz-STM experiments: Theoretical analysis using the Anderson-Holstein model. <i>Physical Review Research</i> , 2020, 2, .	3.6	10
44	Zero-temperature phases of the two-dimensional Hubbard-Holstein model: A non-Gaussian exact diagonalization study. <i>Physical Review Research</i> , 2020, 2, .	3.6	31
45	Geometry of variational methods: dynamics of closed quantum systems. <i>SciPost Physics</i> , 2020, 9, .	4.9	66
46	Imaging magnetic polarons in the doped Fermi-Hubbard model. <i>Nature</i> , 2019, 572, 358-362.	36.2	118
47	String patterns in the doped Hubbard model. <i>Science</i> , 2019, 365, 251-256.	20.9	112
48	Classifying snapshots of the doped Hubbard model with machine learning. <i>Nature Physics</i> , 2019, 15, 921-924.	11.8	101
49	Efficient variational approach to dynamics of a spatially extended bosonic Kondo model. <i>Physical Review A</i> , 2019, 100, .	2.5	9
50	Quantum Rydberg Central Spin Model. <i>Physical Review Letters</i> , 2019, 123, 183001.	8.0	26
51	Atomtronics with a spin: Statistics of spin transport and nonequilibrium orthogonality catastrophe in cold quantum gases. <i>Physical Review B</i> , 2019, 99, .	3.3	11
52	Transport of Neutral Optical Excitations Using Electric Fields. <i>Physical Review X</i> , 2019, 9, .	9.1	23
53	<i>Ab initio</i> exact diagonalization simulation of the Nagaoka transition in quantum dots. <i>Physical Review B</i> , 2019, 100, .	3.3	13
54	Gaussian time-dependent variational principle for the Bose-Hubbard model. <i>Physical Review B</i> , 2019, 100, .	3.3	24

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55	Dicke time crystals in driven-dissipative quantum many-body systems. <i>New Journal of Physics</i> , 2019, 21, 073028.	2.9	106
56	From the moving piston to the dynamical Casimir effect: Explorations with shaken condensates. <i>Physical Review A</i> , 2019, 99, .	2.5	12
57	Microscopic spinon-charge theory of magnetic polarons in the $\mathbb{Z}_2$ lattice gauge theory model. <i>Physical Review B</i> , 2019, 99, .	3.2	12
58	Diagnosing phases of magnetic insulators via noise magnetometry with spin qubits. <i>Physical Review B</i> , 2019, 99, .	3.3	39
59	Floquet approach to $\mathbb{Z}_2$ lattice gauge theories with ultracold atoms in optical lattices. <i>Nature Physics</i> , 2019, 15, 1168-1173.	11.8	240
60	Coupling ultracold matter to dynamical gauge fields in optical lattices: From flux attachment to $\mathbb{Z}_2$ lattice gauge theories. <i>Science Advances</i> , 2019, 5, eaav7444.	10.9	82
61	Many-body interferometry of magnetic polaron dynamics. <i>Physical Review B</i> , 2018, 97, .	3.3	27
62	Selective state spectroscopy and multifractality in disordered Bose-Einstein condensates: a numerical study. <i>Scientific Reports</i> , 2018, 8, 3641.	3.4	3
63	Variational study of fermionic and bosonic systems with non-Gaussian states: Theory and applications. <i>Annals of Physics</i> , 2018, 390, 245-302.	2.9	87
64	Universal many-body response of heavy impurities coupled to a Fermi sea: a review of recent progress. <i>Reports on Progress in Physics</i> , 2018, 81, 024401.	20.3	143
65	Exploring the anisotropic Kondo model in and out of equilibrium with alkaline-earth atoms. <i>Physical Review B</i> , 2018, 97, .	3.3	41
66	Relaxation to a Phase-Locked Equilibrium State in a One-Dimensional Bosonic Josephson Junction. <i>Physical Review Letters</i> , 2018, 120, 173601.	8.0	80
67	Strong-coupling Bose polarons out of equilibrium: Dynamical renormalization-group approach. <i>Physical Review A</i> , 2018, 97, .	2.5	34
68	Probing one-dimensional systems via noise magnetometry with single spin qubits. <i>Physical Review B</i> , 2018, 98, .	3.3	18
69	Variational principle for quantum impurity systems in and out of equilibrium: Application to Kondo problems. <i>Physical Review B</i> , 2018, 98, .	3.3	24
70	Solving Quantum Impurity Problems in and out of Equilibrium with the Variational Approach. <i>Physical Review Letters</i> , 2018, 121, 026805.	8.0	37
71	Observation of discrete time-crystalline order in a disordered dipolar many-body system. <i>Nature</i> , 2017, 543, 221-225.	36.2	741
72	Depolarization Dynamics in a Strongly Interacting Solid-State Spin Ensemble. <i>Physical Review Letters</i> , 2017, 118, 093601.	8.0	95

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73	A cold-atom Fermi-Hubbard antiferromagnet. <i>Nature</i> , 2017, 545, 462-466.	36.2	551
74	Quantum heat waves in a one-dimensional condensate. <i>Physical Review B</i> , 2017, 95, .	3.3	6
75	Theory of parametrically amplified electron-phonon superconductivity. <i>Physical Review B</i> , 2017, 96, .	3.3	111
76	Quantum correlations at infinite temperature: The dynamical Nagaoka effect. <i>Physical Review B</i> , 2017, 96, .	3.3	28
77	Rare-region effects and dynamics near the many-body localization transition. <i>Annalen Der Physik</i> , 2017, 529, 1600326.	2.5	160
78	Full counting statistics of time-of-flight images. <i>Physical Review A</i> , 2017, 95, .	2.5	36
79	Entanglement and entropy production in coupled single-mode Bose-Einstein condensates. <i>Physical Review A</i> , 2017, 96, .	2.5	4
80	Magnetic noise spectroscopy as a probe of local electronic correlations in two-dimensional systems. <i>Physical Review B</i> , 2017, 95, .	3.3	39
81	Tunable spin-orbit coupling for ultracold atoms in two-dimensional optical lattices. <i>Physical Review A</i> , 2017, 95, .	2.5	33
82	Fermi polaron-polaritons in charge-tunable atomically thin semiconductors. <i>Nature Physics</i> , 2017, 13, 255-261.	11.8	407
83	Bose polarons in ultracold atoms in one dimension: beyond the Fröhlich paradigm. <i>New Journal of Physics</i> , 2017, 19, 103035.	2.9	105
84	Intertwined and vestigial order with ultracold atoms in multiple cavity modes. <i>Physical Review A</i> , 2017, 96, .	2.5	15
85	Quantum-fluctuation-induced time-of-flight correlations of an interacting trapped Bose gas. <i>Physical Review A</i> , 2017, 95, .	2.5	7
86	Auxiliary fermion approach to the resonant inelastic x-ray scattering response in an underdoped cuprate. <i>Physical Review B</i> , 2017, 96, .	3.3	6
87	Superconducting pairing in resonant inelastic x-ray scattering. <i>Physical Review B</i> , 2016, 94, .	3.3	3
88	Dicke phase transition without total spin conservation. <i>Physical Review A</i> , 2016, 94, .	2.5	38
89	Dynamical Cooper pairing in nonequilibrium electron-phonon systems. <i>Physical Review B</i> , 2016, 94, .	3.3	130
90	Quantum Dynamics of Ultracold Bose Polarons. <i>Physical Review Letters</i> , 2016, 117, 113002.	8.0	142

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91	Regimes of heating and dynamical response in driven many-body localized systems. Physical Review B, 2016, 94, .	3.3	28
92	Holographic maps of quasiparticle interference. Nature Physics, 2016, 12, 1052-1056.	11.8	13
93	Polaronic mass renormalization of impurities in Bose-Einstein condensates: Correlated Gaussian-wave-function approach. Physical Review A, 2016, 93, .	2.5	47
94	Superconductivity and other collective phenomena in a hybrid Bose-Fermi mixture formed by a polariton condensate and an electron system in two dimensions. Physical Review B, 2016, 93, .	3.3	97
95	Griffiths effects and slow dynamics in nearly many-body localized systems. Physical Review B, 2016, 93, .	3.3	120
96	Weak crystallization theory of metallic alloys. Physical Review B, 2016, 93, .	3.3	5
97	Friedel oscillations as a probe of fermionic quasiparticles. Physical Review B, 2016, 93, .	3.3	30
98	Exploring dynamical phase transitions and prethermalization with quantum noise of excitations. Physical Review B, 2015, 91, .	3.3	67
99	Probing competing and intertwined orders with resonant inelastic x-ray scattering in the hole-doped cuprates. Physical Review B, 2015, 92, .	3.3	4
100	$\hat{L} \pm$ noise and generalized diffusion in random Heisenberg spin systems. Physical Review B, 2015, 92, .	3.3	23
101	Mobile Magnetic Impurities in a Fermi Superfluid: A Route to Designer Molecules. Physical Review Letters, 2015, 114, 045301.	8.0	7
102	Prethermal Floquet Steady States and Instabilities in the Periodically Driven, Weakly Interacting Bose-Hubbard Model. Physical Review Letters, 2015, 115, 205301.	8.0	118
103	Low-frequency conductivity in many-body localized systems. Physical Review B, 2015, 92, .	3.3	167
104	Far-from-Equilibrium Field Theory of Many-Body Quantum Spin Systems: Prethermalization and Relaxation of Spin Spiral States in Three Dimensions. Physical Review X, 2015, 5, .	9.1	77
105	Dynamical instabilities and transient short-range order in the fermionic Hubbard model. Physical Review B, 2015, 92, .	3.3	16
106	Dynamical stability of a many-body Kapitza pendulum. Annals of Physics, 2015, 360, 694-710.	2.9	79
107	Anomalous Diffusion and Griffiths Effects Near the Many-Body Localization Transition. Physical Review Letters, 2015, 114, 160401.	8.0	341
108	Exploring quasiparticles in high- $T_c$ cuprates through photoemission, tunneling, and x-ray scattering experiments. New Journal of Physics, 2015, 17, 022001.	2.9	17

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109	Studying non-equilibrium many-body dynamics using one-dimensional Bose gases. AIP Conference Proceedings, 2014, , .	1.0	6
110	Variational polaron method for Bose-Bose mixtures. Physical Review A, 2014, 89, .	2.5	18
111	Radio-frequency spectroscopy of polarons in ultracold Bose gases. Physical Review A, 2014, 89, .	2.5	90
112	Chiral Prethermalization in Supersonically Split Condensates. Physical Review Letters, 2014, 113, 190401.	8.0	19
113	Hilbert-Glass Transition: New Universality of Temperature-Tuned Many-Body Dynamical Quantum Criticality. Physical Review X, 2014, 4, .	9.1	201
114	Unstable Avoided Crossing in Coupled Spinor Condensates. Physical Review Letters, 2014, 113, 065303.	8.0	34
115	Single-Band Model of Resonant Inelastic X-Ray Scattering by Quasiparticles in High- $T_c$ Superconductors. Physical Review Letters, 2014, 112, 247002.	8.0	40
116	Quantum Flutter: Signatures and Robustness. Physical Review Letters, 2014, 112, 015302.	8.0	51
117	Far-from-Equilibrium Spin Transport in Heisenberg Quantum Magnets. Physical Review Letters, 2014, 113, 147205.	8.0	182
118	Transmon-based simulator of nonlocal electron-phonon coupling: A platform for observing sharp small-polaron transitions. Physical Review B, 2014, 89, .	3.3	30
119	Transport in Two-Dimensional Disordered Semimetals. Physical Review Letters, 2014, 113, 186801.	8.0	20
120	Gopalakrishnan, Martin, and Demler Reply:. Physical Review Letters, 2014, 113, 079603.	8.0	2
121	Quantum Quasicrystals of Spin-Orbit-Coupled Dipolar Bosons. Physical Review Letters, 2013, 111, 185304.	8.0	65
122	Direct measurement of the Zak phase in topological Bloch bands. Nature Physics, 2013, 9, 795-800.	11.8	794
123	Dissipative Preparation of Spin Squeezed Atomic Ensembles in a Steady State. Physical Review Letters, 2013, 110, 120402.	8.0	141
124	Microscopic Theory of Resonant Soft-X-Ray Scattering in Materials with Charge Order: The Example of Charge Stripes in High-Temperature Cuprate Superconductors. Physical Review Letters, 2013, 110, 137002.	8.0	14
125	Cooling through optimal control of quantum evolution. Physical Review A, 2013, 87, .	2.5	31
126	Polaronic model of two-level systems in amorphous solids. Physical Review B, 2013, 87, .	3.3	41



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127	Realizing a Kondo-Correlated State with Ultracold Atoms. <i>Physical Review Letters</i> , 2013, 111, 215304.	8.0	70
128	Universal behavior of repulsive two-dimensional fermions in the vicinity of the quantum freezing point. <i>Europhysics Letters</i> , 2013, 103, 16002.	2.0	13
129	Probing Real-Space and Time-Resolved Correlation Functions with Many-Body Ramsey Interferometry. <i>Physical Review Letters</i> , 2013, 111, 147205.	8.0	113
130	Dissipative Dynamics of a Driven Quantum Spin Coupled to a Bath of Ultracold Fermions. <i>Physical Review Letters</i> , 2013, 111, 265302.	8.0	18
131	Bound states at impurities as a probe of topological superconductivity in nanowires. <i>Physical Review B</i> , 2013, 88, .	3.3	69
132	Proposal for Coherent Coupling of Majorana Zero Modes and Superconducting Qubits Using the $\delta$ -Josephson Effect. <i>Physical Review Letters</i> , 2013, 111, 107007.	8.0	59
133	Interferometric Approach to Measuring Band Topology in 2D Optical Lattices. <i>Physical Review Letters</i> , 2013, 110, 165304.	8.0	99
134	Universal Rephasing Dynamics after a Quantum Quench via Sudden Coupling of Two Initially Independent Condensates. <i>Physical Review Letters</i> , 2013, 110, 090404.	8.0	62
135	Noisy quantum phase transitions: an intuitive approach. <i>Physica Scripta</i> , 2012, T151, 014026.	2.5	1
136	Mott Criticality and Pseudogap in Bose-Fermi Mixtures. <i>Physical Review Letters</i> , 2012, 109, 235304.	8.0	2
137	Dynamics and universality in noise-driven dissipative systems. <i>Physical Review B</i> , 2012, 85, .	3.3	68
138	Clustered Wigner-crystal phases of cold polar molecules in arrays of one-dimensional tubes. <i>Physical Review B</i> , 2012, 86, .	3.3	32
139	Pairing instabilities in quasi-two-dimensional Fermi gases. <i>Physical Review A</i> , 2012, 85, .	2.5	19
140	Fermi polarons in two dimensions. <i>Physical Review A</i> , 2012, 85, .	2.5	125
141	Quantum flutter of supersonic particles in one-dimensional quantum liquids. <i>Nature Physics</i> , 2012, 8, 881-886.	11.8	71
142	Collective excitations of quasi-two-dimensional trapped dipolar fermions: Transition from collisionless to hydrodynamic regime. <i>Physical Review A</i> , 2012, 86, .	2.5	22
143	Fermionic transport and out-of-equilibrium dynamics in a homogeneous Hubbard model with ultracold atoms. <i>Nature Physics</i> , 2012, 8, 213-218.	11.8	350
144	Time-Dependent Impurity in Ultracold Fermions: Orthogonality Catastrophe and Beyond. <i>Physical Review X</i> , 2012, 2, .	9.1	151

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145	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.	2.9	7
146	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.	1.2	23
147	The "Higgs" amplitude mode at the two-dimensional superfluid/Mott insulator transition. <i>Nature</i> , 2012, 487, 454-458.	36.2	285
148	Quantum transport of strongly interacting photons in a one-dimensional nonlinear waveguide. <i>Physical Review A</i> , 2012, 85, .	2.5	43
149	Observation of topologically protected bound states in photonic quantum walks. <i>Nature Communications</i> , 2012, 3, 882.	13.2	509
150	Doublon production rate in modulated optical lattices. <i>Physical Review A</i> , 2012, 85, .	2.5	11
151	Measuring Entanglement Entropy of a Generic Many-Body System with a Quantum Switch. <i>Physical Review Letters</i> , 2012, 109, 020504.	8.0	180
152	Majorana Fermions in Equilibrium and in Driven Cold-Atom Quantum Wires. <i>Physical Review Letters</i> , 2011, 106, 220402.	8.0	629
153	Robust optical delay lines with topological protection. <i>Nature Physics</i> , 2011, 7, 907-912.	11.8	1,166
154	Spin-1 atoms in optical superlattices: Single-atom tunneling and entanglement. <i>Physical Review A</i> , 2011, 84, .	2.5	19
155	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, .	3.3	32
156	Transport properties of nonequilibrium systems under the application of light: Photoinduced quantum Hall insulators without Landau levels. <i>Physical Review B</i> , 2011, 84, .	3.3	846
157	Semiclassical solitons in strongly correlated systems of ultracold bosonic atoms in optical lattices. <i>Annals of Physics</i> , 2011, 326, 1775-1805.	2.9	27
158	Collective phenomena in a quasi-two-dimensional system of fermionic polar molecules: Band renormalization and excitons. <i>Physical Review A</i> , 2011, 84, .	2.5	14
159	Quantum magnetism with polar alkali-metal dimers. <i>Physical Review A</i> , 2011, 84, .	2.5	149
160	Bound states of a localized magnetic impurity in a superfluid of paired ultracold fermions. <i>Physical Review A</i> , 2011, 83, .	2.5	28
161	Relaxation of Fermionic Excitations in a Strongly Attractive Fermi Gas in an Optical Lattice. <i>Physical Review Letters</i> , 2011, 107, 145303.	8.0	8
162	Phase-Sensitive Measurements of Order Parameters for Ultracold Atoms through Two-Particle Interferometry. <i>Physical Review Letters</i> , 2011, 106, 115302.	8.0	23

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163	Tunable Superfluidity and Quantum Magnetism with Ultracold Polar Molecules. Physical Review Letters, 2011, 107, 115301.	8.0	270
164	Competition between Pairing and Ferromagnetic Instabilities in Ultracold Fermi Gases near Feshbach Resonances. Physical Review Letters, 2011, 106, 050402.	8.0	117
165	Observation of topologically protected bound states in photonic quantum walks. , 2011, , .		1
166	The dynamics and prethermalization of one-dimensional quantum systems probed through the full distributions of quantum noise. New Journal of Physics, 2011, 13, 073018.	2.9	114
167	Exploring topological phases with quantum walks. Physical Review A, 2010, 82, .	2.5	409
168	Quantum critical states and phase transitions in the presence of non-equilibrium noise. Nature Physics, 2010, 6, 806-810.	11.8	136
169	Ramsey Interference in One-Dimensional Systems: The Full Distribution Function of Fringe Contrast as a Probe of Many-Body Dynamics. Physical Review Letters, 2010, 104, 255302.	8.0	58
170	Superfluidity and Dimerization in a Multilayered System of Fermionic Polar Molecules. Physical Review Letters, 2010, 105, 220406.	8.0	70
171	Adiabatic preparation of many-body states in optical lattices. Physical Review A, 2010, 81, .	2.5	51
172	Lifetime of double occupancies in the Fermi-Hubbard model. Physical Review B, 2010, 82, .	3.3	98
173	Finding the Elusive Sliding Phase in the Superfluid-Normal Phase Transition Smeared by $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -Axis Disorder. Physical Review Letters, 2010, 105, 085302.	8.0	18
174	Photonic Phase Gate via an Exchange of Fermionic Spin Waves in a Spin Chain. Physical Review Letters, 2010, 105, 060502.	8.0	36
175	RESISTANCE IN SUPERCONDUCTORS. International Journal of Modern Physics B, 2010, 24, 4039-4080.	1.9	47
176	Quantum quenches in the anisotropic spin- $\frac{1}{2}$ Heisenberg chain: different approaches to many-body dynamics far from equilibrium. New Journal of Physics, 2010, 12, 055017.	2.9	110
177	Scaling approach to quantum non-equilibrium dynamics of many-body systems. New Journal of Physics, 2010, 12, 113005.	2.9	74
178	Observation of Elastic Doublon Decay in the Fermi-Hubbard Model. Physical Review Letters, 2010, 104, 080401.	8.0	222
179	Exact methods in the analysis of the non-equilibrium dynamics of integrable models: application to the study of correlation functions for non-equilibrium 1D Bose gas. Journal of Statistical Mechanics: Theory and Experiment, 2010, 2010, P05012.	2.3	63
180	Topological characterization of periodically driven quantum systems. Physical Review B, 2010, 82, .	3.3	972

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181	RESISTANCE IN SUPERCONDUCTORS. , 2010, , 185-226.		2
182	Superconductor to normal-metal transition in finite-length nanowires: Phenomenological model. Physical Review B, 2009, 79, .	3.3	12
183	Modulation Spectroscopy and Dynamics of Double Occupancies in a Fermionic Mott Insulator. Physical Review Letters, 2009, 103, 035303.	8.0	34
184	Vortex molecules in spinor condensates. Physical Review B, 2009, 79, .	3.3	6
185	Probing Spatial Spin Correlations of Ultracold Gases by Quantum Noise Spectroscopy. Physical Review Letters, 2009, 102, 030401.	8.0	28
186	Relaxation of Antiferromagnetic Order in Spin- $1$ Chains Following a Quantum Quench. Physical Review Letters, 2009, 102, 130603.	8.0	174
187	Anyonic interferometry and protected memories in atomic spin lattices. Nature Physics, 2008, 4, 482-488.	11.8	98
188	Quantum Spin Dynamics of Mode-Squeezed Luttinger Liquids in Two-Component Atomic Gases. Physical Review Letters, 2008, 100, 140401.	8.0	109
189	Dynamics of One-Dimensional Bose Liquids: Andreev-Like Reflection at $Y$ Junctions and the Absence of the Aharonov-Bohm Effect. Physical Review Letters, 2008, 100, 140402.	8.0	49
190	Mapping of Coulomb gases and sine-Gordon models to statistics of random surfaces. Physical Review A, 2008, 77, .	2.5	21
191	Spin-resolved spectra of Shiba multiplets from Mn impurities in $MgB_2$ . Physical Review B, 2008, 77, .	3.3	29
192	Quantum many-body dynamics of coupled double-well superlattices. Physical Review A, 2008, 78, .	2.5	57
193	Quantum noise analysis of spin systems realized with cold atoms. New Journal of Physics, 2007, 9, 7-7.	2.9	51
194	Linear response theory for a pair of coupled one-dimensional condensates of interacting atoms. Physical Review B, 2007, 75, .	3.3	100
195	Nematic Order by Disorder in Spin-2 Bose-Einstein Condensates. Physical Review Letters, 2007, 98, 190404.	8.0	72
196	Spectroscopy of Collective Excitations in Interacting Low-Dimensional Many-Body Systems Using Quench Dynamics. Physical Review Letters, 2007, 99, 200404.	8.0	76
197	Decoherence Dynamics in Low-Dimensional Cold Atom Interferometers. Physical Review Letters, 2007, 98, 200404.	8.0	71
198	Superconductor-to-normal transitions in dissipative chains of mesoscopic grains and nanowires. Physical Review B, 2007, 75, .	3.3	50

#	ARTICLE	IF	CITATIONS
199	Classifying vortices in $S=3$ Bose-Einstein condensates. Physical Review A, 2007, 76, .	36.2	2
200	Relaxation after a tight squeeze. Nature, 2007, 449, 296-297.	11.8	1,091
201	A single-photon transistor using nanoscale surface plasmons. Nature Physics, 2007, 3, 807-812.	8.0	273
202	Observing Majorana bound States in p-Wave Superconductors Using Noise Measurements in Tunneling Experiments. Physical Review Letters, 2007, 98, 237002.	2.5	81
203	Exactly solvable case of a one-dimensional Bose-Fermi mixture. Physical Review A, 2006, 73, .	11.8	116
204	Full quantum distribution of contrast in interference experiments between interacting one-dimensional Bose liquids. Nature Physics, 2006, 2, 705-709.	2.9	64
205	Applications of exact solution for strongly interacting one-dimensional Bose-Fermi mixture: Low-temperature correlation functions, density profiles, and collective modes. Annals of Physics, 2006, 321, 2390-2437.	7.6	148
206	Interference between independent fluctuating condensates. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6125-6129.	8.0	172
207	Quantum Magnetism with Multicomponent Dipolar Molecules in an Optical Lattice. Physical Review Letters, 2006, 96, 190401.	8.0	38
208	Vortex-Peierls States in Optical Lattices. Physical Review Letters, 2006, 96, 180406.	8.0	36
209	Coexistence of Gapless Excitations and Commensurate Charge-Density Wave in the 2D Transition Metal Dichalcogenides. Physical Review Letters, 2006, 96, 026406.	8.0	5
210	Spin-Wave Contribution to the Nuclear Spin-Lattice Relaxation in Triplet Superconductors. Physical Review Letters, 2006, 96, 077002.	8.0	131
211	Classifying Novel Phases of Spinor Atoms. Physical Review Letters, 2006, 97, 180412.	2.5	33
212	Breakdown of the local density approximation in interacting systems of cold fermions in strongly anisotropic traps. Physical Review A, 2006, 74, .	8.0	123
213	Quantum Fluids of Self-Assembled Chains of Polar Molecules. Physical Review Letters, 2006, 97, 180413.	2.9	31
214	Properties and detection of spin nematic order in strongly correlated electron systems. New Journal of Physics, 2005, 7, 59-59.	1.9	20
215	Superconducting and charge-density wave instabilities in ultrasmall-radius carbon nanotubes. Solid State Communications, 2005, 135, 335-339.	3.3	77
216	Electron-phonon interaction in ultrasmall-radius carbon nanotubes. Physical Review B, 2005, 71, .		

#	ARTICLE	IF	CITATIONS
217	Fractional Quantum Hall States of Atoms in Optical Lattices. Physical Review Letters, 2005, 94, 086803.	8.0	420
218	SO(4) Theory of Antiferromagnetism and Superconductivity in Bechgaard Salts. Physical Review Letters, 2004, 93, 246402.	8.0	26
219	Competing orders in thermally fluctuating superconductors in two dimensions. Physical Review B, 2004, 69, .	3.3	47
220	Collective modes of $\nu=2$ quantum Hall bilayers in tilted magnetic fields. Physical Review B, 2004, 70, .	3.3	4
221	Magnetization Plateaus for Spin-One Bosons in Optical Lattices: Stern-Gerlach Experiments with Strongly Correlated Atoms. Physical Review Letters, 2004, 93, 120405.	8.0	45
222	SO(5) theory of antiferromagnetism and superconductivity. Reviews of Modern Physics, 2004, 76, 909-974.	46.3	252
223	Disordered Bose-Einstein Condensates in Quasi-One-Dimensional Magnetic Microtraps. Physical Review Letters, 2004, 92, 076802.	8.0	93
224	Luttinger Liquid of Polarons in One-Dimensional Boson-Fermion Mixtures. Physical Review Letters, 2004, 93, 120404.	8.0	141
225	Global phase diagram of $\nu=2$ quantum Hall bilayers in tilted magnetic fields. Physical Review B, 2004, 70, .	3.3	5
226	Probing many-body states of ultracold atoms via noise correlations. Physical Review A, 2004, 70, .	2.5	479
227	Competition between triplet superconductivity and antiferromagnetism in quasi-one-dimensional electron systems. Physical Review B, 2004, 70, .	3.3	3
228	Decay of Supercurrents in Condensates in Optical Lattices. Journal of Superconductivity and Novel Magnetism, 2004, 17, 577-584.	0.5	4
229	Scaling in plasticity-induced cell-boundary microstructure: $\epsilon_f$ Fragmentation and rotational diffusion. Physical Review B, 2003, 67, .	3.3	17
230	Spin-exchange interactions of spin-one bosons in optical lattices: Singlet, nematic, and dimerized phases. Physical Review A, 2003, 68, .	2.5	218
231	Spontaneous symmetry breaking and exotic quantum orders in integer quantum Hall systems under a tilted magnetic field. Physical Review B, 2003, 68, .	3.3	23
232	Translational symmetry breaking in the superconducting state of the cuprates: Analysis of the quasiparticle density of states. Physical Review B, 2003, 67, .	3.3	95
233	Dissipation and quantum phase transitions of a pair of Josephson junctions. Physical Review B, 2003, 68, .	3.3	28
234	Phase diagram of two-component bosons on an optical lattice. New Journal of Physics, 2003, 5, 113-113.	2.9	281

#	ARTICLE	IF	CITATIONS
235	Fractionalization patterns in strongly correlated electron systems: Spin-charge separation and beyond. Physical Review B, 2002, 65, .	3.3	27
236	Quantum phase transitions in the Bose-Fermi Kondo model. Physical Review B, 2002, 66, .	3.3	88
237	Spinor Bosonic Atoms in Optical Lattices: Symmetry Breaking and Fractionalization. Physical Review Letters, 2002, 88, 163001.	8.0	202
238	Magnetoplasmon excitations and spin density instabilities in an integer quantum Hall system with a tilted magnetic field. Physical Review B, 2002, 66, .	3.3	17
239	Josephson effects between multigap and single-gap superconductors. Physical Review B, 2002, 66, .	3.3	56
240	Competing orders in a magnetic field: Spin and charge order in the cuprate superconductors. Physical Review B, 2002, 66, .	3.3	141
241	Spin-Ordering Quantum Transitions of Superconductors in a Magnetic Field. Physical Review Letters, 2001, 87, 067202.	8.0	232
242	Bilayer quantum Hall systems: spin pseudospin symmetry breaking and quantum phase transitions. Solid State Communications, 2001, 117, 141-147.	1.9	12
243	Bilayer paired quantum Hall states and Coulomb drag. Physical Review B, 2001, 63, .	3.3	59
244	Bilayer Coherent and Quantum Hall Phases: Duality and Quantum Disorder. Physical Review Letters, 2001, 86, 1853-1856.	8.0	42
245	Spin symmetry breaking in bilayer quantum Hall systems. Physical Review B, 2000, 61, R10567-R10570.	3.3	6
246	Spin Bose-Glass Phase in Bilayer Quantum Hall Systems at $\nu=2$ . Physical Review Letters, 1999, 82, 3895-3898.	8.0	47
247	Topological doping and the stability of stripe phases. Physical Review B, 1999, 60, 7541-7557.	3.3	45
248	Non-Abelian Holonomy of BCS and SDW Quasiparticles. Annals of Physics, 1999, 271, 83-119.	2.9	34
249	Resonant neutron scattering on the high Tc cuprates and $\tilde{\rho}$ and $\tilde{\sigma}$ excitations of the t-J and Hubbard models. AIP Conference Proceedings, 1999, , .	1.0	1
250	$\tilde{\rho}$ excitation of the $\tilde{\sigma}$ model. Physical Review B, 1998, 58, 5719-5730.	3.3	52
251	Microscopic Electron Models with Exact SO(5) Symmetry. Physical Review Letters, 1998, 80, 3586-3589.	8.0	50
252	Quantitative test of a microscopic mechanism of high-temperature superconductivity. Nature, 1998, 396, 733-735.	36.2	127

#	ARTICLE	IF	CITATIONS
253	Comment on "Is the $\sigma$ -Particle Responsible for the 41 meV Peak in $\text{YBa}_2\text{Cu}_3\text{O}_7$ ?". Physical Review Letters, 1997, 79, 4937-4937.	8.0	8
254	Finite-Size Studies on the $\text{SO}(5)$ Symmetry of the Hubbard Model. Physical Review Letters, 1997, 79, 4902-4905.	8.0	42
255	Search for the $\sigma$ -Resonance in Two-Particle Tunneling Experiments of YBCO Superconductors. Physical Review Letters, 1997, 79, 1921-1924.	8.0	16
256	A CLASS OF COLLECTIVE EXCITATIONS OF THE HUBBARD MODEL: $\hat{\sigma}$ -EXCITATION OF THE NEGATIVE-U MODEL. International Journal of Modern Physics B, 1996, 10, 2137-2166.	1.9	12
257	Theory of the Resonant Neutron Scattering of High-Tc Superconductors. Physical Review Letters, 1995, 75, 4126-4129.	8.0	191