

# Eugene A Demler

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/3592445/eugene-a-demler-publications-by-citations.pdf>

**Version:** 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

255  
papers

18,238  
citations

70  
h-index

129  
g-index

264  
ext. papers

21,685  
ext. citations

8  
avg, IF

7.04  
L-index

#	Paper	IF	Citations
255	A single-photon transistor using nanoscale surface plasmons. <i>Nature Physics</i> , <b>2007</b> , 3, 807-812	16.2	928
254	Robust optical delay lines with topological protection. <i>Nature Physics</i> , <b>2011</b> , 7, 907-912	16.2	830
253	Topological characterization of periodically driven quantum systems. <i>Physical Review B</i> , <b>2010</b> , 82,	3.3	700
252	Transport properties of nonequilibrium systems under the application of light: Photoinduced quantum Hall insulators without Landau levels. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	623
251	Direct measurement of the Zak phase in topological Bloch bands. <i>Nature Physics</i> , <b>2013</b> , 9, 795-800	16.2	545
250	Majorana fermions in equilibrium and in driven cold-atom quantum wires. <i>Physical Review Letters</i> , <b>2011</b> , 106, 220402	7.4	501
249	Observation of discrete time-crystalline order in a disordered dipolar many-body system. <i>Nature</i> , <b>2017</b> , 543, 221-225	50.4	468
248	Probing many-body states of ultracold atoms via noise correlations. <i>Physical Review A</i> , <b>2004</b> , 70,	2.6	437
247	Observation of topologically protected bound states in photonic quantum walks. <i>Nature Communications</i> , <b>2012</b> , 3, 882	17.4	376
246	Fractional quantum Hall states of atoms in optical lattices. <i>Physical Review Letters</i> , <b>2005</b> , 94, 086803	7.4	354
245	A cold-atom Fermi-Hubbard antiferromagnet. <i>Nature</i> , <b>2017</b> , 545, 462-466	50.4	329
244	Exploring topological phases with quantum walks. <i>Physical Review A</i> , <b>2010</b> , 82,	2.6	308
243	Fermionic transport and out-of-equilibrium dynamics in a homogeneous Hubbard model with ultracold atoms. <i>Nature Physics</i> , <b>2012</b> , 8, 213-218	16.2	289
242	Anomalous diffusion and griffiths effects near the many-body localization transition. <i>Physical Review Letters</i> , <b>2015</b> , 114, 160401	7.4	260
241	Fermi polaron-polaritons in charge-tunable atomically thin semiconductors. <i>Nature Physics</i> , <b>2017</b> , 13, 255-261	16.2	254
240	Phase diagram of two-component bosons on an optical lattice. <i>New Journal of Physics</i> , <b>2003</b> , 5, 113-113	2.9	237
239	Observing Majorana bound states in p-wave superconductors using noise measurements in tunneling experiments. <i>Physical Review Letters</i> , <b>2007</b> , 98, 237002	7.4	231

238	The Qiggs amplitude mode at the two-dimensional superfluid/Mott insulator transition. <i>Nature</i> , <b>2012</b> , 487, 454-8	50.4	223
237	SO(5) theory of antiferromagnetism and superconductivity. <i>Reviews of Modern Physics</i> , <b>2004</b> , 76, 909-974	40.5	219
236	Spin-ordering quantum transitions of superconductors in a magnetic field. <i>Physical Review Letters</i> , <b>2001</b> , 87, 067202	7.4	219
235	Tunable superfluidity and quantum magnetism with ultracold polar molecules. <i>Physical Review Letters</i> , <b>2011</b> , 107, 115301	7.4	194
234	Spin-exchange interactions of spin-one bosons in optical lattices: Singlet, nematic, and dimerized phases. <i>Physical Review A</i> , <b>2003</b> , 68,	2.6	191
233	Observation of elastic doublon decay in the Fermi-Hubbard model. <i>Physical Review Letters</i> , <b>2010</b> , 104, 080401	7.4	186
232	Theory of the resonant neutron scattering of high-Tc superconductors. <i>Physical Review Letters</i> , <b>1995</b> , 75, 4126-4129	7.4	183
231	Spinor bosonic atoms in optical lattices: symmetry breaking and fractionalization. <i>Physical Review Letters</i> , <b>2002</b> , 88, 163001	7.4	180
230	Ultrafast many-body interferometry of impurities coupled to a Fermi sea. <i>Science</i> , <b>2016</b> , 354, 96-99	33.3	170
229	Hilbert-Glass Transition: New Universality of Temperature-Tuned Many-Body Dynamical Quantum Criticality. <i>Physical Review X</i> , <b>2014</b> , 4,	9.1	169
228	Relaxation of antiferromagnetic order in spin-1/2 chains following a quantum quench. <i>Physical Review Letters</i> , <b>2009</b> , 102, 130603	7.4	150
227	Quantum magnetism with multicomponent dipolar molecules in an optical lattice. <i>Physical Review Letters</i> , <b>2006</b> , 96, 190401	7.4	138
226	Measuring entanglement entropy of a generic many-body system with a quantum switch. <i>Physical Review Letters</i> , <b>2012</b> , 109, 020504	7.4	134
225	Competing orders in a magnetic field: Spin and charge order in the cuprate superconductors. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	133
224	Interference between independent fluctuating condensates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 6125-9	11.5	130
223	Far-from-equilibrium spin transport in Heisenberg quantum magnets. <i>Physical Review Letters</i> , <b>2014</b> , 113, 147205	7.4	128
222	Low-frequency conductivity in many-body localized systems. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	128
221	Luttinger liquid of polarons in one-dimensional boson-fermion mixtures. <i>Physical Review Letters</i> , <b>2004</b> , 93, 120404	7.4	127

220	Time-Dependent Impurity in Ultracold Fermions: Orthogonality Catastrophe and Beyond. <i>Physical Review X</i> , <b>2012</b> , 2,	9.1	120
219	Dissipative preparation of spin squeezed atomic ensembles in a steady state. <i>Physical Review Letters</i> , <b>2013</b> , 110, 120402	7.4	117
218	Classifying novel phases of spinor atoms. <i>Physical Review Letters</i> , <b>2006</b> , 97, 180412	7.4	117
217	Quantum critical states and phase transitions in the presence of non-equilibrium noise. <i>Nature Physics</i> , <b>2010</b> , 6, 806-810	16.2	114
216	Quantum fluids of self-assembled chains of polar molecules. <i>Physical Review Letters</i> , <b>2006</b> , 97, 180413	7.4	114
215	Quantitative test of a microscopic mechanism of high-temperature superconductivity. <i>Nature</i> , <b>1998</b> , 396, 733-735	50.4	112
214	Quantum magnetism with polar alkali-metal dimers. <i>Physical Review A</i> , <b>2011</b> , 84,	2.6	111
213	Rare-region effects and dynamics near the many-body localization transition. <i>Annalen Der Physik</i> , <b>2017</b> , 529, 1600326	2.6	105
212	Competition between pairing and ferromagnetic instabilities in ultracold Fermi gases near Feshbach resonances. <i>Physical Review Letters</i> , <b>2011</b> , 106, 050402	7.4	105
211	The dynamics and prethermalization of one-dimensional quantum systems probed through the full distributions of quantum noise. <i>New Journal of Physics</i> , <b>2011</b> , 13, 073018	2.9	102
210	Full quantum distribution of contrast in interference experiments between interacting one-dimensional Bose liquids. <i>Nature Physics</i> , <b>2006</b> , 2, 705-709	16.2	101
209	Quantum Dynamics of Ultracold Bose Polarons. <i>Physical Review Letters</i> , <b>2016</b> , 117, 113002	7.4	101
208	Dynamical Cooper pairing in nonequilibrium electron-phonon systems. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	100
207	Bloch state tomography using Wilson lines. <i>Science</i> , <b>2016</b> , 352, 1094-7	33.3	100
206	Quantum quenches in the anisotropic spin- $\frac{1}{2}$ Heisenberg chain: different approaches to many-body dynamics far from equilibrium. <i>New Journal of Physics</i> , <b>2010</b> , 12, 055017	2.9	98
205	Quantum spin dynamics of mode-squeezed Luttinger liquids in two-component atomic gases. <i>Physical Review Letters</i> , <b>2008</b> , 100, 140401	7.4	97
204	Floquet approach to Z2 lattice gauge theories with ultracold atoms in optical lattices. <i>Nature Physics</i> , <b>2019</b> , 15, 1168-1173	16.2	95
203	Revealing hidden antiferromagnetic correlations in doped Hubbard chains via string correlators. <i>Science</i> , <b>2017</b> , 357, 484-487	33.3	94

202	Griffiths effects and slow dynamics in nearly many-body localized systems. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	93
201	Translational symmetry breaking in the superconducting state of the cuprates: Analysis of the quasiparticle density of states. <i>Physical Review B</i> , <b>2003</b> , 67,	3.3	92
200	Prethermal Floquet Steady States and Instabilities in the Periodically Driven, Weakly Interacting Bose-Hubbard Model. <i>Physical Review Letters</i> , <b>2015</b> , 115, 205301	7.4	91
199	Fermi polarons in two dimensions. <i>Physical Review A</i> , <b>2012</b> , 85,	2.6	91
198	Anyonic interferometry and protected memories in atomic spin lattices. <i>Nature Physics</i> , <b>2008</b> , 4, 482-488	16.2	89
197	Disordered Bose-Einstein condensates in quasi-one-dimensional magnetic microtraps. <i>Physical Review Letters</i> , <b>2004</b> , 92, 076802	7.4	89
196	Universal many-body response of heavy impurities coupled to a Fermi sea: a review of recent progress. <i>Reports on Progress in Physics</i> , <b>2018</b> , 81, 024401	14.4	84
195	Interferometric approach to measuring band topology in 2D optical lattices. <i>Physical Review Letters</i> , <b>2013</b> , 110, 165304	7.4	84
194	Theory of parametrically amplified electron-phonon superconductivity. <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	78
193	Probing real-space and time-resolved correlation functions with many-body Ramsey interferometry. <i>Physical Review Letters</i> , <b>2013</b> , 111, 147205	7.4	77
192	Quantum phase transitions in the Bose-Fermi Kondo model. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	77
191	Exactly solvable case of a one-dimensional Bose-Fermi mixture. <i>Physical Review A</i> , <b>2006</b> , 73,	2.6	75
190	Lifetime of double occupancies in the Fermi-Hubbard model. <i>Physical Review B</i> , <b>2010</b> , 82,	3.3	73
189	Electron-phonon interaction in ultrasmall-radius carbon nanotubes. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	73
188	Anomalous expansion of attractively interacting fermionic atoms in an optical lattice. <i>Science</i> , <b>2010</b> , 327, 1621-4	33.3	72
187	Bloch oscillations in the absence of a lattice. <i>Science</i> , <b>2017</b> , 356, 945-948	33.3	71
186	Bose polarons in ultracold atoms in one dimension: beyond the Fröhlich paradigm. <i>New Journal of Physics</i> , <b>2017</b> , 19, 103035	2.9	70
185	Radio-frequency spectroscopy of polarons in ultracold Bose gases. <i>Physical Review A</i> , <b>2014</b> , 89,	2.6	68

184	Linear response theory for a pair of coupled one-dimensional condensates of interacting atoms. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	68
183	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> , <b>2016</b> , 93,	3.3	67
182	Nematic order by disorder in spin-2 Bose-Einstein condensates. <i>Physical Review Letters</i> , <b>2007</b> , 98, 190404.	7.4	65
181	Spectroscopy of collective excitations in interacting low-dimensional many-body systems using quench dynamics. <i>Physical Review Letters</i> , <b>2007</b> , 99, 200404	7.4	64
180	Scaling approach to quantum non-equilibrium dynamics of many-body systems. <i>New Journal of Physics</i> , <b>2010</b> , 12, 113005	2.9	61
179	Decoherence dynamics in low-dimensional cold atom interferometers. <i>Physical Review Letters</i> , <b>2007</b> , 98, 200404	7.4	61
178	Superfluidity and dimerization in a multilayered system of fermionic polar molecules. <i>Physical Review Letters</i> , <b>2010</b> , 105, 220406	7.4	60
177	Depolarization Dynamics in a Strongly Interacting Solid-State Spin Ensemble. <i>Physical Review Letters</i> , <b>2017</b> , 118, 093601	7.4	59
176	Dynamical stability of a many-body Kapitza pendulum. <i>Annals of Physics</i> , <b>2015</b> , 360, 694-710	2.5	58
175	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. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , <b>2010</b> , 2010, P05012	1.9	58
174	Dynamics and universality in noise-driven dissipative systems. <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	58
173	Applications of exact solution for strongly interacting one-dimensional Bose-Fermi mixture: Low-temperature correlation functions, density profiles, and collective modes. <i>Annals of Physics</i> , <b>2006</b> , 321, 2390-2437	2.5	57
172	Exploring dynamical phase transitions and prethermalization with quantum noise of excitations. <i>Physical Review B</i> , <b>2015</b> , 91,	3.3	55
171	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> , <b>2015</b> , 5,	9.1	55
170	Quantum flutter of supersonic particles in one-dimensional quantum liquids. <i>Nature Physics</i> , <b>2012</b> , 8, 881-886	16.2	55
169	Realizing a Kondo-correlated state with ultracold atoms. <i>Physical Review Letters</i> , <b>2013</b> , 111, 215304	7.4	53
168	Bound states at impurities as a probe of topological superconductivity in nanowires. <i>Physical Review B</i> , <b>2013</b> , 88,	3.3	53
167	Josephson effects between multigap and single-gap superconductors. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	53

166	Quantum quasicrystals of spin-orbit-coupled dipolar bosons. <i>Physical Review Letters</i> , <b>2013</b> , 111, 185304	7.4	50
165	Bilayer paired quantum Hall states and Coulomb drag. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	50
164	Excitation of the tJ model. <i>Physical Review B</i> , <b>1998</b> , 58, 5719-5730	3.3	50
163	Dicke time crystals in driven-dissipative quantum many-body systems. <i>New Journal of Physics</i> , <b>2019</b> , 21, 073028	2.9	49
162	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> , <b>2010</b> , 104, 255302	7.4	49
161	Variational study of fermionic and bosonic systems with non-Gaussian states: Theory and applications. <i>Annals of Physics</i> , <b>2018</b> , 390, 245-302	2.5	48
160	Imaging magnetic polarons in the doped Fermi-Hubbard model. <i>Nature</i> , <b>2019</b> , 572, 358-362	50.4	48
159	String patterns in the doped Hubbard model. <i>Science</i> , <b>2019</b> , 365, 251-256	33.3	48
158	Quantum many-body dynamics of coupled double-well superlattices. <i>Physical Review A</i> , <b>2008</b> , 78,	2.6	48
157	Microscopic Electron Models with Exact SO(5) Symmetry. <i>Physical Review Letters</i> , <b>1998</b> , 80, 3586-3589	7.4	47
156	Quantum Simulators: Architectures and Opportunities. <i>PRX Quantum</i> , <b>2021</b> , 2,	6.1	47
155	Proposal for coherent coupling of Majorana zero modes and superconducting qubits using the 4π Josephson effect. <i>Physical Review Letters</i> , <b>2013</b> , 111, 107007	7.4	46
154	Classifying snapshots of the doped Hubbard model with machine learning. <i>Nature Physics</i> , <b>2019</b> , 15, 921-924	10.4	45
153	Universal rephasing dynamics after a quantum quench via sudden coupling of two initially independent condensates. <i>Physical Review Letters</i> , <b>2013</b> , 110, 090404	7.4	45
152	Superconductor-to-normal transitions in dissipative chains of mesoscopic grains and nanowires. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	45
151	Competing orders in thermally fluctuating superconductors in two dimensions. <i>Physical Review B</i> , <b>2004</b> , 69,	3.3	45
150	Spin Bose-Glass Phase in Bilayer Quantum Hall Systems at $\nu=2$ . <i>Physical Review Letters</i> , <b>1999</b> , 82, 3895-3898	7.4	45
149	Classifying vortices in S=3 Bose-Einstein condensates. <i>Physical Review A</i> , <b>2007</b> , 76,	2.6	43

148	Topological doping and the stability of stripe phases. <i>Physical Review B</i> , <b>1999</b> , 60, 7541-7557	3.3	42
147	Magnetization plateaus for spin-one bosons in optical lattices: Stern-Gerlach experiments with strongly correlated atoms. <i>Physical Review Letters</i> , <b>2004</b> , 93, 120405	7.4	41
146	Bilayer coherent and quantum Hall phases: duality and quantum disorder. <i>Physical Review Letters</i> , <b>2001</b> , 86, 1853-6	7.4	41
145	Polaronic mass renormalization of impurities in Bose-Einstein condensates: Correlated Gaussian-wave-function approach. <i>Physical Review A</i> , <b>2016</b> , 93,	2.6	40
144	Adiabatic preparation of many-body states in optical lattices. <i>Physical Review A</i> , <b>2010</b> , 81,	2.6	40
143	Finite-Size Studies on the SO(5) Symmetry of the Hubbard Model. <i>Physical Review Letters</i> , <b>1997</b> , 79, 4902-4905	7.4	40
142	Dynamics of one-dimensional Bose liquids: Andreev-like reflection at Y junctions and the absence of the Aharonov-Bohm effect. <i>Physical Review Letters</i> , <b>2008</b> , 100, 140402	7.4	39
141	Quantum transport of strongly interacting photons in a one-dimensional nonlinear waveguide. <i>Physical Review A</i> , <b>2012</b> , 85,	2.6	38
140	Quantum noise analysis of spin systems realized with cold atoms. <i>New Journal of Physics</i> , <b>2007</b> , 9, 7-7	2.9	38
139	Spin transport in a tunable Heisenberg model realized with ultracold atoms. <i>Nature</i> , <b>2020</b> , 588, 403-407	50.4	37
138	Quantum flutter: signatures and robustness. <i>Physical Review Letters</i> , <b>2014</b> , 112, 015302	7.4	37
137	Relaxation to a Phase-Locked Equilibrium State in a One-Dimensional Bosonic Josephson Junction. <i>Physical Review Letters</i> , <b>2018</b> , 120, 173601	7.4	36
136	Coexistence of gapless excitations and commensurate charge-density wave in the 2H transition metal dichalcogenides. <i>Physical Review Letters</i> , <b>2006</b> , 96, 026406	7.4	35
135	Coupling ultracold matter to dynamical gauge fields in optical lattices: From flux attachment to Z lattice gauge theories. <i>Science Advances</i> , <b>2019</b> , 5, eaav7444	14.3	35
134	Photonic phase gate via an exchange of fermionic spin waves in a spin chain. <i>Physical Review Letters</i> , <b>2010</b> , 105, 060502	7.4	32
133	Modulation spectroscopy and dynamics of double occupancies in a fermionic Mott insulator. <i>Physical Review Letters</i> , <b>2009</b> , 103, 035303	7.4	32
132	Vortex-Peierls states in optical lattices. <i>Physical Review Letters</i> , <b>2006</b> , 96, 180406	7.4	32
131	Breakdown of the local density approximation in interacting systems of cold fermions in strongly anisotropic traps. <i>Physical Review A</i> , <b>2006</b> , 74,	2.6	31



130	Single-band model of resonant inelastic x-ray scattering by quasiparticles in high-T(c) cuprate superconductors. <i>Physical Review Letters</i> , <b>2014</b> , 112, 247002	7.4	30
129	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> , <b>2011</b> , 84,	3.3	30
128	Non-Abelian Holonomy of BCS and SDW Quasiparticles. <i>Annals of Physics</i> , <b>1999</b> , 271, 83-119	2.5	30
127	RESISTANCE IN SUPERCONDUCTORS. <i>International Journal of Modern Physics B</i> , <b>2010</b> , 24, 4039-4080	1.1	29
126	Electron-phonon instability in graphene revealed by global and local noise probes. <i>Science</i> , <b>2019</b> , 364, 154-157	33.3	29
125	Quantum Electrodynamical Control of Matter: Cavity-Enhanced Ferroelectric Phase Transition. <i>Physical Review X</i> , <b>2020</b> , 10,	9.1	29
124	Dicke phase transition without total spin conservation. <i>Physical Review A</i> , <b>2016</b> , 94,	2.6	29
123	Polaronic model of two-level systems in amorphous solids. <i>Physical Review B</i> , <b>2013</b> , 87,	3.3	28
122	Clustered Wigner-crystal phases of cold polar molecules in arrays of one-dimensional tubes. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	28
121	Strong-coupling Bose polarons out of equilibrium: Dynamical renormalization-group approach. <i>Physical Review A</i> , <b>2018</b> , 97,	2.6	27
120	Properties and detection of spin nematic order in strongly correlated electron systems. <i>New Journal of Physics</i> , <b>2005</b> , 7, 59-59	2.9	27
119	Fractionalization patterns in strongly correlated electron systems: Spin-charge separation and beyond. <i>Physical Review B</i> , <b>2002</b> , 65,	3.3	27
118	Unstable avoided crossing in coupled spinor condensates. <i>Physical Review Letters</i> , <b>2014</b> , 113, 065303	7.4	25
117	Cooling through optimal control of quantum evolution. <i>Physical Review A</i> , <b>2013</b> , 87,	2.6	25
116	SO(4) theory of antiferromagnetism and superconductivity in Bechgaard salts. <i>Physical Review Letters</i> , <b>2004</b> , 93, 246402	7.4	25
115	Dissipation and quantum phase transitions of a pair of Josephson junctions. <i>Physical Review B</i> , <b>2003</b> , 68,	3.3	25
114	Probing spatial spin correlations of ultracold gases by quantum noise spectroscopy. <i>Physical Review Letters</i> , <b>2009</b> , 102, 030401	7.4	24
113	Friedel oscillations as a probe of fermionic quasiparticles. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	23

112	Transmon-based simulator of nonlocal electron-phonon coupling: A platform for observing sharp small-polaron transitions. <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	23
111	Magnetic noise spectroscopy as a probe of local electronic correlations in two-dimensional systems. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	23
110	Tunable spin-orbit coupling for ultracold atoms in two-dimensional optical lattices. <i>Physical Review A</i> , <b>2017</b> , 95,	2.6	23
109	Bound states of a localized magnetic impurity in a superfluid of paired ultracold fermions. <i>Physical Review A</i> , <b>2011</b> , 83,	2.6	23
108	Spin-resolved spectra of Shiba multiplets from Mn impurities in MgB <sub>2</sub> . <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	23
107	Exploring the anisotropic Kondo model in and out of equilibrium with alkaline-earth atoms. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	22
106	Solving Quantum Impurity Problems in and out of Equilibrium with the Variational Approach. <i>Physical Review Letters</i> , <b>2018</b> , 121, 026805	7.4	22
105	Full counting statistics of time-of-flight images. <i>Physical Review A</i> , <b>2017</b> , 95,	2.6	22
104	Spontaneous symmetry breaking and exotic quantum orders in integer quantum Hall systems under a tilted magnetic field. <i>Physical Review B</i> , <b>2003</b> , 68,	3.3	22
103	Regimes of heating and dynamical response in driven many-body localized systems. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	22
102	Many-body interferometry of magnetic polaron dynamics. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	21
101	$1/f$ noise and generalized diffusion in random Heisenberg spin systems. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	20
100	Semiclassical solitons in strongly correlated systems of ultracold bosonic atoms in optical lattices. <i>Annals of Physics</i> , <b>2011</b> , 326, 1775-1805	2.5	20
99	Phase-sensitive measurements of order parameters for ultracold atoms through two-particle interferometry. <i>Physical Review Letters</i> , <b>2011</b> , 106, 115302	7.4	20
98	Mapping of Coulomb gases and sine-Gordon models to statistics of random surfaces. <i>Physical Review A</i> , <b>2008</b> , 77,	2.6	20
97	Geometry of variational methods: dynamics of closed quantum systems. <i>SciPost Physics</i> , <b>2020</b> , 9,	6.1	20
96	Signatures of Wigner crystal of electrons in a monolayer semiconductor. <i>Nature</i> , <b>2021</b> , 595, 53-57	50.4	20
95	Variational principle for quantum impurity systems in and out of equilibrium: Application to Kondo problems. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	19

94	Transport in two-dimensional disordered semimetals. <i>Physical Review Letters</i> , <b>2014</b> , 113, 186801	7.4	19
93	Resonant soft X-ray scattering, stripe order, and the electron spectral function in cuprates. <i>Physica C: Superconductivity and Its Applications</i> , <b>2012</b> , 481, 15-22	1.3	19
92	Spin-1 atoms in optical superlattices: Single-atom tunneling and entanglement. <i>Physical Review A</i> , <b>2011</b> , 84,	2.6	19
91	Pairing instabilities in quasi-two-dimensional Fermi gases. <i>Physical Review A</i> , <b>2012</b> , 85,	2.6	18
90	Superconducting and charge-density wave instabilities in ultrasmall-radius carbon nanotubes. <i>Solid State Communications</i> , <b>2005</b> , 135, 335-339	1.6	18
89	Microscopic spinon-charge theory of magnetic polarons in the $tJ$ model. <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	17
88	Quantum Rydberg Central Spin Model. <i>Physical Review Letters</i> , <b>2019</b> , 123, 183001	7.4	17
87	Chiral prethermalization in supersonically split condensates. <i>Physical Review Letters</i> , <b>2014</b> , 113, 190401	7.4	17
86	Collective excitations of quasi-two-dimensional trapped dipolar fermions: Transition from collisionless to hydrodynamic regime. <i>Physical Review A</i> , <b>2012</b> , 86,	2.6	17
85	Magnetoplasmon excitations and spin density instabilities in an integer quantum Hall system with a tilted magnetic field. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	17
84	Search for the $\pi$ Resonance in Two-Particle Tunneling Experiments of YBCO Superconductors. <i>Physical Review Letters</i> , <b>1997</b> , 79, 1921-1924	7.4	16
83	Meson formation in mixed-dimensional $t$ - $J$ models <b>2018</b> , 5,		16
82	Bilayer Wigner crystals in a transition metal dichalcogenide heterostructure. <i>Nature</i> , <b>2021</b> , 595, 48-52	50.4	16
81	Exploring quasiparticles in high- $T_c$ cuprates through photoemission, tunneling, and x-ray scattering experiments. <i>New Journal of Physics</i> , <b>2015</b> , 17, 022001	2.9	15
80	Variational polaron method for Bose-Bose mixtures. <i>Physical Review A</i> , <b>2014</b> , 89,	2.6	15
79	Gaussian time-dependent variational principle for the Bose-Hubbard model. <i>Physical Review B</i> , <b>2019</b> , 100,	3.3	14
78	Diagnosing phases of magnetic insulators via noise magnetometry with spin qubits. <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	14
77	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> , <b>2013</b> , 110, 137002	7.4	14

76	Finding the elusive sliding phase in the superfluid-normal phase transition smeared by c-axis disorder. <i>Physical Review Letters</i> , <b>2010</b> , 105, 085302	7.4	14
75	Scaling in plasticity-induced cell-boundary microstructure: Fragmentation and rotational diffusion. <i>Physical Review B</i> , <b>2003</b> , 67,	3.3	14
74	Cavity Quantum Electrodynamics at Arbitrary Light-Matter Coupling Strengths. <i>Physical Review Letters</i> , <b>2021</b> , 126, 153603	7.4	13
73	Holographic maps of quasiparticle interference. <i>Nature Physics</i> , <b>2016</b> , 12, 1052-1056	16.2	12
72	Transport of Neutral Optical Excitations Using Electric Fields. <i>Physical Review X</i> , <b>2019</b> , 9,	9.1	12
71	Quantum correlations at infinite temperature: The dynamical Nagaoka effect. <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	12
70	Dissipative dynamics of a driven quantum spin coupled to a bath of ultracold fermions. <i>Physical Review Letters</i> , <b>2013</b> , 111, 265302	7.4	12
69	Collective phenomena in a quasi-two-dimensional system of fermionic polar molecules: Band renormalization and excitons. <i>Physical Review A</i> , <b>2011</b> , 84,	2.6	12
68	Bilayer quantum Hall systems: spin $\uparrow$ seudospin symmetry breaking and quantum phase transitions. <i>Solid State Communications</i> , <b>2001</b> , 117, 141-147	1.6	12
67	A CLASS OF COLLECTIVE EXCITATIONS OF THE HUBBARD MODEL: $\pi$ EXCITATION OF THE NEGATIVE-U MODEL. <i>International Journal of Modern Physics B</i> , <b>1996</b> , 10, 2137-2166	1.1	12
66	Zero-temperature phases of the two-dimensional Hubbard-Holstein model: A non-Gaussian exact diagonalization study. <i>Physical Review Research</i> , <b>2020</b> , 2,	3.9	12
65	Dynamical instabilities and transient short-range order in the fermionic Hubbard model. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	11
64	Superconductor to normal-metal transition in finite-length nanowires: Phenomenological model. <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	11
63	Self-similar dynamics of order parameter fluctuations in pump-probe experiments. <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	10
62	Intertwined and vestigial order with ultracold atoms in multiple cavity modes. <i>Physical Review A</i> , <b>2017</b> , 96,	2.6	10
61	Doublon production rate in modulated optical lattices. <i>Physical Review A</i> , <b>2012</b> , 85,	2.6	10
60	Universal behavior of repulsive two-dimensional fermions in the vicinity of the quantum freezing point. <i>Europhysics Letters</i> , <b>2013</b> , 103, 16002	1.6	10
59	Rydberg impurity in a Fermi gas: Quantum statistics and rotational blockade. <i>Physical Review Research</i> , <b>2020</b> , 2,	3.9	10

58	Probing one-dimensional systems via noise magnetometry with single spin qubits. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	10
57	Variational Approach for Many-Body Systems at Finite Temperature. <i>Physical Review Letters</i> , <b>2020</b> , 125, 180602	7.4	9
56	Non-Gaussian correlations imprinted by local dephasing in fermionic wires. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	9
55	Comment on "Is the $\sigma$ Particle Responsible for the 41 meV Peak in $\text{YBa}_2\text{Cu}_3\text{O}_7$ ?" <i>Physical Review Letters</i> , <b>1997</b> , 79, 4937-4937	7.4	8
54	Parton theory of angle-resolved photoemission spectroscopy spectra in antiferromagnetic Mott insulators. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	8
53	Correlator convolutional neural networks as an interpretable architecture for image-like quantum matter data. <i>Nature Communications</i> , <b>2021</b> , 12, 3905	17.4	8
52	Ab initio exact diagonalization simulation of the Nagaoka transition in quantum dots. <i>Physical Review B</i> , <b>2019</b> , 100,	3.3	7
51	From the moving piston to the dynamical Casimir effect: Explorations with shaken condensates. <i>Physical Review A</i> , <b>2019</b> , 99,	2.6	7
50	Parametric resonance of Josephson plasma waves: A theory for optically amplified interlayer superconductivity in $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ . <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	7
49	Non-Abelian Symmetries and Disorder: A Broad Nonergodic Regime and Anomalous Thermalization. <i>Physical Review X</i> , <b>2020</b> , 10,	9.1	7
48	Efficient variational approach to dynamics of a spatially extended bosonic Kondo model. <i>Physical Review A</i> , <b>2019</b> , 100,	2.6	7
47	Mobile magnetic impurities in a Fermi superfluid: a route to designer molecules. <i>Physical Review Letters</i> , <b>2015</b> , 114, 045301	7.4	7
46	Coupling a Mobile Hole to an Antiferromagnetic Spin Background: Transient Dynamics of a Magnetic Polaron. <i>Physical Review X</i> , <b>2021</b> , 11,	9.1	7
45	Fermionic formalism for driven-dissipative multilevel systems. <i>Physical Review A</i> , <b>2020</b> , 101,	2.6	6
44	Relaxation of fermionic excitations in a strongly attractive Fermi gas in an optical lattice. <i>Physical Review Letters</i> , <b>2011</b> , 107, 145303	7.4	6
43	A magnon scattering platform. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	6
42	Quantum heat waves in a one-dimensional condensate. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	5
41	Photo control of transport properties in a disordered wire: Average conductance, conductance statistics, and time-reversal symmetry. <i>Annals of Physics</i> , <b>2012</b> , 327, 1868-1889	2.5	5

40	Vortex molecules in spinor condensates. <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	5
39	Global phase diagram of $\mathbb{Z}_2$ quantum Hall bilayers in tilted magnetic fields. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	5
38	Spin symmetry breaking in bilayer quantum Hall systems. <i>Physical Review B</i> , <b>2000</b> , 61, R10567-R10570	3.3	5
37	Auxiliary fermion approach to the resonant inelastic x-ray scattering response in an underdoped cuprate. <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	5
36	Ultrafast molecular dynamics in terahertz-STM experiments: Theoretical analysis using the Anderson-Holstein model. <i>Physical Review Research</i> , <b>2020</b> , 2,	3.9	5
35	Quantum-fluctuation-induced time-of-flight correlations of an interacting trapped Bose gas. <i>Physical Review A</i> , <b>2017</b> , 95,	2.6	5
34	Thermal radiation and dissipative phase transition in a BEC with local loss. <i>Annals of Physics</i> , <b>2020</b> , 412, 168021	2.5	5
33	Quantum approximate Bayesian computation for NMR model inference. <i>Nature Machine Intelligence</i> , <b>2020</b> , 2, 396-402	22.5	4
32	Weak crystallization theory of metallic alloys. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	4
31	Atomtronics with a spin: Statistics of spin transport and nonequilibrium orthogonality catastrophe in cold quantum gases. <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	4
30	Entanglement and entropy production in coupled single-mode Bose-Einstein condensates. <i>Physical Review A</i> , <b>2017</b> , 96,	2.6	4
29	Probing competing and intertwined orders with resonant inelastic x-ray scattering in the hole-doped cuprates. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	4
28	Studying non-equilibrium many-body dynamics using one-dimensional Bose gases <b>2014</b> ,		4
27	Collective modes of $\mathbb{Z}_2$ quantum Hall bilayers in tilted magnetic fields. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	4
26	Decay of Supercurrents in Condensates in Optical Lattices. <i>Journal of Superconductivity and Novel Magnetism</i> , <b>2004</b> , 17, 577-584		4
25	Characterizing two-dimensional superconductivity via nanoscale noise magnetometry with single-spin qubits. <i>Physical Review B</i> , <b>2022</b> , 105,	3.3	4
24	Cavity magnon-polaritons in cuprate parent compounds. <i>Physical Review Research</i> , <b>2022</b> , 4,	3.9	4
23	Role of Equilibrium Fluctuations in Light-Induced Order. <i>Physical Review Letters</i> , <b>2021</b> , 127, 227401	7.4	4

22	Dynamical Quantum Cherenkov Transition of Fast Impurities in Quantum Liquids. <i>Physical Review Letters</i> , <b>2021</b> , 127, 185302	7.4	4
21	Universal Prethermal Dynamics in Heisenberg Ferromagnets. <i>Physical Review Letters</i> , <b>2020</b> , 125, 230601	7.4	4
20	Generalization of group-theoretic coherent states for variational calculations. <i>Physical Review Research</i> , <b>2021</b> , 3,	3.9	4
19	Higgs-Mediated Optical Amplification in a Nonequilibrium Superconductor. <i>Physical Review X</i> , <b>2021</b> , 11,	9.1	4
18	Microscopic evolution of doped Mott insulators from polaronic metal to Fermi liquid. <i>Science</i> , <b>2021</b> , 374, 82-86	33.3	4
17	Multiparticle Interactions for Ultracold Atoms in Optical Tweezers: Cyclic Ring-Exchange Terms. <i>Physical Review Letters</i> , <b>2020</b> , 124, 073601	7.4	3
16	Spin-wave contribution to the nuclear spin-lattice relaxation in triplet superconductors. <i>Physical Review Letters</i> , <b>2006</b> , 96, 077002	7.4	3
15	Competition between triplet superconductivity and antiferromagnetism in quasi-one-dimensional electron systems. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	3
14	Transverse Spin Dynamics in the Anisotropic Heisenberg Model Realized with Ultracold Atoms. <i>Physical Review X</i> , <b>2021</b> , 11,	9.1	3
13	Superconducting pairing in resonant inelastic x-ray scattering. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	3
12	Gopalakrishnan, Martin, and Demler reply:. <i>Physical Review Letters</i> , <b>2014</b> , 113, 079603	7.4	2
11	Single-spin qubit magnetic spectroscopy of two-dimensional superconductivity. <i>Physical Review Research</i> , <b>2022</b> , 4,	3.9	2
10	RESISTANCE IN SUPERCONDUCTORS <b>2010</b> , 185-226		2
9	Selective state spectroscopy and multifractality in disordered Bose-Einstein condensates: a numerical study. <i>Scientific Reports</i> , <b>2018</b> , 8, 3641	4.9	1
8	Observation of topologically protected bound states in photonic quantum walks <b>2011</b> ,		1
7	Noisy quantum phase transitions: an intuitive approach. <i>Physica Scripta</i> , <b>2012</b> , T151, 014026	2.6	1
6	Mott criticality and pseudogap in Bose-Fermi mixtures. <i>Physical Review Letters</i> , <b>2012</b> , 109, 235304	7.4	1
5	Exploration of doped quantum magnets with ultracold atoms. <i>Annals of Physics</i> , <b>2021</b> , 168651	2.5	1

4	Time-Domain Anyon Interferometry in Kitaev Honeycomb Spin Liquids and Beyond. <i>Physical Review Letters</i> , <b>2021</b> , 126, 177204	7.4	1
3	Quantum generative model for sampling many-body spectral functions. <i>Physical Review B</i> , <b>2021</b> , 103,	3.3	1
2	Higher-order spin-hole correlations around a localized charge impurity. <i>Physical Review Research</i> , <b>2021</b> , 3,	3.9	1
1	Resonantly enhanced polariton wave mixing and parametric instability in a Floquet medium.. <i>Journal of Chemical Physics</i> , <b>2022</b> , 156, 174110	3.9	1