

# James K. Freericks

## List of Publications by Citations

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250  
papers

7,568  
citations

42  
h-index

80  
g-index

279  
ext. papers

8,384  
ext. citations

4.3  
avg, IF

6.09  
L-index

#	Paper	IF	Citations
250	Engineered two-dimensional Ising interactions in a trapped-ion quantum simulator with hundreds of spins. <i>Nature</i> , <b>2012</b> , 484, 489-92	50.4	566
249	Quantum simulation of frustrated Ising spins with trapped ions. <i>Nature</i> , <b>2010</b> , 465, 590-3	50.4	543
248	Anomalous normal-state properties of high-T <sub>c</sub> superconductors: intrinsic properties of strongly correlated electron systems?. <i>Advances in Physics</i> , <b>1995</b> , 44, 187-210	18.4	392
247	Emergence and frustration of magnetism with variable-range interactions in a quantum simulator. <i>Science</i> , <b>2013</b> , 340, 583-7	33.3	301
246	Strong-coupling expansions for the pure and disordered Bose-Hubbard model. <i>Physical Review B</i> , <b>1996</b> , 53, 2691-2700	3.3	294
245	Onset of a quantum phase transition with a trapped ion quantum simulator. <i>Nature Communications</i> , <b>2011</b> , 2, 377	17.4	270
244	Exact dynamical mean-field theory of the Falicov-Kimball model. <i>Reviews of Modern Physics</i> , <b>2003</b> , 75, 1333-1382	40.5	267
243	Nonequilibrium dynamical mean-field theory. <i>Physical Review Letters</i> , <b>2006</b> , 97, 266408	7.4	220
242	Phase diagram of the Bose-Hubbard Model. <i>Europhysics Letters</i> , <b>1994</b> , 26, 545-550	1.6	162
241	Theoretical description of time-resolved photoemission spectroscopy: application to pump-probe experiments. <i>Physical Review Letters</i> , <b>2009</b> , 102, 136401	7.4	153
240	Theory of Floquet band formation and local pseudospin textures in pump-probe photoemission of graphene. <i>Nature Communications</i> , <b>2015</b> , 6, 7047	17.4	146
239	Holstein model in infinite dimensions. <i>Physical Review B</i> , <b>1993</b> , 48, 6302-6314	3.3	127
238	Quenching Bloch oscillations in a strongly correlated material: Nonequilibrium dynamical mean-field theory. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	96
237	Protracted screening in the periodic Anderson model. <i>Physical Review B</i> , <b>1997</b> , 55, R3332-R3335	3.3	90
236	Low-Temperature Coherence in the Periodic Anderson Model: Predictions for Photoemission of Heavy Fermions. <i>Physical Review Letters</i> , <b>1998</b> , 80, 5168-5171	7.4	85
235	Quantum simulation and phase diagram of the transverse-field Ising model with three atomic spins. <i>Physical Review B</i> , <b>2010</b> , 82,	3.3	73
234	Examining Electron-Boson Coupling Using Time-Resolved Spectroscopy. <i>Physical Review X</i> , <b>2013</b> , 3,	9.1	72

233	Two-state one-dimensional spinless Fermi gas. <i>Physical Review B</i> , <b>1990</b> , 41, 2163-2172	3.3	69
232	Quantum simulation of the transverse Ising model with trapped ions. <i>New Journal of Physics</i> , <b>2011</b> , 13, 105003	2.9	66
231	Strong-coupling expansion for the momentum distribution of the Bose-Hubbard model with benchmarking against exact numerical results. <i>Physical Review A</i> , <b>2009</b> , 79,	2.6	66
230	Theoretical description of high-order harmonic generation in solids. <i>New Journal of Physics</i> , <b>2013</b> , 15, 023003	2.9	62
229	Verification of a Many-Ion Simulator of the Dicke Model Through Slow Quenches across a Phase Transition. <i>Physical Review Letters</i> , <b>2018</b> , 121, 040503	7.4	61
228	Direct observation of Higgs mode oscillations in the pump-probe photoemission spectra of electron-phonon mediated superconductors. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	61
227	Steady-state nonequilibrium density of States of driven strongly correlated lattice models in infinite dimensions. <i>Physical Review Letters</i> , <b>2008</b> , 101, 196401	7.4	59
226	Zone-center phonons of bulk, few-layer, and monolayer 1T $\bar{1}$ aS <sub>2</sub> : Detection of commensurate charge density wave phase through Raman scattering. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	58
225	Competition between electron-phonon attraction and weak Coulomb repulsion. <i>Physical Review Letters</i> , <b>1995</b> , 75, 2570-2573	7.4	57
224	Conserving approximations for the attractive Holstein and Hubbard models. <i>Physical Review B</i> , <b>1994</b> , 50, 403-417	3.3	57
223	Stripe phases in the two-dimensional Falicov-Kimball model. <i>Physical Review Letters</i> , <b>2002</b> , 89, 196403	7.4	56
222	Observation of an unconventional metal-insulator transition in overdoped CuO <sub>2</sub> compounds. <i>Physical Review Letters</i> , <b>2002</b> , 89, 107003	7.4	54
221	Relationship between the thermopower and entropy of strongly correlated electron systems. <i>Physical Review B</i> , <b>2007</b> , 76,	3.3	53
220	Phase separation due to quantum mechanical correlations. <i>Physical Review Letters</i> , <b>2002</b> , 88, 106401	7.4	53
219	Energy dissipation from a correlated system driven out of equilibrium. <i>Nature Communications</i> , <b>2016</b> , 7, 13761	17.4	53
218	Optical conductivity of the infinite-dimensional Hubbard model. <i>Physical Review B</i> , <b>1995</b> , 51, 11704-11713	3.3	52
217	Magnetic phase diagram of the Hubbard model. <i>Physical Review Letters</i> , <b>1995</b> , 74, 186-189	7.4	52
216	Nonlinear response of Bloch electrons in infinite dimensions. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	51

215	Transport in Multilayered Nanostructures <b>2006</b> ,		50
214	Dynamical mean-field theory for strongly correlated inhomogeneous multilayered nanostructures. <i>Physical Review B</i> , <b>2004</b> , 70,	3-3	49
213	Spinless Falicov-Kimball model (annealed binary alloy) from large to small dimensions. <i>Physical Review B</i> , <b>1993</b> , 47, 9263-9272	3-3	49
212	Raman scattering through a metal-insulator transition. <i>Physical Review B</i> , <b>2001</b> , 64,	3-3	44
211	Anomalous magnetic response of the spin-one-half Falicov-Kimball model. <i>Physical Review B</i> , <b>1998</b> , 58, 322-329	3-3	44
210	Iterated perturbation theory for the attractive Holstein and Hubbard models. <i>Physical Review B</i> , <b>1994</b> , 50, 6939-6953	3-3	43
209	Strong-coupling perturbation theory for the two-dimensional Bose-Hubbard model in a magnetic field. <i>Physical Review B</i> , <b>1999</b> , 60, 2357-2362	3-3	42
208	The Anharmonic Electron-Phonon Problem. <i>Physical Review Letters</i> , <b>1996</b> , 77, 4588-4591	7-4	42
207	Conformal deformation by the currents of affine $g$ . <i>Annals of Physics</i> , <b>1988</b> , 188, 258-306	2-5	42
206	Nonequilibrium electron and lattice dynamics of strongly correlated BiSrCaCuO single crystals. <i>Science Advances</i> , <b>2018</b> , 4, eaap7427	14-3	41
205	Exact solution of the multicomponent Falicov-Kimball model in infinite dimensions. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , <b>2001</b> , 81, 1443-1467		40
204	Strong-coupling expansions for the attractive Holstein and Hubbard models. <i>Physical Review B</i> , <b>1993</b> , 48, 3881-3891	3-3	40
203	Effect of dynamical spectral weight redistribution on effective interactions in time-resolved spectroscopy. <i>Physical Review B</i> , <b>2014</b> , 90,	3-3	38
202	Spectroscopy and thermometry of drumhead modes in a mesoscopic trapped-ion crystal using entanglement. <i>Physical Review Letters</i> , <b>2012</b> , 108, 213003	7-4	38
201	Phase separation and the segregation principle in the infinite-U spinless Falicov-Kimball model. <i>Physical Review B</i> , <b>1999</b> , 60, 1617-1626	3-3	38
200	Structural phase stability and electron-phonon coupling in lithium. <i>Physical Review B</i> , <b>1999</b> , 59, 4028-4035	3-3	38
199	Segregation in the Falicov-Kimball Model. <i>Communications in Mathematical Physics</i> , <b>2002</b> , 227, 243-279	2	35
198	Mapping of unoccupied states and relevant bosonic modes via the time-dependent momentum distribution. <i>Physical Review B</i> , <b>2013</b> , 87,	3-3	33

197	Charge-transfer metal-insulator transitions in the spin-12 Falicov-Kimball model. <i>Physical Review B</i> , <b>1998</b> , 57, 11955-11961	3-3	32
196	Ground state of a general electron-phonon Hamiltonian is a spin singlet. <i>Physical Review B</i> , <b>1995</b> , 51, 2812-2821	3-3	32
195	Appearance of "fragile" Fermi liquids in finite-width Mott insulators sandwiched between metallic leads. <i>Physical Review Letters</i> , <b>2009</b> , 103, 116402	7-4	31
194	Spectral moment sum rules for strongly correlated electrons in time-dependent electric fields. <i>Physical Review B</i> , <b>2006</b> , 73,	3-3	31
193	Time-resolved photoemission of correlated electrons driven out of equilibrium. <i>Physical Review B</i> , <b>2010</b> , 81,	3-3	30
192	Review of the Theoretical Description of Time-Resolved Angle-Resolved Photoemission Spectroscopy in Electron-Phonon Mediated Superconductors. <i>Annalen Der Physik</i> , <b>2017</b> , 529, 1600235	2-6	28
191	Magnetic phase diagram of the Hubbard model in three dimensions: The second-order local approximation. <i>Physical Review B</i> , <b>1997</b> , 55, 942-946	3-3	28
190	Exact theory for electronic Raman scattering of correlated materials in infinite dimensions. <i>Physical Review B</i> , <b>2001</b> , 64,	3-3	28
189	Nonequilibrium "melting" of a charge density wave insulator via an ultrafast laser pulse. <i>Physical Review Letters</i> , <b>2014</b> , 112, 176404	7-4	27
188	Electron-mediated relaxation following ultrafast pumping of strongly correlated materials: model evidence of a correlation-tuned crossover between thermal and nonthermal states. <i>Physical Review Letters</i> , <b>2013</b> , 111, 077401	7-4	26
187	Density-wave patterns for fermionic dipolar molecules on a square optical lattice: Mean-field-theory analysis. <i>Physical Review A</i> , <b>2011</b> , 83,	2-6	26
186	The Electron-Phonon Problem in Infinite Dimensions. <i>Europhysics Letters</i> , <b>1994</b> , 25, 37-42	1-6	26
185	Strong-coupling perturbation theory for the extended Bose-Hubbard model. <i>Physical Review A</i> , <b>2009</b> , 79,	2-6	25
184	Optical and dc-transport properties of a strongly correlated charge-density-wave system: Exact solution in the ordered phase of the spinless Falicov-Kimball model with dynamical mean-field theory. <i>Physical Review B</i> , <b>2008</b> , 77,	3-3	25
183	Tuning a Josephson junction through a quantum critical point. <i>Physical Review B</i> , <b>2001</b> , 64,	3-3	25
182	Dynamical mean-field theory of an Ising double-exchange model with diagonal disorder. <i>Physical Review B</i> , <b>2001</b> , 64,	3-3	25
181	Charge-density-wave order parameter of the Falicov-Kimball model in infinite dimensions. <i>Physical Review B</i> , <b>2003</b> , 68,	3-3	24
180	Evidence for exhaustion in the conductivity of the infinite-dimensional periodic Anderson model. <i>Physical Review B</i> , <b>1999</b> , 60, 10782-10787	3-3	24

179	Improving the efficiency of ultracold dipolar molecule formation by first loading onto an optical lattice. <i>Physical Review A</i> , <b>2010</b> , 81,	2.6	23
178	Theoretical description of time-resolved pump/probe photoemission in TaS <sub>2</sub> : a single-band DFT+DMFT(NRG) study within the quasiequilibrium approximation. <i>Physica Status Solidi (B): Basic Research</i> , <b>2009</b> , 246, 948-954	1.3	23
177	Charge Stripes Due to Electron Correlations in the Two-Dimensional Spinless Falicov-Kimball Model. <i>Journal of Statistical Physics</i> , <b>2004</b> , 116, 699-718	1.5	23
176	Electronic Raman scattering in correlated materials: A treatment of nonresonant, mixed, and resonant scattering using dynamical mean-field theory. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	23
175	Segregation and charge-density-wave order in the spinless Falicov-Kimball model. <i>Physical Review B</i> , <b>2000</b> , 61, 13438-13444	3.3	23
174	Bang-bang shortcut to adiabaticity in the Dicke model as realized in a Penning trap experiment. <i>New Journal of Physics</i> , <b>2018</b> , 20, 055013	2.9	23
173	Dynamical charge susceptibility of the spinless Falicov-Kimball model. <i>Physical Review B</i> , <b>2000</b> , 62, 10022-10032	3.1	22
172	Creation of two-dimensional Coulomb crystals of ions in oblate Paul traps for quantum simulations. <i>EPJ Quantum Technology</i> , <b>2015</b> , 2,	6.9	21
171	Nonequilibrium sum rules for the retarded self-energy of strongly correlated electrons. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	21
170	Pattern formation in mixtures of ultracold atoms in optical lattices. <i>Physical Review Letters</i> , <b>2008</b> , 101, 060404	7.4	21
169	Thermal transport in the Falicov-Kimball model on a Bethe lattice. <i>Physical Review B</i> , <b>2004</b> , 69,	3.3	21
168	Nonresonant inelastic light scattering in the Hubbard model. <i>Physical Review B</i> , <b>2003</b> , 67,	3.3	21
167	Thermoelectricity in tunneling nanostructures. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	20
166	Phonon-mediated quantum spin simulator employing a planar ionic crystal in a Penning trap. <i>Physical Review A</i> , <b>2013</b> , 87,	2.6	20
165	Intrinsic phonon effects on analog quantum simulators with ultracold trapped ions. <i>Physical Review A</i> , <b>2012</b> , 86,	2.6	20
164	Optimizing thermal transport in the Falicov-Kimball model: The binary-alloy picture. <i>Physical Review B</i> , <b>2003</b> , 68,	3.3	20
163	Microscopic self-consistent theory of Josephson junctions including dynamical electron correlations. <i>Journal of Physics Condensed Matter</i> , <b>2001</b> , 13, 3187-3213	1.8	20
162	Equilibrium properties of double-screened dipole-barrier SINIS Josephson junctions. <i>Physical Review B</i> , <b>2002</b> , 65,	3.3	20

161	Electronic thermal transport in strongly correlated multilayered nanostructures. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	19
160	Exact many-body solution of the periodic-cluster $t$ - $t'$ - $J$ model for cubic systems: Ground-state properties. <i>Physical Review B</i> , <b>1990</b> , 42, 4960-4978	3.3	19
159	Universal thermopower of bad metals. <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	17
158	Dynamical mean-field theory for light-fermion-heavy-boson mixtures on optical lattices. <i>Physical Review A</i> , <b>2009</b> , 80,	2.6	17
157	Nonequilibrium perturbation theory of the spinless Falicov-Kimball model: Second-order truncated expansion in $U$ . <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	17
156	Comparison of structural transformations and superconductivity in compressed sulfur and selenium. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	17
155	Thermal transport in the Falicov-Kimball model. <i>Physical Review B</i> , <b>2001</b> , 64,	3.3	17
154	OPTIMIZING THE SPEED OF A JOSEPHSON JUNCTION WITH DYNAMICAL MEAN FIELD THEORY. <i>International Journal of Modern Physics B</i> , <b>2002</b> , 16, 531-561	1.1	17
153	Strong-coupling expansions for the anharmonic Holstein model and for the Holstein-Hubbard model. <i>Physical Review B</i> , <b>1996</b> , 54, 9372-9384	3.3	17
152	Weak-coupling expansions for the attractive Holstein and Hubbard models. <i>Physical Review B</i> , <b>1994</b> , 49, 6368-6371	3.3	17
151	Electronic charge reconstruction of doped Mott insulators in multilayered nanostructures. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	16
150	F-electron spectral function of the Falicov-Kimball model in infinite dimensions: The half-filled case. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	16
149	Optical sum rules that relate to the potential energy of strongly correlated systems. <i>Physical Review Letters</i> , <b>2005</b> , 94, 216401	7.4	16
148	Possible experimentally observable effects of vertex corrections in superconductors. <i>Physical Review B</i> , <b>1998</b> , 58, 14498-14510	3.3	16
147	Inelastic x-ray scattering in correlated Mott insulators. <i>Physical Review Letters</i> , <b>2003</b> , 90, 067402	7.4	15
146	Nonconstant electronic density of states tunneling inversion for A15 superconductors: Nb <sub>3</sub> Sn. <i>Physical Review B</i> , <b>2002</b> , 65,	3.3	15
145	Approximate scaling relation for the anharmonic electron-phonon problem. <i>Physical Review B</i> , <b>2000</b> , 61, R838-R841	3.3	15
144	Phase separation in the binary-alloy problem: The one-dimensional spinless Falicov-Kimball model. <i>Physical Review B</i> , <b>1996</b> , 53, 16189-16196	3.3	14

143	Exact solutions of frustrated ordinary and chiral eight-site Hubbard models. <i>Physical Review B</i> , <b>1991</b> , 44, 1458-1474	3.3	14
142	Quantum computation of magnon spectra. <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	13
141	Resonant enhancement of inelastic light scattering in strongly correlated materials. <i>Physical Review Letters</i> , <b>2004</b> , 93, 137402	7.4	13
140	Superconductor-correlated metal-superconductor Josephson junctions: an optimized class for high speed digital electronics. <i>IEEE Transactions on Applied Superconductivity</i> , <b>2003</b> , 13, 1089-1092	1.8	13
139	Local approximation to the spinless Falicov-Kimball model. <i>Physical Review B</i> , <b>1993</b> , 48, 14797-14800	3.3	13
138	Thermodynamic model of the insulator-metal transition in nickel iodide. <i>Physical Review B</i> , <b>1992</b> , 45, 1896-1899	3.3	13
137	Theory for time-resolved resonant inelastic x-ray scattering. <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	12
136	Amplitude mode oscillations in pump-probe photoemission spectra from a d-wave superconductor. <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	12
135	Intrinsic reduction of Josephson critical current in short ballistic SNS weak links. <i>Physical Review B</i> , <b>2001</b> , 64,	3.3	12
134	Time-domain pumping a quantum-critical charge density wave ordered material. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	11
133	Nonperturbative calculation of phonon effects on spin squeezing. <i>Physical Review A</i> , <b>2016</b> , 93,	2.6	11
132	Strongly enhanced thermal transport in a lightly doped Mott insulator at low temperature. <i>Physical Review Letters</i> , <b>2012</b> , 109, 266601	7.4	11
131	Inhomogeneous spectral moment sum rules for the retarded Green function and self-energy of strongly correlated electrons or ultracold fermionic atoms in optical lattices. <i>Physical Review B</i> , <b>2009</b> , 80,	3.3	11
130	Enhancement of thermal transport in the degenerate periodic Anderson model. <i>Physical Review B</i> , <b>2008</b> , 78,	3.3	11
129	Higher period ordered phases on the Bethe lattice. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	11
128	Reevaluating electron-phonon coupling strengths: Indium as a test case for ab initio and many-body theory methods. <i>Physical Review B</i> , <b>1998</b> , 58, 14511-14517	3.3	11
127	Thermalization of field driven quantum systems. <i>Scientific Reports</i> , <b>2014</b> , 4, 4699	4.9	10
126	Gauge invariance in the theoretical description of time-resolved angle-resolved pump/probe photoemission spectroscopy. <i>Physica Scripta</i> , <b>2015</b> , T165, 014012	2.6	10



125	Momentum distribution of the insulating phases of the extended Bose-Hubbard model. <i>Physical Review A</i> , <b>2009</b> , 80,	2.6	10
124	Many-body effects on the capacitance of multilayers made from strongly correlated materials. <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	10
123	Vertex-corrected tunneling inversion in electron-phonon mediated superconductors: Pb. <i>Physical Review B</i> , <b>1997</b> , 55, 11651-11658	3.3	10
122	Inelastic x-ray scattering as a probe of electronic correlations. <i>Physical Review B</i> , <b>2003</b> , 68,	3.3	10
121	Competition between phase separation and "Classical" intermediate valence in an exactly solved model. <i>Physical Review Letters</i> , <b>2000</b> , 84, 2461-4	7.4	10
120	Vertex-corrected perturbation theory for the electron-phonon problem with nonconstant density of states. <i>Physical Review B</i> , <b>1998</b> , 58, 11613-11623	3.3	10
119	Test of the unitary coupled-cluster variational quantum eigensolver for a simple strongly correlated condensed-matter system. <i>Modern Physics Letters B</i> , <b>2020</b> , 34, 2040049	1.6	10
118	NON-RESONANT RAMAN SCATTERING THROUGH A METAL-INSULATOR TRANSITION: AN EXACT ANALYSIS OF THE FALICOV-KIMBALL MODEL. <i>Condensed Matter Physics</i> , <b>2001</b> , 4, 149	1.3	10
117	Nonequilibrium electron dynamics in pump-probe spectroscopy: Role of excited phonon populations. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	10
116	Application of Quantum Computing to Biochemical Systems: A Look to the Future. <i>Frontiers in Chemistry</i> , <b>2020</b> , 8, 587143	5	9
115	Emergence of Floquet behavior for lattice fermions driven by light pulses. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	9
114	Diabatic-ramping spectroscopy of many-body excited states. <i>Physical Review A</i> , <b>2014</b> , 90,	2.6	9
113	Theoretical description of coherent doublon creation via lattice modulation spectroscopy. <i>Physical Review A</i> , <b>2014</b> , 89,	2.6	9
112	Resonant inelastic x-ray scattering in a Mott insulator. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	9
111	Equivalence of the Falicov-Kimball and Brandt-Mielsch forms for the free energy of the infinite-dimensional Falicov-Kimball model. <i>Physical Review B</i> , <b>2003</b> , 67,	3.3	9
110	Quantum-Inspired Algorithm for the Factorized Form of Unitary Coupled Cluster Theory. <i>Journal of Chemical Theory and Computation</i> , <b>2021</b> , 17, 841-847	6.4	9
109	Long-lived nonequilibrium states in the Hubbard model with an electric field. <i>Physical Review B</i> , <b>2015</b> , 91,	3.3	8
108	Bang-bang shortcut to adiabaticity in trapped-ion quantum simulators. <i>Physical Review A</i> , <b>2018</b> , 97,	2.6	8

107	Exact solution for Bloch oscillations of a simple charge-density-wave insulator. <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	8
106	Quasiuniversal transient behavior of a nonequilibrium Mott insulator driven by an electric field. <i>Physical Review Letters</i> , <b>2012</b> , 109, 260402	7.4	8
105	Effect of particle-hole asymmetry on the Mott-Hubbard metal-insulator transition. <i>Physical Review Letters</i> , <b>2004</b> , 92, 216401	7.4	8
104	Crossover from tunneling to incoherent (bulk) transport in a correlated nanostructure. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 1383-1385	3.4	8
103	Gap ratio in anharmonic charge-density-wave systems. <i>Physical Review B</i> , <b>2001</b> , 64,	3.3	8
102	Driven-dissipative quantum mechanics on a lattice: Simulating a fermionic reservoir on a quantum computer. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	8
101	Relationship between Population Dynamics and the Self-Energy in Driven Non-Equilibrium Systems. <i>Entropy</i> , <b>2016</b> , 18, 180	2.8	8
100	Heavy-fermion systems in magnetic fields: The metamagnetic transition. <i>Physical Review B</i> , <b>1992</b> , 46, 874-879	3.3	7
99	Positivity of the Spectral Densities of Retarded Floquet Green Functions. <i>Physical Review Letters</i> , <b>2019</b> , 122, 130604	7.4	6
98	Theoretical description of pump/probe experiments in electron-mediated charge-density-wave insulators. <i>Physica Scripta</i> , <b>2017</b> , 92, 034007	2.6	6
97	Thermoelectricity of intermetallics. <i>Physica B: Condensed Matter</i> , <b>2006</b> , 378-380, 661-662	2.8	6
96	Application of the multicomponent Falicov-Kimball model to intermediate-valence materials: YbInCu <sub>4</sub> and EuNi <sub>2</sub> (Si <sub>1-x</sub> Gex) <sub>2</sub> . <i>Physica Status Solidi (B): Basic Research</i> , <b>2003</b> , 236, 265-271	1.3	6
95	Suppression of the "Quasiclassical" proximity gap in correlated-metal-superconductor structures. <i>Physical Review Letters</i> , <b>2002</b> , 88, 077002	7.4	6
94	Vertex corrections to the theory of superconductivity. <i>Physica C: Superconductivity and Its Applications</i> , <b>1994</b> , 235-240, 2379-2380	1.3	6
93	Nonequilibrium dynamical mean-field theory of strongly correlated electrons <b>2007</b> , 187-210		6
92	Transport in Multilayered Nanostructures <b>2016</b> ,		6
91	A completely algebraic solution of the simple harmonic oscillator. <i>American Journal of Physics</i> , <b>2020</b> , 88, 976-985	0.7	6
90	Proving the existence of bound states for attractive potentials in one-dimension and two-dimensions without calculus. <i>European Journal of Physics</i> , <b>2019</b> , 40, 045404	0.8	5

89	Minimal effective Gibbs ansatz: A simple protocol for extracting an accurate thermal representation for quantum simulation. <i>Physical Review A</i> , <b>2020</b> , 102,	2.6	5
88	Nonequilibrium response of an electron-mediated charge density wave ordered material to a large dc electric field. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	5
87	Nonequilibrium Dynamical Mean-Field Theory for the Charge-Density-Wave Phase of the Falicov-Kimball Model. <i>Journal of Superconductivity and Novel Magnetism</i> , <b>2016</b> , 29, 581-585	1.5	5
86	Robust finite-temperature disordered Mott-insulating phases in inhomogeneous Fermi-Fermi mixtures with density and mass imbalance. <i>Physical Review A</i> , <b>2015</b> , 91,	2.6	5
85	Simulation of inhomogeneous distributions of ultracold atoms in an optical lattice via a massively parallel implementation of nonequilibrium strong-coupling perturbation theory. <i>Physical Review E</i> , <b>2014</b> , 89, 023306	2.4	5
84	Effect of vertex corrections on longitudinal transport through multilayered nanostructures: Dynamical mean-field theory approach applied to the inhomogeneous Falicov-Kimball model. <i>Physical Review B</i> , <b>2011</b> , 83,	3.3	5
83	Momentum distribution and ordering in mixtures of ultracold light- and heavy-fermion atoms. <i>Physical Review A</i> , <b>2011</b> , 83,	2.6	5
82	Hidden symmetries of finite-size clusters with periodic boundary conditions. <i>Physical Review B</i> , <b>1991</b> , 44, 2895-2904	3.3	5
81	Constant Matrix Element Approximation to Time-Resolved Angle-Resolved Photoemission Spectroscopy. <i>Photonics</i> , <b>2016</b> , 3, 58	2.2	5
80	Exact Time Evolution of the Asymmetric Hubbard Dimer. <i>Journal of Superconductivity and Novel Magnetism</i> , <b>2017</b> , 30, 97-102	1.5	4
79	Theoretical basis for quantum simulation with a planar ionic crystal in a Penning trap using a triangular rotating wall. <i>Physical Review A</i> , <b>2015</b> , 92,	2.6	4
78	The nonequilibrium quantum many-body problem as a paradigm for extreme data science. <i>International Journal of Modern Physics B</i> , <b>2014</b> , 28, 1430021	1.1	4
77	Effect of defects on phonons and the effective spin-spin interactions of an ultracold Penning-trap quantum simulator. <i>Physical Review A</i> , <b>2013</b> , 88,	2.6	4
76	Temporal response of nonequilibrium correlated electrons. <i>Computer Physics Communications</i> , <b>2011</b> , 182, 109-111	4.2	4
75	Pulsed high harmonic generation of light due to pumped Bloch oscillations in noninteracting metals. <i>Physica Scripta</i> , <b>2012</b> , T151, 014062	2.6	4
74	Effect of anisotropic hopping on the Bose-Hubbard model phase diagram: Strong-coupling perturbation theory on a square lattice. <i>Physical Review A</i> , <b>2008</b> , 78,	2.6	4
73	Enhancement of thermoelectric performance in strongly correlated multilayered nanostructures. <i>Physica Status Solidi (B): Basic Research</i> , <b>2007</b> , 244, 2351-2356	1.3	4
72	Phase separation in the combined Falicov-Kimball and static Holstein model. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	4

71	First-principles determination of superconducting properties of metals. <i>Physica B: Condensed Matter</i> , <b>2000</b> , 284-288, 425-426	2.8	4
70	F-electron spectral function of the Falicov-Kimball model and the Wiener-Hopf sum equation approach. <i>Condensed Matter Physics</i> , <b>2008</b> , 11, 425	1.3	4
69	Nonlinear Peltier effect and the nonequilibrium Jonson-Mahan theorem. <i>Condensed Matter Physics</i> , <b>2006</b> , 9, 603	1.3	4
68	Stroboscopic Tests for Thermalization of Electrons in Pump-Probe Experiments. <i>Physical Review Letters</i> , <b>2019</b> , 122, 247402	7.4	3
67	Measuring nonequilibrium retarded spin-spin Green's functions in an ion-trap-based quantum simulator. <i>Physical Review A</i> , <b>2016</b> , 93,	2.6	3
66	Ubiquity of linear resistivity at intermediate temperature in bad metals. <i>Physical Review B</i> , <b>2015</b> , 91,	3.3	3
65	Feshbach modulation spectroscopy of the Fermi-Hubbard model. <i>Physical Review A</i> , <b>2015</b> , 92,	2.6	3
64	Intrinsic anharmonic effects on the phonon frequencies and effective spin-spin interactions in a quantum simulator made from trapped ions in a linear Paul trap. <i>Physical Review A</i> , <b>2014</b> , 90,	2.6	3
63	Publisher's Note: Phonon-mediated quantum spin simulator employing a planar ionic crystal in a Penning trap [Phys. Rev. A 87, 013422 (2013)]. <i>Physical Review A</i> , <b>2013</b> , 87,	2.6	3
62	Strong-coupling expansion for ultracold bosons in an optical lattice at finite temperatures in the presence of superfluidity. <i>Physical Review A</i> , <b>2013</b> , 88,	2.6	3
61	Low-temperature transport properties of TaxN thin films (0.72 $\times$ 0.83). <i>Journal Physics D: Applied Physics</i> , <b>2010</b> , 43, 445405	3	3
60	Efficiency for preforming molecules from mixtures of light Fermi and heavy Bose atoms in optical lattices: The strong-coupling-expansion method. <i>Physical Review A</i> , <b>2011</b> , 83,	2.6	3
59	The Anharmonic Electron-Phonon Problem [Phys. Rev. Lett. 77, 4588 (1996)]. <i>Physical Review Letters</i> , <b>1997</b> , 79, 1783-1783	7.4	3
58	Thouless energy as a unifying concept for Josephson junctions tuned through the Mott metal-insulator transition. <i>Physical Review B</i> , <b>2006</b> , 73,	3.3	3
57	Steady-state nonequilibrium dynamical mean-field theory and the quantum Boltzmann equation. <i>Journal of Physics: Conference Series</i> , <b>2006</b> , 35, 39-52	0.3	3
56	Temperature dependence of superconductor-correlated metal-superconductor Josephson junctions. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 970-972	3.4	3
55	. <i>IEEE Transactions on Applied Superconductivity</i> , <b>2005</b> , 15, 896-899	1.8	3
54	Exact solution of a variety of X-ray probes in the Falicov-Kimball model with dynamical mean-field theory. <i>Condensed Matter Physics</i> , <b>2012</b> , 15, 43701	1.3	3

53	Creating analogs of thermal distributions from diabatic excitations in ion-trap-based quantum simulation. <i>New Journal of Physics</i> , <b>2016</b> , 18, 043026	2.9	3
52	Incorporating the Stern-Gerlach delayed-choice quantum eraser into the undergraduate quantum mechanics curriculum. <i>American Journal of Physics</i> , <b>2020</b> , 88, 298-307	0.7	2
51	Relationship between the transverse-field Ising model and the XY model via the rotating-wave approximation. <i>Physical Review A</i> , <b>2018</b> , 97,	2.6	2
50	Generalized gradient expansion for inhomogeneous dynamical mean-field theory: Application to ultracold atoms in a harmonic trap. <i>Physical Review A</i> , <b>2016</b> , 94,	2.6	2
49	Exact solution for high harmonic generation and the response to an ac driving field for a charge density wave insulator. <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	2
48	The role of average time dependence on the relaxation of excited electron populations in nonequilibrium many-body physics. <i>Fortschritte Der Physik</i> , <b>2017</b> , 65, 1600042	5.7	2
47	Thermoelectric transport parallel to the planes in a multilayered Mott-Hubbard heterostructure. <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	2
46	Estimating the ground-state probability of a quantum simulation with product-state measurements. <i>Frontiers in Physics</i> , <b>2015</b> , 3,	3.9	2
45	Spectral moment sum rules for the retarded Green's function and self-energy of the inhomogeneous Bose-Hubbard model in equilibrium and nonequilibrium. <i>Physical Review A</i> , <b>2013</b> , 87,	2.6	2
44	Nonresonant Raman and inelastic x-ray scattering in the charge-density-wave phase of the spinless Falicov-Kimball model. <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	2
43	Optimizing Pre-formed Molecules in Mixtures of Ultracold 40K and 87Rb on an Optical Lattice: A Challenge Grant and Capabilities Application Project <b>2009</b> ,		2
42	Sum rules for inelastic light scattering in the Hubbard model. <i>Physica B: Condensed Matter</i> , <b>2006</b> , 378-380, 650-653	2.8	2
41	Nonresonant pump/probe electronic Raman scattering within nonequilibrium dynamical mean-field theory <b>2018</b> ,		2
40	Characterizing the Non-equilibrium Dynamics of Field-Driven Correlated Quantum Systems. <i>Frontiers in Physics</i> , <b>2020</b> , 8,	3.9	2
39	Theoretical description of pump/probe experiments in nesting induced charge density wave insulators <b>2016</b> ,		2
38	Many-body thermodynamics on quantum computers via partition function zeros. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	2
37	Nonequilibrium Density Of States And Distribution Functions For Strongly Correlated Materials Across The Mott Transition. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , <b>2008</b> , 219-236	0.2	2
36	Comparison Between the f-Electron and Conduction-Electron Density of States in the Falicov-Kimball Model at Low Temperature. <i>Journal of Superconductivity and Novel Magnetism</i> , <b>2020</b> , 33, 2419-2425	1.5	1

35	X-ray photoemission spectroscopy in the Falicov-Kimball model. <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	1
34	Universal thermopower of bad metals. <i>Journal of Physics: Conference Series</i> , <b>2015</b> , 592, 012056	0.3	1
33	Frustrated phase separation in the momentum distribution of field-driven light-heavy Fermi-Fermi mixtures of ultracold atoms. <i>Physical Review A</i> , <b>2014</b> , 90,	2.6	1
32	Beyond Planck-Einstein quanta: Amplitude-driven quantum excitation. <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	1
31	Lanczos-based Low-Rank Correction Method for Solving the Dyson Equation in Inhomogenous Dynamical Mean-Field Theory. <i>Physics Procedia</i> , <b>2011</b> , 15, 22-28		1
30	Efficiently Generalizing Ultra-Cold Atomic Simulations via Inhomogeneous Dynamical Mean-Field Theory from Two- to Three-Dimensions <b>2010</b> ,		1
29	Resonant Raman scattering effects in a nesting-driven charge-density-wave insulator: Exact analysis of the spinless Falicov-Kimball model with dynamical mean-field theory. <i>Physical Review B</i> , <b>2010</b> , 82,	3.3	1
28	Impurity problems for steady-state nonequilibrium dynamical mean-field theory. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2010</b> , 42, 520-524	3	1
27	Resonant enhancement of electronic Raman scattering. <i>Journal of Physics and Chemistry of Solids</i> , <b>2006</b> , 67, 336-339	3.9	1
26	Resonant electronic Raman scattering near a quantum critical point. <i>Physica B: Condensed Matter</i> , <b>2005</b> , 359-361, 705-707	2.8	1
25	Strongly correlated multilayered nanostructures near the Mott transition. <i>Physica Status Solidi (B): Basic Research</i> , <b>2005</b> , 242, 189-195	1.3	1
24	Dephasing effects in a two-dimensional magnetic-breakdown linked-orbit network: Magnesium. <i>Physical Review B</i> , <b>1989</b> , 39, 5678-5683	3.3	1
23	Cartesian Operator Factorization Method for Hydrogen. <i>Atoms</i> , <b>2022</b> , 10, 14	2.1	1
22	Flexibility of the factorized form of the unitary coupled cluster Ansatz.. <i>Journal of Chemical Physics</i> , <b>2022</b> , 156, 044106	3.9	1
21	Simulation of the Electron-Phonon Interaction in Infinite Dimensions. <i>Springer Proceedings in Physics</i> , <b>1994</b> , 99-112	0.2	1
20	Theory of Valence Transitions in Ytterbium-Based Compounds <b>2001</b> , 371-380		1
19	Schrödinger's original quantummechanical solution for hydrogen. <i>European Journal of Physics</i> , <b>2021</b> , 42, 035405	0.8	1
18	Sparse-Hamiltonian approach to the time-evolution of molecules on quantum computers. <i>European Physical Journal: Special Topics</i> , <b>2021</b> , 230, 1067-1071	2.3	1

17	Converting translation operators into plane polar and spherical coordinates and their use in determining quantum-mechanical wavefunctions in a representation-independent fashion. <i>Journal of Mathematical Physics</i> , <b>2021</b> , 62, 072102	1.2	1
16	Algebraic derivation of Kramers-Pasternack relations based on the Schrödinger factorization method. <i>European Journal of Physics</i> , <b>2021</b> , 42, 025409	0.8	1
15	Determining quantum phase diagrams of topological Kitaev-inspired models on NISQ quantum hardware. <i>Quantum - the Open Journal for Quantum Science</i> , 5, 553		1
14	Real-time evolution of static electron-phonon models in time-dependent electric fields.. <i>Physical Review E</i> , <b>2022</b> , 105, 025301	2.4	0
13	What do the two times in two-time correlation functions mean for interpreting tr-ARPES?. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , <b>2021</b> , 251, 147104	1.7	0
12	Operator Relationship between Conventional Coupled Cluster and Unitary Coupled Cluster. <i>Symmetry</i> , <b>2022</b> , 14, 494	2.7	0
11	Determining Ground-State Phase Diagrams on Quantum Computers via a Generalized Application of Adiabatic State Preparation. <i>Symmetry</i> , <b>2022</b> , 14, 809	2.7	0
10	f-Electron spectral function near a quantum critical point. <i>Physica B: Condensed Matter</i> , <b>2005</b> , 359-361, 684-686	2.8	
9	Vertex-corrected tunneling inversion in superconductors. <i>European Physical Journal D</i> , <b>1996</b> , 46, 603-604		
8	Inelastic Light Scattering and the Correlated Metal-Insulator Transition <b>2003</b> , 115-122		
7	Describing the Valence-Change Transition by the DMFT Solution of the Falicov-Kimball Model <b>2003</b> , 287-296		
6	Phase Separation due to Quantum Mechanical Correlations <b>2004</b> , 119-122		
5	Electronic Structure of Highly Correlated Systems <b>1993</b> , 1-11		
4	Infinite single-particle bandwidth of a Mott-Hubbard insulator. <i>International Journal of Modern Physics B</i> , <b>2016</b> , 30, 1642001	1.1	
3	Spin and pseudospin towers of the Hubbard model on a bipartite lattice. <i>International Journal of Modern Physics B</i> , <b>2018</b> , 32, 1840021	1.1	
2	Making squeezed-coherent states concrete by determining their wavefunction. <i>American Journal of Physics</i> , <b>2021</b> , 89, 885-896	0.7	
1	Native multiqubit Toffoli gates on ion trap quantum computers. <i>Quantum Science and Technology</i> , <b>2021</b> , 6, 044010	5.5	