Adrian E Feiguin

List of Publications by Citations

63 papers	2,334 citations	21 h-index	48 g-index
69 ext. papers	2,750 ext. citations	4.3 avg, IF	5.23 L-index

#	Paper	IF	Citations
63	Real-time evolution using the density matrix renormalization group. *Physical Review Letters*, **2004**, 93, 076401	7.4	874
62	Finite-temperature density matrix renormalization using an enlarged Hilbert space. *Physical Review B*, **2005**, 72,	3.3	182
61	Real-time simulations of nonequilibrium transport in the single-impurity Anderson model. *Physical Review B*, **2009**, 79,	3.3	136
60	Pairing states of a polarized Fermi gas trapped in a one-dimensional optical lattice. *Physical Review B*, **2007**, 76,	3.3	131
59	Time-step targeting methods for real-time dynamics using the density matrix renormalization group. *Physical Review B*, **2005**, 72,	3.3	104
58	Quantum distillation: Dynamical generation of low-entropy states of strongly correlated fermions in an optical lattice. *Physical Review A*, **2009**, 80,	2.6	74
57	Adaptive time-dependent density-matrix renormalization-group technique for calculating the conductance of strongly correlated nanostructures. *Physical Review B*, **2006**, 73,	3.3	69
56	Nonequilibrium electronic transport in a one-dimensional Mott insulator. *Physical Review B*, **2010**, 82,	3.3	64
55	Transport properties and Kondo correlations in nanostructures: Time-dependent DMRG method applied to quantum dots coupled to Wilson chains. *Physical Review B*, **2008**, 78,	3.3	62
54	SU(N) magnetism in chains of ultracold alkaline-earth-metal atoms: Mott transitions and quantum correlations. *Physical Review A*, **2011**, 84,	2.6	58
53	Excitons in the one-dimensional Hubbard model: a real-time study. *Physical Review Letters*, **2008**, 100, 166403	7.4	40
52	Phase separation of trapped spin-imbalanced Fermi gases in one-dimensional optical lattices. *Physical Review A*, **2010**, 81,	2.6	39
51	BCS-BEC crossover and the disappearance of Fulde-Ferrell-Larkin-Ovchinnikov correlations in a spin-imbalanced one-dimensional Fermi gas. *Physical Review A*, **2010**, 81,	2.6	29
50	General method for calculating the universal conductance of strongly correlated junctions of multiple quantum wires. *Physical Review B*, **2012**, 85,	3.3	26
49	Junctions of multiple quantum wires with different Luttinger parameters. *Physical Review B*, **2012**, 86,	3.3	26
48	Kondo versus indirect exchange: Role of lattice and actual range of RKKY interactions in real materials. *Physical Review B*, **2015**, 91,	3.3	24
47	Transport in carbon nanotubes: Two-level SU(2) regime reveals subtle competition between Kondo and intermediate valence states. *Physical Review B*, **2011**, 83,	3.3	24

46	Crystallization of spin superlattices with pressure and field in the layered magnet SrCu2(BO3)2. *Nature Communications*, **2016**, 7, 11956	17.4	23
45	Lanczos transformation for quantum impurity problems in d-dimensional lattices: Application to graphene nanoribbons. *Physical Review B*, **2013**, 88,	3.3	22
44	Spectral properties of a partially spin-polarized one-dimensional Hubbard/Luttinger superfluid. *Physical Review B*, **2009**, 79,	3.3	22
43	Competition between Kondo effect and RKKY physics in graphene magnetism. *Physical Review B*, **2017**, 95,	3.3	21
42	Nonequilibrium transport through a point contact in the nu = 5/2 non-Abelian quantum Hall state. *Physical Review Letters*, **2008**, 101, 236801	7.4	21
41	Electrostatic control over polarized currents through the spin-orbital Kondo effect. *Physical Review B*, **2012**, 85,	3.3	19
40	Spinon confinement and a sharp longitudinal mode in YbPtPb in magnetic fields. *Nature Communications*, **2019**, 10, 1123	17.4	16
39	Real-time dynamics of particle-hole excitations in Mott insulator-metal junctions. *Physical Review B*, **2010**, 81,	3.3	16
38	Suppressing Spectral Diffusion of Emitted Photons with Optical Pulses. *Physical Review Letters*, **2016**, 116, 033603	7.4	15
37	Spin-incoherent behavior in the ground state of strongly correlated systems. *Physical Review Letters*, **2011**, 106, 146401	7.4	12
36	Unveiling the internal entanglement structure of the Kondo singlet. *Physical Review B*, **2017**, 95,	3.3	11
35	Finite-temperature dynamics of the Mott insulating Hubbard chain. *Physical Review B*, **2018**, 97,	3.3	10
34	Spectral function of the two-dimensional Hubbard model: A density matrix renormalization group plus cluster perturbation theory study. *Physical Review B*, **2016**, 93,	3.3	10
33	Photoexcitation of electronic instabilities in one-dimensional charge-transfer systems. *Physical Review B*, **2014**, 90,	3.3	10
32	One-dimensional itinerant interacting non-Abelian anyons. *Physical Review B*, **2013**, 87,	3.3	10
31	Spin filtering in a double quantum dot device: Numerical renormalization group study of the internal structure of the Kondo state. *Applied Physics Letters*, **2014**, 104, 132401	3.4	9
30	Chiral liquid phase of simple quantum magnets. *Physical Review B*, **2017**, 96,	3.3	9
29	Spatial structure of correlations around a quantum impurity at the edge of a two-dimensional topological insulator. *Physical Review B*, **2017**, 96,	3.3	9

28	Cooper-pair transport through a Hubbard chain sandwiched between two superconductors: Density matrix renormalization group calculations. *Physical Review B*, **2007**, 75,	3.3	9
27	Coupled spin-12 ladders as microscopic models for non-Abelian chiral spin liquids. *Physical Review B* , **2017**, 95,	3.3	7
26	The Density Matrix Renormalization Group and its time-dependent variants **2011**,		7
25	Unconventional fermionic pairing states in a monochromatically tilted optical lattice. *Physical Review A*, **2017**, 95,	2.6	6
24	Many-Body Effects in FeN4 Center Embedded in Graphene. *Applied Sciences (Switzerland)*, **2020**, 10, 2542	2.6	6
23	Spin polaron in the J1□2 Heisenberg model. *Physical Review B*, **2008**, 77,	3.3	6
22	Machine learning approach to dynamical properties of quantum many-body systems. *Physical Review B*, **2019**, 100,	3.3	6
21	Interplay of charge, spin, and lattice degrees of freedom in the spectral properties of the one-dimensional Hubbard-Holstein model. *Physical Review B*, **2014**, 90,	3.3	5
20	Nonperturbative effects and indirect exchange interaction between quantum impurities on metallic (111) surfaces. *Physical Review B*, **2017**, 95,	3.3	5
19	Efficiency of fermionic quantum distillation. *Physical Review A*, **2017**, 96,	2.6	5
18	Anyonic liquids in nearly saturated spin chains. *Physical Review Letters*, **2014**, 113, 267201	7.4	5
17	A Numerically Exact Approach to Quantum Impurity Problems in Realistic Lattice Geometries. *Frontiers in Physics*, **2019**, 7,	3.9	4
16	Relaxation towards negative temperatures in bosonic systems: Generalized Gibbs ensembles and beyond integrability. *Physical Review A*, **2013**, 88,	2.6	4
15	Qubit-photon corner states in all dimensions. *Physical Review Research*, **2020**, 2,	3.9	4
14	Time- and momentum-resolved tunneling spectroscopy of pump-driven nonthermal excitations in Mott insulators. *Physical Review B*, **2019**, 100,	3.3	4
13	Spectral function of Mott-insulating Hubbard ladders: From fractionalized excitations to coherent quasiparticles. *Physical Review B*, **2019**, 99,	3.3	3
12	Unconventional field induced phases in a quantum magnet formed by free radical tetramers. *Physical Review B*, **2018**, 97,	3.3	3
11	Photoinduced Hund excitons in the breakdown of a two-orbital Mott insulator. *Physical Review B*, **2018**, 97,	3.3	3

List of Publications

10	Quantum Liquid with Strong Orbital Fluctuations: The Case of a Pyroxene Family. *Physical Review Letters*, **2019**, 123, 237204	7.4	3
9	Spin-1 two-impurity Kondo problem on a lattice. *Physical Review B*, **2018**, 97,	3.3	2
8	Exact real-space renormalization method and applications. *Physical Review B*, **2013**, 88,	3.3	2
7	From deconfined spinons to coherent magnons in an antiferromagnetic Heisenberg chain with long range interactions. *SciPost Physics*, **2021**, 10,	6.1	2
6	Quantum Spin Torque Driven Transmutation of an Antiferromagnetic Mott Insulator. *Physical Review Letters*, **2021**, 126, 197202	7.4	2
5	Excitonic density waves, biexcitons, and orbital-selective pairing in two-orbital correlated chains. *Physical Review B*, **2018**, 98,	3.3	1
4	Feiguin and Fisher reply. *Physical Review Letters*, **2014**, 113, 019602	7.4	1
3	Signatures of topological ground state degeneracy in Majorana islands. *Physical Review Research*, **2020**, 2,	3.9	1
2	Spintronics Meets Density Matrix Renormalization Group: Quantum Spin-Torque-Driven Nonclassical Magnetization Reversal and Dynamical Buildup of Long-Range Entanglement. *Physical Review X*, **2021**, 11,	9.1	1
1	A graphene edge-mediated quantum gate. *Applied Physics Letters*, **2021**, 119, 064001	3.4	