Stephen R Clark

List of Publications by Year
in descending order

59 papers	2,707 citations	172457 29 h-index	175258 52 g-index
59 all docs	59 docs citations	59 times ranked	2901 citing authors

#	Article	IF	Citations
1	Thermally driven polaron transport in conjugated polymers. Physical Review B, 2022, 105, .	3.2	5
2	Investigation of the non-equilibrium state of strongly correlated materials by complementary ultrafast spectroscopy techniques. New Journal of Physics, 2021, 23, 033025.	2.9	7
3	Neural-Network Quantum States for Spin-1 Systems: Spin-Basis and Parameterization Effects on Compactness of Representations. Entropy, 2021, 23, 879.	2.2	2
4	Compact neural-network quantum state representations of Jastrow and stabilizer states. Journal of Physics A: Mathematical and Theoretical, 2021, 54, 405304.	2.1	2
5	Tensor-Network Method to Simulate Strongly Interacting Quantum Thermal Machines. Physical Review X, 2020, 10, .	8.9	45
6	Parallel time-dependent variational principle algorithm for matrix product states. Physical Review B, 2020, 101, .	3.2	20
7	Controllable finite-momenta dynamical quasicondensation in the periodically driven one-dimensional Fermi-Hubbard model. Physical Review A, 2020, 101, .	2.5	5
8	Energy Current Rectification and Mobility Edges. Physical Review Letters, 2019, 123, 020603.	7.8	25
9	Hidden order in quantum many-body dynamics of driven-dissipative nonlinear photonic lattices. Physical Review A, 2019, 99, .	2.5	9
10	Thermodynamics of precision in quantum nonequilibrium steady states. Physical Review Research, 2019, 1, .	3.6	104
11	Unifying neural-network quantum states and correlator product states via tensor networks. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 135301.	2.1	50
12	Ground-state phase diagram of the one-dimensional tâˆ'J model with pair hopping terms. Physical Review B, 2018, 98, .	3.2	9
13	Ultraâ€Fast Control of Magnetic Relaxation in a Periodically Driven Hubbard Model. Annalen Der Physik, 2017, 529, 1700024.	2.4	15
14	The tensor network theory library. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 093102.	2.3	43
15	Dephasing enhanced spin transport in the ergodic phase of a manyâ€body localizable system. Annalen Der Physik, 2017, 529, 1600298.	2.4	29
16	Non-linear quantum-classical scheme to simulate non-equilibrium strongly correlated fermionic many-body dynamics. Scientific Reports, 2016, 6, 32940.	3.3	32
17	Few-qubit quantum-classical simulation of strongly correlated lattice fermions. EPJ Quantum Technology, 2016, 3, .	6.3	36
18	Possible light-induced superconductivity in K3C60 at high temperature. Nature, 2016, 530, 461-464.	27.8	572

#	Article	IF	Citations
19	Spatially resolved ultrafast magnetic dynamics initiated at a complex oxide heterointerface. Nature Materials, 2015, 14, 883-888.	27.5	109
20	Transport enhancement from incoherent coupling between one-dimensional quantum conductors. New Journal of Physics, 2014, 16, 053016.	2.9	11
21	What is a quantum simulator?. EPJ Quantum Technology, 2014, 1, .	6.3	89
22	Pressure-Dependent Relaxation in the Photoexcited Mott Insulator$ET-F_2TCNQ$: Influence of Hopping and Correlations on Quasiparticle Recombination Rates. Physical Review Letters, 2014, 112, 117801.	7.8	58
23	Optical Properties of a Vibrationally Modulated Solid State Mott Insulator. Scientific Reports, 2014, 4, 3823.	3.3	40
24	Quantifying the Nonclassicality of Operations. Physical Review Letters, 2013, 110, 070502.	7.8	30
25	Dephasing enhanced transport in nonequilibrium strongly correlated quantum systems. Physical Review B, 2013, 87, .	3.2	69
26	*Ab initio* derivation of Hubbard models for cold atoms in optical lattices. Physical Review A, 2013, 87, .	2.5	44
27	Heat transport in the *X**X**Z* spin chain: from ballistic to diffusive regimes and dephasing enhancement. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P07007.	2.3	59
28	Capturing the reâ€‘entrant behavior of oneâ€‘dimensional Boseâ€“Hubbard model. Physica Status Solidi (B): Basic Research, 2013, 250, 51-58.	1.5	6
29	Repulsively induced photon superbunching in driven resonator arrays. Physical Review A, 2013, 87, .	2.5	36
30	Solving search problems by strongly simulating quantum circuits. Scientific Reports, 2013, 3, 1235.	3.3	11
31	Non-equilibrium many-body effects in driven nonlinear resonator arrays. New Journal of Physics, 2012, 14, 103025.	2.9	52
32	Breathing oscillations of a trapped impurity in a Bose gas. Europhysics Letters, 2012, 98, 26001.	2.0	34
33	Reentrance and entanglement in the one-dimensional Bose-Hubbard model. Physical Review A, 2012, 86, .	2.5	27
34	Algebraically contractible topological tensor network states. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 015309.	2.1	21
35	Capturing long range correlations in two-dimensional quantum lattice systems using correlator product states. Physical Review B, 2011, 84, .	3.2	17
36	Categorical Tensor Network States. AIP Advances, 2011, 1, .	1.3	33

#	Article	IF	Citations
37	Quantum interference between charge excitation paths in a solid-state Mott insulator. Nature Physics, 2011, 7, 114-118.	16.7	134
38	Impurity transport through a strongly interacting bosonic quantum gas. Physical Review A, 2011, 84, .	2.5	45
39	Phonon resonances in atomic currents through Bose-Fermi mixtures in optical lattices. Physical Review A, 2010, 82, .	2.5	18
40	Exact matrix product solutions in the Heisenberg picture of an open quantum spin chain. New Journal of Physics, 2010, 12, 025005.	2.9	41
41	Entanglement consumption of instantaneous nonlocal quantum measurements. New Journal of Physics, 2010, 12, 083034.	2.9	22
42	DECOHERENCE OF A QUANTUM MEMORY COUPLED TO A COLLECTIVE SPIN BATH. International Journal of Quantum Information, 2010, 08, 271-294.	1.1	1
43	Dynamical simulations of classical stochastic systems using matrix product states. Physical Review E, 2010, 82, 036702.	2.1	32
44	Density Matrix Renormalization Group in the Heisenberg Picture. Physical Review Letters, 2009, 102, 057202.	7.8	52
45	Transport of strong-coupling polarons in optical lattices. New Journal of Physics, 2008, 10, 033015.	2.9	59
46	Adiabatic melting of two-component Mott-insulator states. Physical Review A, 2008, 77, .	2.5	2
47	Adiabatic evolution of on-site superposition states in a completely-connected optical lattice. Journal of Physics: Conference Series, 2008, 99, 012017.	0.4	1
48	Dissipative dynamics of atomic Hubbard models coupled to a phonon bath: dark state cooling of atoms within a Bloch band of an optical lattice. New Journal of Physics, 2007, 9, 44-44.	2.9	29
49	Dynamics, dephasing and clustering of impurity atoms in Bose–Einstein condensates. New Journal of Physics, 2007, 9, 411-411.	2.9	59
50	Fast initialization of a high-fidelity quantum register using optical superlattices. New Journal of Physics, 2007, 9, 221-221.	2.9	10
51	Graph state generation with noisy mirror-inverting spin chains. New Journal of Physics, 2007, 9, 202-202.	2.9	10
52	Polaron physics in optical lattices. Physical Review A, 2007, 76, .	2.5	128
53	Generation of twin Fock states via transition from a two-component Mott insulator to a superfluid. Physical Review A, 2007, 75, .	2.5	14
54	Dark-State Cooling of Atoms by Superfluid Immersion. Physical Review Letters, 2006, 97, 220403.	7.8	68

#	Article	IF	Citations
55	Signatures of the superfluid to Mott-insulator transition in the excitation spectrum of ultracold atoms. New Journal of Physics, 2006, 8, 160-160.	2.9	29
56	Efficient Dynamical Simulation of Strongly Correlated One-Dimensional Quantum Systems. Lecture Notes in Computer Science, 2006, , 555-563.	1.3	0
57	Efficient generation of graph states for quantum computation. New Journal of Physics, 2005, 7, 124-124.	2.9	85
58	Numerical analysis of coherent many-body currents in a single atom transistor. Physical Review A, 2005, 72, .	2.5	39
59	Dynamics of the superfluid to Mott-insulator transition in one dimension. Physical Review A, 2004, 70, .	2.5	73