BartÅ‚omiej Gardas

List of Publications by Year
in descending order

32 papers	551 citations	840776 11 h-index	642732 23 g-index
33 all docs	33 docs citations	33 times ranked	512 citing authors

#	Article	IF	Citations
1	Three phases of quantum annealing: Fast, slow, and very slow. Physical Review A, 2022, 105, .	2.5	6
2	Assessing the performance of quantum annealing with nonlinear driving. Physical Review A, 2022, 105, .	2.5	5
3	Brute-forcing spin-glass problems with CUDA. Computer Physics Communications, 2021, 260, 107728.	7.5	3
4	Approximate optimization, sampling, and spin-glass droplet discovery with tensor networks. Physical Review E, 2021, 104, 025308.	2.1	10
5	Parallel in time dynamics with quantum annealers. Scientific Reports, 2020, 10, 13534.	3.3	7
6	Separability gap and large-deviation entanglement criterion. Physical Review A, 2019, 100, .	2.5	5
7	Disorder-assisted graph coloring on quantum annealers. Physical Review A, 2019, 100, .	2.5	8
8	Counting defects in quantum computers with Graphics Processing Units. Journal of Computational Physics, 2018, 366, 320-326.	3.8	2
9	Defects in Quantum Computers. Scientific Reports, 2018, 8, 4539.	3.3	65
10	Quantum fluctuation theorem for error diagnostics in quantum annealers. Scientific Reports, 2018, 8, 17191.	3.3	36
11	Quantum neural networks to simulate many-body quantum systems. Physical Review B, 2018, 98, .	3.2	22
12	Dynamics of the quantum phase transition in the one-dimensional Bose-Hubbard model: Excitations and correlations induced by a quench. Physical Review B, 2017, 95, .	3.2	24
13	Non-hermitian quantum thermodynamics. Scientific Reports, 2016, 6, 23408.	3.3	58
14	Repeatability of measurements: Non-Hermitian observables and quantum Coriolis force. Physical Review A, 2016, 94, .	2.5	11
15	Space and time renormalization in phase transition dynamics. Physical Review B, 2016, 93, .	3.2	61
16	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="script">PT</mml:mi></mml:math>-symmetric slowing down of decoherence. Physical Review A, 2016, 94, .	2.5	32
17	Thermodynamic universality of quantum Carnot engines. Physical Review E, 2015, 92, 042126.	2.1	102
18	Energetics of an rf SQUID Coupled to Two Thermal Reservoirs. PLoS ONE, 2015, 10, e0143912.	2.5	1

#	Article	IF	Citations
19	GPU-based acceleration of free energy calculations in solid state physics. Computer Physics Communications, 2015, 192, 220-227.	7.5	17
20	Reply to Comment on â€˜Initial states of qubitâ€“environment models leading to conserved quantitiesâ€™. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 168002.	2.1	0
21	Reply to â€œComment on: â€˜Multi-photon Rabi model: Generalized parity and its applicationsâ€™ [Phys. Lett. A 377 (2013) 3205]â€•[Phys. Lett. A 378 (2014) 1969]. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 1970.	2.1	1
22	Multi-photon Rabi model: Generalized parity and its applications. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 3205-3208.	2.1	7
23	Relation Between Purity of an Open Qubit Dynamics and Its Initial Correlation with an Environment. International Journal of Theoretical Physics, 2013, 52, 1148-1159.	1.2	5
24	Initial states of qubitâ€“environment models leading to conserved quantities. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 235301.	2.1	1
25	New symmetry in the Rabi model. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 265302.	2.1	9
26	Notes on the Riccati operator equation in open quantum systems. Journal of Mathematical Physics, 2012, 53, 012106.	1.1	1
27	Stationary states of two-level open quantum systems. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 215306.	2.1	2
28	Experimentally feasible measures of distance between quantum operations. Quantum Information Processing, 2011, 10, 1-12.	2.2	22
29	Riccati equation and the problem of decoherence II: Symmetry and the solution of the Riccati equation. Journal of Mathematical Physics, 2011, 52, 042104.	1.1	4
30	Exact solution of the SchrÃ¶dinger equation with the spin-boson Hamiltonian. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 195301.	2.1	9
31	Exact reduced dynamics for a qubit in a precessing magnetic field and in contact with a heat bath. Physical Review A, 2010, 82, .	2.5	6
32	Riccati equation and the problem of decoherence. Journal of Mathematical Physics, 2010, 51, 062103.	1.1	9