Itay Hen

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5750449/publications.pdf

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47	1,195	394286	395590
papers	citations	19 h-index	33 g-index

48	48	48	756
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Calculating elements of matrix functions using divided differences. Computer Physics Communications, 2022, 271, 108219.	3.0	1
2	3-regular three-XORSAT planted solutions benchmark of classical and quantum heuristic optimizers. Quantum Science and Technology, 2022, 7, 025008.	2.6	18
3	Localization transition induced by programmable disorder. Physical Review B, 2022, 105, .	1.1	5
4	Determining quantum Monte Carlo simulability with geometric phases. Physical Review Research, 2021, 3, .	1.3	9
5	Quantum Algorithm for Time-Dependent Hamiltonian Simulation by Permutation Expansion. PRX Quantum, 2021, 2, .	3.5	14
6	An integral-free representation of the Dyson series using divided differences. New Journal of Physics, 2021, 23, 103035.	1.2	1
7	Discriminating nonisomorphic graphs with an experimental quantum annealer. Physical Review A, 2020, 102, .	1.0	2
8	Calculating the divided differences of the exponential function by addition and removal of inputs. Computer Physics Communications, 2020, 254, 107385.	3.0	8
9	Elucidating the Interplay between Nonâ€Stoquasticity and the Sign Problem. Advanced Quantum Technologies, 2020, 3, 1900108.	1.8	9
10	Permutation matrix representation quantum Monte Carlo. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 073105.	0.9	4
11	Hardness and Ease of Curing the Sign Problem for Two-Local Qubit Hamiltonians. SIAM Journal on Computing, 2020, 49, 1332-1362.	0.8	11
12	Equation Planting: A Tool for Benchmarking Ising Machines. Physical Review Applied, 2019, 12, .	1.5	10
13	Estimating the density of states of frustrated spin systems. New Journal of Physics, 2019, 21, 073065.	1.2	14
14	How quantum is the speedup in adiabatic unstructured search?. Quantum Information Processing, 2019, 18, 1.	1.0	6
15	Power of Pausing: Advancing Understanding of Thermalization in Experimental Quantum Annealers. Physical Review Applied, 2019, 11, .	1.5	70
16	On the computational complexity of curing non-stoquastic Hamiltonians. Nature Communications, 2019, 10, 1571.	5.8	38
17	Resolution of the sign problem for a frustrated triplet of spins. Physical Review E, 2019, 99, 033306.	0.8	10
18	Analog errors in Ising machines. Quantum Science and Technology, 2019, 4, 02LT03.	2.6	27

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19	Analog nature of quantum adiabatic unstructured search. New Journal of Physics, 2019, 21, 113025.	1.2	8
20	Analog errors in quantum annealing: doom and hope. Npj Quantum Information, 2019, 5, .	2.8	47
21	Fundamental Limitations to the Scalability of Quantum Annealing Optimizers. Advances in Parallel Computing, 2019, , .	0.3	0
22	Solving Quantum Spin Glasses with Off-Diagonal Expansion Quantum Monte Carlo. Journal of Physics: Conference Series, 2018, 1136, 012007.	0.3	0
23	Quantum annealing of the p -spin model under inhomogeneous transverse field driving. Physical Review A, 2018, 98, .	1.0	42
24	Off-diagonal series expansion for quantum partition functions. Journal of Statistical Mechanics: Theory and Experiment, 2018, 2018, 053102.	0.9	8
25	Advantages of Unfair Quantum Ground-State Sampling. Scientific Reports, 2017, 7, 1044.	1.6	15
26	Temperature Scaling Law for Quantum Annealing Optimizers. Physical Review Letters, 2017, 119, 110502.	2.9	44
27	Solving spin glasses with optimized trees of clustered spins. Physical Review E, 2017, 96, 022105.	0.8	4
28	Thermalization, Freeze-out, and Noise: Deciphering Experimental Quantum Annealers. Physical Review Applied, 2017, 8, .	1.5	33
29	Off-diagonal expansion quantum Monte Carlo. Physical Review E, 2017, 96, 063309.	0.8	18
30	Energetic Cost of Superadiabatic Quantum Computation. Frontiers in ICT, 2016, 3, .	3.6	33
31	Driver Hamiltonians for constrained optimization in quantum annealing. Physical Review A, 2016, 93, .	1.0	38
32	Practical engineering of hard spin-glass instances. Physical Review A, 2016, 94, .	1.0	22
33	Quantum Annealing for Constrained Optimization. Physical Review Applied, 2016, 5, .	1.5	57
34	Quantum annealing correction with minor embedding. Physical Review A, 2015, 92, .	1.0	67
35	Probing for quantum speedup in spin-glass problems with planted solutions. Physical Review A, 2015, 92, .	1.0	117
36	Unraveling Quantum Annealers using Classical Hardness. Scientific Reports, 2015, 5, 15324.	1.6	60

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37	Quantum gates with controlled adiabatic evolutions. Physical Review A, 2015, 91, .	1.0	31
38	How fast can quantum annealers count?. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 235304.	0.7	9
39	Continuous-time quantum algorithms for unstructured problems. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 045305.	0.7	13
40	Excitation gap from optimized correlation functions in quantum Monte Carlo simulations. Physical Review E, 2012, 85, 036705.	0.8	19
41	Solving the graph-isomorphism problem with a quantum annealer. Physical Review A, 2012, 86, .	1.0	28
42	Performance of the quantum adiabatic algorithm on random instances of two optimization problems on regular hypergraphs. Physical Review A, 2012, 86, .	1.0	77
43	Exponential complexity of the quantum adiabatic algorithm for certain satisfiability problems. Physical Review E, 2011, 84, 061152.	0.8	71
44	Strongly Interacting Atom Lasers in Three-Dimensional Optical Lattices. Physical Review Letters, 2010, 105, 180401.	2.9	14
45	No-Broadcasting Theorem and Its Classical Counterpart. Physical Review Letters, 2008, 100, 210502.	2.9	30
46	Quantum Algorithm for Simulating Hamiltonian Dynamics with an Off-diagonal Series Expansion. Quantum - the Open Journal for Quantum Science, 0, 5, 426.	0.0	14
47	De-Signing Hamiltonians for Quantum Adiabatic Optimization. Quantum - the Open Journal for Quantum Science, 0, 4, 334.	0.0	18