Wolfgang Lechner

List of Publications by Year
in descending order

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29	852	567281 15	526287 27
papers	citations	h-index	g-index

29	29	29	671
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Polynomial scaling enhancement in the ground-state preparation of Ising spin models via counterdiabatic driving. Physical Review A, 2022, 105, .	2.5	5
2	Quantum Optimization via Four-Body Rydberg Gates. Physical Review Letters, 2022, 128, 120503.	7.8	20
3	Demonstration and modeling of time-bin entangled photons from a quantum dot in a nanowire. AIP Advances, 2022, 12, 055115.	1.3	5
4	Modular Parity Quantum Approximate Optimization. PRX Quantum, 2022, 3, .	9.2	10
5	Two-parameter counter-diabatic driving in quantum annealing. Physical Review Research, 2021, 3, .	3.6	19
6	Qualifying quantum approaches for hard industrial optimization problems. A case study in the field of smart-charging of electric vehicles. EPJ Quantum Technology, 2021, 8, 12.	6.3	25
7	Minimal constraints in the parity formulation of optimization problems. New Journal of Physics, 2021, 23, 083039.	2.9	5
8	Embedding Overhead Scaling of Optimization Problems in Quantum Annealing. PRX Quantum, 2021, 2, .	9.2	16
9	Perspectives of quantum annealing: methods and implementations. Reports on Progress in Physics, 2020, 83, 054401.	20.1	226
10	Quantum expectation-maximization algorithm. Physical Review A, 2020, 101, .	2.5	6
11	Many-body quantum heat engines with shortcuts to adiabaticity. Physical Review Research, 2020, 2, .	3.6	35
12	Quantum Approximate Optimization With Parallelizable Gates. IEEE Transactions on Quantum Engineering, 2020, 1, 1-6.	4.9	27
13	Rapid counter-diabatic sweeps in lattice gauge adiabatic quantum computing. New Journal of Physics, 2019, 21, 043025.	2.9	39
14	Quantum phase transition with inhomogeneous driving in the Lechner-Hauke-Zoller model. Physical Review A, 2019, 100, .	2.5	13
15	Designing ground states of Hopfield networks for quantum state preparation. Physical Review A, 2019, 99, .	2.5	7
16	Programmable superpositions of Ising configurations. Physical Review A, 2018, 97, .	2.5	19
17	Glass Transitions in Monodisperse Cluster-Forming Ensembles: Vortex Matter in Type-1.5 Superconductors. Physical Review Letters, 2017, 118, 067001.	7.8	18
18	A transmon quantum annealer: decomposing many-body Ising constraints into pair interactions. Quantum Science and Technology, 2016, 1, 015008.	5.8	48

#	Article	IF	Citations
19	Tunable defect interactions and supersolidity in dipolar quantum gases on a lattice potential. Physical Review A, 2015, 92, .	2.5	10
20	Monodisperse cluster crystals: Classical and quantum dynamics. Physical Review E, 2015, 92, 052307.	2.1	19
21	Spatial Patterns in Rydberg Excitations from Logarithmic Pair Interactions. Physical Review Letters, 2015, 115, 125301.	7.8	4
22	Probing entanglement in adiabatic quantum optimization with trapped ions. Frontiers in Physics, 2015, 3, .	2.1	24
23	Entropy and kinetics of point defects in two-dimensional dipolar crystals. Physical Review E, 2015, 91, 032304.	2.1	3
24	A quantum annealing architecture with all-to-all connectivity from local interactions. Science Advances, 2015, 1, e1500838.	10.3	162
25	Role of Quantum Fluctuations in the Hexatic Phase of Cold Polar Molecules. Physical Review Letters, 2014, 112, 255301.	7.8	12
26	Self-organized defect strings in two-dimensional crystals. Physical Review E, 2013, 88, 060402.	2.1	15
27	From Classical to Quantum Glasses with Ultracold Polar Molecules. Physical Review Letters, 2013, 111, 185306.	7.8	37
28	A Quantum N-Queens Solver. Quantum - the Open Journal for Quantum Science, 0, 3, 149.	0.0	11
29	Multi-spin counter-diabatic driving in many-body quantum Otto refrigerators. Quantum - the Open Journal for Quantum Science, 0, 4, 377.	0.0	12