Joshua A Izaac

List of Publications by Year
in descending order

20 papers	1,859 citations	759233 12 h-index	996975 15 g-index
20 all docs	20 docs citations	20 times ranked	1304 citing authors

#	Article	IF	Citations
1	Graph isomorphism and Gaussian boson sampling. Special Matrices, 2021, 9, 166-196.	0.5	20
2	Quantum circuits with many photons on a programmable nanophotonic chip. Nature, 2021, 591, 54-60.	27.8	304
3	Fast Simulation of Bosonic Qubits via Gaussian Functions in Phase Space. PRX Quantum, 2021, 2, .	9.2	14
4	Variational quantum algorithm for molecular geometry optimization. Physical Review A, 2021, 104, .	2.5	15
5	Experimental Parity-Time Symmetric Quantum Walks for Centrality Ranking on Directed Graphs. Physical Review Letters, 2020, 125, 240501.	7.8	14
6	OpenFermion: the electronic structure package for quantum computers. Quantum Science and Technology, 2020, 5, 034014.	5.8	214
7	Applications of near-term photonic quantum computers: software and algorithms. Quantum Science and Technology, 2020, 5, 034010.	5.8	64
8	Production of photonic universal quantum gates enhanced by machine learning. Physical Review A, 2019, 100, .	2.5	37
9	Evaluating analytic gradients on quantum hardware. Physical Review A, 2019, 99, .	2.5	447
10	Machine learning method for state preparation and gate synthesis on photonic quantum computers. Quantum Science and Technology, 2019, 4, 024004.	5.8	89
11	The Walrus: a library for the calculation of hafnians, Hermite polynomials and Gaussian boson sampling. Journal of Open Source Software, 2019, 4, 1705.	4.6	39
12	Computational Quantum Mechanics. Undergraduate Lecture Notes in Physics, 2018, , .	0.1	31
13	Reconfigurable magnetic domain wall pinning using vortex-generated magnetic fields. Applied Physics Letters, 2017, 110, 182404.	3.3	4
14	People take more risks when wearing helmets, potentially negating safety benefits. Science, 2016, , .	12.6	0
15	Phase-modified CTQW unable to distinguish strongly regular graphs efficiently. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 265301.	2.1	6
16	pyCTQW: A continuous-time quantum walk simulator on distributed memory computers. Computer Physics Communications, 2015, 186, 81-92.	7.5	17
17	Strawberry Fields: A Software Platform for Photonic Quantum Computing. Quantum - the Open Journal for Quantum Science, 0, 3, 129.	0.0	151
18	Quantum Natural Gradient. Quantum - the Open Journal for Quantum Science, 0, 4, 269.	0.0	200

#	Article	IF	Citations
19	Transfer learning in hybrid classical-quantum neural networks. Quantum - the Open Journal for Quantum Science, 0, 4, 340.	0.0	137
20	General parameter-shift rules for quantum gradients. Quantum - the Open Journal for Quantum Science, 0, 6, 677.	0.0	56