Kosuke Mitarai

List of Publications by Year
in descending order

21 papers	2,407 citations	623734 14 h-index	839539 18 g-index
21 all docs	21 docs citations	21 times ranked	1095 citing authors

#	Article	IF	Citations
1	Variational quantum algorithms. Nature Reviews Physics, 2021, 3, 625-644.	26.6	930
2	Quantum circuit learning. Physical Review A, 2018, 98, .	2.5	643
3	Subspace-search variational quantum eigensolver for excited states. Physical Review Research, 2019, 1, .	3.6	178
4	Qulacs: a fast and versatile quantum circuit simulator for research purpose. Quantum - the Open Journal for Quantum Science, 0, 5, 559.	0.0	112
5	Methodology for replacing indirect measurements with direct measurements. Physical Review Research, 2019, 1, .	3.6	93
6	Boosting Computational Power through Spatial Multiplexing in Quantum Reservoir Computing. Physical Review Applied, 2019, 11, .	3.8	77
7	Orbital optimized unitary coupled cluster theory for quantum computer. Physical Review Research, 2020, 2, .	3.6	66
8	Theory of analytical energy derivatives for the variational quantum eigensolver. Physical Review Research, 2020, 2, .	3.6	51
9	Quantum analog-digital conversion. Physical Review A, 2019, 99, .	2.5	49
10	Variational quantum algorithm for nonequilibrium steady states. Physical Review Research, 2020, 2, .	3.6	31
11	Deep Variational Quantum Eigensolver: A Divide-And-Conquer Method for Solving a Larger Problem with Smaller Size Quantum Computers. PRX Quantum, 2022, 3, .	9.2	28
12	Constructing a virtual two-qubit gate by sampling single-qubit operations. New Journal of Physics, 2021, 23, 023021.	2.9	24
13	Experimental quantum kernel trick with nuclear spins in a solid. Npj Quantum Information, 2021, 7, .	6.7	24
14	Generalization of the Output of a Variational Quantum Eigensolver by Parameter Interpolation with a Low-depth Ansatz. Physical Review Applied, 2019, 11, .	3.8	18
15	Learning temporal data with a variational quantum recurrent neural network. Physical Review A, 2021, 103, .	2.5	17
16	Computational power of one- and two-dimensional dual-unitary quantum circuits. Quantum - the Open Journal for Quantum Science, 0, 6, 631.	0.0	17
17	Overhead for simulating a non-local channel with local channels by quasiprobability sampling. Quantum - the Open Journal for Quantum Science, 0, 5, 388.	0.0	16
18	Calculating transition amplitudes by variational quantum deflation. Physical Review Research, 2022, 4, .	3.6	15

#	Article	IF	Citations
19	An advanced 2ï‰ method enabling thermal conductivity measurement for various sample thicknesses: From thin films to bulk materials. Journal of Applied Physics, 2020, 128, 015102.	2.5	10
20	Toward NMR Quantum Reservoir Computing. Natural Computing Series, 2021, , 451-458.	2.2	4
21	Sampling-based quasiprobability simulation for fault-tolerant quantum error correction on the surface codes under coherent noise. Physical Review Research, 2021, 3, .	3.6	4