Ying Li

List of Publications by Year
in descending order

61 papers	**3,232** citations	257450 **24** h-index	168389 **53** g-index
61 all docs	**61** docs citations	**61** times ranked	**2387** citing authors

#	Article	IF	Citations
1	Efficient Variational Quantum Simulator Incorporating Active Error Minimization. Physical Review X, 2017, 7, .	8.9	409
2	Practical Quantum Error Mitigation for Near-Future Applications. Physical Review X, 2018, 8, .	8.9	317
3	Variational ansatz-based quantum simulation of imaginary time evolution. Npj Quantum Information, 2019, 5, .	6.7	285
4	Photonic polarization gears for ultra-sensitive angular measurements. Nature Communications, 2013, 4, 2432.	12.8	257
5	Theory of variational quantum simulation. Quantum - the Open Journal for Quantum Science, 0, 3, 191.	0.0	245
6	Quantum-state transfer via the ferromagnetic chain in a spatially modulated field. Physical Review A, 2005, 71, .	2.5	146
7	Topological quantum computing with a very noisy network and local error rates approaching one percent. Nature Communications, 2013, 4, 1756.	12.8	144
8	Variational Quantum Simulation of General Processes. Physical Review Letters, 2020, 125, 010501.	7.8	137
9	Quantum-state transmission via a spin ladder as a robust data bus. Physical Review A, 2005, 71, .	2.5	123
10	16-qubit IBM universal quantum computer can be fully entangled. Npj Quantum Information, 2018, 4, .	6.7	100
11	Learning-Based Quantum Error Mitigation. PRX Quantum, 2021, 2, .	9.2	82
12	Quantum computation with universal error mitigation on a superconducting quantum processor. Science Advances, 2019, 5, eaaw5686.	10.3	79
13	Variational algorithms for linear algebra. Science Bulletin, 2021, 66, 2181-2188.	9.0	72
14	Error-mitigated quantum gates exceeding physical fidelities in a trapped-ion system. Nature Communications, 2020, 11, 587.	12.8	60
15	Resource Costs for Fault-Tolerant Linear Optical Quantum Computing. Physical Review X, 2015, 5, .	8.9	57
16	Robust-Fidelity Atom-Photon Entangling Gates in the Weak-Coupling Regime. Physical Review Letters, 2012, 109, 160504.	7.8	48
17	A magic stateâ€™s fidelity can be superior to the operations that created it. New Journal of Physics, 2015, 17, 023037.	2.9	42
18	Fault Tolerant Quantum Computation with Nondeterministic Gates. Physical Review Letters, 2010, 105, 250502.	7.8	41

#	ARTICLE	IF	CITATIONS
19	Mitigating algorithmic errors in a Hamiltonian simulation. Physical Review A, 2019, 99, .	2.5	40
20	The Peierls distorted chain as a quantum data bus for quantum state transfer. Europhysics Letters, 2008, 84, 30004.	2.0	38
21	Thermal States as Universal Resources for Quantum Computation with Always-On Interactions. Physical Review Letters, 2011, 107, 060501.	7.8	38
22	Operator Quantum Zeno Effect: Protecting Quantum Information with Noisy Two-Qubit Interactions. Physical Review Letters, 2013, 110, 100505.	7.8	35
23	Characterizing entanglement by momentum jump in the frustrated Heisenberg ring at a quantum phase transition. Physical Review A, 2005, 72, .	2.5	33
24	Stabilizers as a design tool for new forms of the Lechner-Hauke-Zoller annealer. Science Advances, 2016, 2, e1601246.	10.3	31
25	High threshold distributed quantum computing with three-qubit nodes. New Journal of Physics, 2012, 14, 093008.	2.9	28
26	Quantum-state transfer characterized by mode entanglement. Physical Review A, 2005, 72, .	2.5	24
27	Atomic entanglement versus visibility of photon interference for quantum criticality of a hybrid system. Physical Review A, 2008, 77, .	2.5	24
28	Dual-state purification for practical quantum error mitigation. Physical Review A, 2022, 105, .	2.5	22
29	Long range failure-tolerant entanglement distribution. New Journal of Physics, 2013, 15, 023012.	2.9	21
30	â€˜Momentum rejuvenationâ€™ underlies the phenomenon of noise-assisted quantum energy flow. New Journal of Physics, 2015, 17, 013057.	2.9	18
31	Interference-based molecular transistors. Scientific Reports, 2016, 6, 33686.	3.3	17
32	Double quantum dot memristor. Physical Review B, 2017, 96, .	3.2	15
33	Accelerated Quantum Monte Carlo with Mitigated Error on Noisy Quantum Computer. PRX Quantum, 2021, 2, .	9.2	15
34	Electrically driven spin resonance in a bent disordered carbon nanotube. Physical Review B, 2014, 90, .	3.2	13
35	Hierarchical surface code for network quantum computing with modules of arbitrary size. Physical Review A, 2016, 94, .	2.5	13
36	Quantum algorithm for the simulation of open-system dynamics and thermalization. Physical Review A, 2020, 101, .	2.5	13

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37	A query‐based quantum eigensolver. Quantum Engineering, 2020, 2, e49.	2.5	12
38	Quantum Zeno effect of general quantum operations. Physical Review A, 2013, 88, .	2.5	11
39	Perfect Transfer of Many-Particle Quantum State via High-Dimensional Systems with Spectrum-Matched Symmetry. Communications in Theoretical Physics, 2007, 48, 445-448.	2.5	10
40	Noise Threshold and Resource Cost of Fault-Tolerant Quantum Computing with Majorana Fermions in Hybrid Systems. Physical Review Letters, 2016, 117, 120403.	7.8	10
41	Learning time-dependent noise to reduce logical errors: real time error rate estimation in quantum error correction. New Journal of Physics, 2017, 19, 123032.	2.9	10
42	Fault-tolerant fermionic quantum computation based on color code. Physical Review A, 2018, 98, .	2.5	10
43	One-dimensional quantum computing with a 'segmented chain' is feasible with today's gate fidelities. Npj Quantum Information, 2018, 4, .	6.7	10
44	Detecting continuous spontaneous localization with charged bodies in a Paul trap. Physical Review A, 2017, 95, .	2.5	9
45	Exact results for the criticality of quench dynamics in quantum Ising models. Physical Review B, 2009, 80, .	3.2	8
46	Transitions in the quantum computational power. Physical Review A, 2014, 89, .	2.5	8
47	Measurement-Based Quantum Computation on Two-Body Interacting Qubits with Adiabatic Evolution. Physical Review Letters, 2014, 113, 180501.	7.8	8
48	Simulation of memristive synapses and neuromorphic computing on a quantum computer. Physical Review Research, 2021, 3, .	3.6	8
49	Simulating Finite-Time Isothermal Processes with Superconducting Quantum Circuits. Entropy, 2021, 23, 353.	2.2	7
50	Photonic multiqubit states from a single atom. Physical Review A, 2011, 83, .	2.5	6
51	Long-distance entanglement generation with scalable and robust two-dimensional quantum network. Physical Review A, 2012, 85, .	2.5	6
52	Self-consistent tomography of temporally correlated errors. Communications in Theoretical Physics, 2021, 73, 075101.	2.5	5
53	Scalable Evaluation of Quantum-Circuit Error Loss Using Clifford Sampling. Physical Review Letters, 2021, 126, 080501.	7.8	4
54	Quantum computation with noisy operations. Physical Review A, 2015, 91, .	2.5	3

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55	Modeling Quantum Devices and the Reconstruction of Physics in Practical Systems. Physical Review Letters, 2019, 123, 140405.	7.8	3
56	Absorption and delayed reemission in an array of atoms strongly coupled to a waveguide. Physical Review A, 2020, 102, .	2.5	1
57	Quasiparticle localisation via frequent measurements. Quantum Information and Computation, 2014, 14, 1136-1148.	0.3	1
58	THE PHOTON-LIKE FLYING QUBIT IN THE COUPLED CAVITY ARRAY. International Journal of Quantum Information, 2012, 10, 1250002.	1.1	0
59	A QUANTUM SIMULATOR FOR PROBING MOTT LOBES VIA THE AC JOSEPHSON EFFECT. International Journal of Quantum Information, 2013, 11, 1350049.	1.1	0
60	Perturbative tomography of small errors in quantum gates. Physical Review A, 2021, 103, .	2.5	0
61	Gate-set tomography of fermionic systems using Majorana-fermion operations. Physical Review A, 2021, 103, .	2.5	0