Xiaobo Zhu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/466608/publications.pdf

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40	3,296	236925	289244
papers	citations	25 h-index	40 g-index

41	41	41	2574
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Experimental exploration of five-qubit quantum error-correcting code with superconducting qubits. National Science Review, 2022, 9, nwab011.	9.5	22
2	Quantum computational advantage via 60-qubit 24-cycle random circuit sampling. Science Bulletin, 2022, 67, 240-245.	9.0	114
3	Ruling Out Real-Valued Standard Formalism of Quantum Theory. Physical Review Letters, 2022, 128, 040403.	7.8	31
4	Observation of Thermalization and Information Scrambling in a Superconducting Quantum Processor. Physical Review Letters, 2022, 128, 160502.	7.8	26
5	Realization of an Error-Correcting Surface Code with Superconducting Qubits. Physical Review Letters, 2022, 129, .	7.8	94
6	Emulating Quantum Teleportation of a Majorana Zero Mode Qubit. Physical Review Letters, 2021, 126, 090502.	7.8	30
7	Quantum walks on a programmable two-dimensional 62-qubit superconducting processor. Science, 2021, 372, 948-952.	12.6	202
8	Observation of Strong and Weak Thermalization in a Superconducting Quantum Processor. Physical Review Letters, 2021, 127, 020602.	7.8	16
9	Experimental characterization of the quantum many-body localization transition. Physical Review Research, 2021, 3, .	3.6	27
10	Experimental Quantum Generative Adversarial Networks for Image Generation. Physical Review Applied, 2021, 16, .	3.8	87
11	Strong Quantum Computational Advantage Using a Superconducting Quantum Processor. Physical Review Letters, 2021, 127, 180501.	7.8	491
12	Realization of High-Fidelity Controlled-Phase Gates in Extensible Superconducting Qubits Design with a Tunable Coupler. Chinese Physics Letters, 2021, 38, 100301.	3.3	13
13	Ergodic-Localized Junctions in a Periodically Driven Spin Chain. Physical Review Letters, 2020, 125, 170503.	7.8	18
14	Superconducting quantum computing: a review. Science China Information Sciences, 2020, 63, 1.	4.3	152
15	Demonstration of Adiabatic Variational Quantum Computing with a Superconducting Quantum Coprocessor. Physical Review Letters, 2020, 125, 180501.	7.8	33
16	Verification of a resetting protocol for an uncontrolled superconducting qubit. Npj Quantum Information, 2020, 6, .	6.7	2
17	Quantum-Teleportation-Inspired Algorithm for Sampling Large Random Quantum Circuits. Physical Review Letters, 2020, 124, 080502.	7.8	14
18	Propagation and Localization of Collective Excitations on a 24-Qubit Superconducting Processor. Physical Review Letters, 2019, 123, 050502.	7.8	87

#	Article	IF	Citations
19	12 superconducting qubits for quantum walks. Frontiers of Physics, 2019, 14, 1.	5.0	3
20	Realisation of high-fidelity nonadiabatic CZ gates with superconducting qubits. Npj Quantum Information, 2019, 5, .	6.7	23
21	Synthesis of antisymmetric spin exchange interaction and chiral spin clusters in superconducting circuits. Nature Physics, 2019, 15, 382-386.	16.7	58
22	Strongly correlated quantum walks with a 12-qubit superconducting processor. Science, 2019, 364, 753-756.	12.6	169
23	Electron paramagnetic resonance spectroscopy using a single artificial atom. Communications Physics, 2019, 2, .	5.3	24
24	Genuine 12-Qubit Entanglement on a Superconducting Quantum Processor. Physical Review Letters, 2019, 122, 110501.	7.8	136
25	Emulating Many-Body Localization with a Superconducting Quantum Processor. Physical Review Letters, 2018, 120, 050507.	7.8	189
26	An efficient and compact switch for quantum circuits. Npj Quantum Information, 2018, 4, .	6.7	39
27	Dephasing-Insensitive Quantum Information Storage and Processing with Superconducting Qubits. Physical Review Letters, 2018, 121, 130501.	7.8	33
28	Demonstration of Topological Robustness of Anyonic Braiding Statistics with a Superconducting Quantum Circuit. Physical Review Letters, 2018, 121, 030502.	7.8	40
29	Continuous-variable geometric phase and its manipulation for quantum computation in a superconducting circuit. Nature Communications, 2017, 8, 1061.	12.8	64
30	10-Qubit Entanglement and Parallel Logic Operations with a Superconducting Circuit. Physical Review Letters, 2017, 119, 180511.	7.8	313
31	Solving Systems of Linear Equations with a Superconducting Quantum Processor. Physical Review Letters, 2017, 118, 210504.	7.8	76
32	Fabrication and characterization of ultra-low noise narrow and wide band Josephson parametric amplifiers. Chinese Physics B, 2017, 26, 094203.	1.4	13
33	Electron paramagnetic resonance spectroscopy using a direct current-SQUID magnetometer directly coupled to an electron spin ensemble. Applied Physics Letters, 2016, 108, 052601.	3.3	21
34	Engineering entangled microwave photon states through multiphoton interactions between two cavity fields and a superconducting qubit. Scientific Reports, 2016, 6, 23646.	3.3	15
35	Improving the lifetime of the nitrogen-vacancy-center ensemble coupled with a superconducting flux qubit by applying magnetic fields. Physical Review A, 2015, 91, .	2.5	24
36	Preparation of interlayer surface tailored protonated double-layered perovskite H₂CaTa₂O₇with n-alcohols, and their photocatalytic activity. RSC Advances, 2014, 4, 4047-4054.	3.6	40

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37	<scp>d</scp>-Glucopyranose-modified compound of Ruddlesdenâ€“Popper phases H₂CaTa₂O₇: characterization and intercalation with Ag. Journal of Materials Chemistry A, 2014, 2, 15590.	10.3	11
38	Towards Realizing a Quantum Memory for a Superconducting Qubit: Storage and Retrieval of Quantum States. Physical Review Letters, 2013, 111, 107008.	7.8	97
39	Coherent coupling of a superconducting flux qubit to an electron spin ensemble in diamond. Nature, 2011, 478, 221-224.	27.8	387
40	Coherent operation of a gap-tunable flux qubit. Applied Physics Letters, 2010, 97, .	3.3	62