Random access quantum information processors using electrodynamics

Nature Communications 8, 1904 DOI: 10.1038/s41467-017-02046-6

Citation Report

#	Article	IF	CITATIONS
1	Analytical modeling of parametrically modulated transmon qubits. Physical Review A, 2018, 97, .	2.5	53
2	Demonstration of universal parametric entangling gates on a multi-qubit lattice. Science Advances, 2018, 4, eaao3603.	10.3	181
3	Creation and control of multi-phonon Fock states in a bulk acoustic-wave resonator. Nature, 2018, 563, 666-670.	27.8	176
4	Nonadiabatic Geometric Quantum Computation with Parametrically Tunable Coupling. Physical Review Applied, 2018, 10, .	3.8	68
5	Perfect Quantum State Transfer in a Superconducting Qubit Chain with Parametrically Tunable Couplings. Physical Review Applied, 2018, 10, .	3.8	113
6	Microwave dual-mode resonators for coherent spin-photon coupling. Journal of Applied Physics, 2018, 124, .	2.5	8
7	Compact 3D quantum memory. Applied Physics Letters, 2018, 112, .	3.3	13
8	Input-output theory for superconducting and photonic circuits that contain weak retroreflections and other weak pseudocavities. Physical Review A, 2018, 98, .	2.5	9
9	Coupling a Superconducting Quantum Circuit to a Phononic Crystal Defect Cavity. Physical Review X, 2018, 8, .	8.9	46
10	Interacting Floquet polaritons. Nature, 2019, 571, 532-536.	27.8	38
11	Suppression of Qubit Crosstalk in a Tunable Coupling Superconducting Circuit. Physical Review Applied, 2019, 12, .	3.8	129
12	Microwave Quantum Acoustic Processor. , 2019, , .		2
13	Experimental data from a quantum computer verifies the generalized Pauli exclusion principle. Communications Physics, 2019, 2, .	5.3	17
14	Interacting Qubit-Photon Bound States with Superconducting Circuits. Physical Review X, 2019, 9, .	8.9	59
15	A quantum engineer's guide to superconducting qubits. Applied Physics Reviews, 2019, 6, .	11.3	909
16	Resolving Phonon Fock States in a Multimode Cavity with a Double-Slit Qubit. Physical Review X, 2019, 9, .	8.9	59
17	Asymptotic improvements to quantum circuits via qutrits. , 2019, , .		48
18	Mode Structure in Superconducting Metamaterial Transmission-Line Resonators. Physical Review Applied, 2019, 11, .	3.8	18

ATION RED

		CITATION REPORT		
#	Article		IF	CITATIONS
19	Circuit quantization in the presence of time-dependent external flux. Physical Review B,	2019, 99, .	3.2	36
20	Universal quantum computing with thermal state bosonic systems. Physical Review A, 2	:019, 99, .	2.5	7
21	Readout of a weakly coupled qubit through the use of an auxiliary mode. Physics Letters General, Atomic and Solid State Physics, 2019, 383, 1536-1542.	s, Section A:	2.1	3
22	A tunable Josephson platform to explore many-body quantum optics in circuit-QED. Npj Information, 2019, 5, .	Quantum	6.7	59
23	Deterministic bidirectional communication and remote entanglement generation betwe superconducting qubits. Npj Quantum Information, 2019, 5, .	en.	6.7	44
24	Hardware-Efficient Quantum Random Access Memory with Hybrid Quantum Acoustic S Review Letters, 2019, 123, 250501.	ystems. Physical	7.8	86
25	Landau-Zener-Stückelberg Interference in a Multimode Electromechanical System in t Regime. Physical Review Letters, 2019, 123, 240401.	he Quantum	7.8	21
26	Engineering bilinear mode coupling in circuit QED: Theory and experiment. Physical Revi	iew A, 2019, 99, .	2.5	34
27	Superconducting circuit quantum computing with nanomechanical resonators as stora Science and Technology, 2019, 4, 015006.	ge. Quantum	5.8	50
28	Quantum control of an oscillator using a stimulated Josephson nonlinearity. Nature Phy 211-217.	sics, 2020, 16,	16.7	32
29	Demonstration of a parametrically activated entangling gate protected from flux noise. Review A, 2020, 101, .	Physical	2.5	54
30	Superconducting Qubits: Current State of Play. Annual Review of Condensed Matter Ph 369-395.	ysics, 2020, 11,	14.5	728
31	Instantaneous braids and Dehn twists in topologically ordered states. Physical Review B	, 2020, 102, .	3.2	8
32	Universal Logical Gates on Topologically Encoded Qubits via Constant-Depth Unitary Ci Physical Review Letters, 2020, 125, 050502.	rcuits.	7.8	8
33	Two-acoustic-cavity interaction mediated by superconducting artificial atoms. Quantum Processing, 2020, 19, 1.	ı Information	2.2	2
34	Virtualized Logical Qubits: A 2.5D Architecture for Error-Corrected Quantum Computing	g. , 2020, , .		4
35	Coupling a Superconducting Qubit to a Left-Handed Metamaterial Resonator. Physical F 2020, 14, .	leview Applied,	3.8	12
36	Multimode Storage of Quantum Microwave Fields in Electron Spins over 100Âms. Physi Letters, 2020, 125, 210505.	cal Review	7.8	21

#	Article	IF	Citations
37	Implementation of XY entangling gates with a single calibrated pulse. Nature Electronics, 2020, 3, 744-750.	26.0	60
38	Floquet-Engineered Enhancement of Coherence Times in a Driven Fluxonium Qubit. Physical Review Applied, 2020, 14, .	3.8	21
39	Exotic Quantum States of Circuit Quantum Electrodynamics in the Ultra‧trong Coupling Regime. Advanced Quantum Technologies, 2020, 3, 2000085.	3.9	3
40	Bosonic quantum error correction codes in superconducting quantum circuits. Fundamental Research, 2021, 1, 50-67.	3.3	83
41	Quantum Electrodynamics in a Topological Waveguide. Physical Review X, 2021, 11, .	8.9	89
42	Quantum Computer Systems for Scientific Discovery. PRX Quantum, 2021, 2, .	9.2	142
43	Nonadiabatic geometric quantum gates that are insensitive to qubit-frequency drifts. Physical Review A, 2021, 103, .	2.5	11
44	Quantum Information Scrambling on a Superconducting Qutrit Processor. Physical Review X, 2021, 11, .	8.9	126
45	Resilience of Quantum Random Access Memory to Generic Noise. PRX Quantum, 2021, 2, .	9.2	27
46	Searching for Dark Matter with a Superconducting Qubit. Physical Review Letters, 2021, 126, 141302.	7.8	73
47	Realizing nonadiabatic holonomic quantum computation beyond the three-level setting. Physical Review A, 2021, 103, .	2.5	10
48	Qutrit Randomized Benchmarking. Physical Review Letters, 2021, 126, 210504.	7.8	59
49	Realization of invariant-based shortcuts to population inversion with a superconducting circuit. Applied Physics Letters, 2021, 118, 224003.	3.3	3
50	Circuit quantum electrodynamics. Reviews of Modern Physics, 2021, 93, .	45.6	634
51	Number Partitioning With Grover's Algorithm in Central Spin Systems. PRX Quantum, 2021, 2, .	9.2	14
52	Virtual Logical Qubits: A Compact Architecture for Fault-Tolerant Quantum Computing. IEEE Micro, 2021, 41, 95-101.	1.8	2
53	On-Demand Storage and Retrieval of Microwave Photons Using a Superconducting Multiresonator Quantum Memory. Physical Review Letters, 2021, 127, 010503.	7.8	16
54	Energy-participation quantization of Josephson circuits. Npj Quantum Information, 2021, 7, .	6.7	41

#	ARTICLE	IF	Citations
55	display="inline"> <mml:math xmins:mml="http://www.ws.org/1998/Math/Math/Math/Math/Math/Math/Math/Math</td"><td>7.8</td><td>30</td></mml:math>	7.8	30
56	Quantum control of bosonic modes with superconducting circuits. Science Bulletin, 2021, 66, 1789-1805.	9.0	45
57	Emerging Technologies for Quantum Computing. IEEE Micro, 2021, 41, 41-47.	1.8	4
58	Time-sliced quantum circuit partitioning for modular architectures. , 2020, , .		19
59	Quantum Information Processing Algorithms with Emphasis on Machine Learning. , 2021, , .		14
60	Improved Quantum Circuits via Intermediate Qutrits. ACM Transactions on Quantum Computing, 2020, 1, 1-25.	4.3	9
61	Memory-Equipped Quantum Architectures. , 2020, , .		0
62	Characterization and Tomography of a Hidden Qubit. Physical Review X, 2021, 11, .	8.9	4
63	Bosonic indistinguishability-dependent contextuality. Physical Review A, 2022, 105, .	2.5	2
64	Building a Fault-Tolerant Quantum Computer Using Concatenated Cat Codes. PRX Quantum, 2022, 3, .	9.2	101
65	Quantum Approach to Accelerate Finite Volume Method on Steady Computational Fluid Dynamics Problems. Quantum Information Processing, 2022, 21, 1.	2.2	9
66	QULATIS: A Quantum Error Correction Methodology toward Lattice Surgery. , 2022, , .		5
67	Entanglement dynamics between Ising spins and a central ancilla. Physical Review A, 2022, 105, .	2.5	3
68	Dynamical Sweet Spot Engineering via Two-Tone Flux Modulation of Superconducting Qubits. PRX Quantum, 2022, 3, .	9.2	11
69	Multimode photon blockade. Nature Physics, 2022, 18, 879-884.	16.7	14
70	Mode-Manipulated Multimode Cavity for Quantum Memory. IEEE Transactions on Quantum Engineering, 2022, 3, 1-10.	4.9	1
71	Controlling Atom-Photon Bound States in an Array of Josephson-Junction Resonators. Physical Review X, 2022, 12, .	8.9	19
72	Localization and delocalization in networks with varied connectivity. Physical Review A, 2022, 106, .	2.5	1

ARTICLE IF CITATIONS # Fault tolerance in qudit circuit design. Physical Review A, 2022, 106, . 73 2.5 1 Down-conversion of a single photon as a probe of many-body localization. Nature, 2023, 613, 650-655. 74 27.8 Toward Highly Efficient Multimode Superconducting Quantum Memory. Physical Review Applied, 2023, 75 3.8 8 19,. Integrated Multiresonator Quantum Memory. Entropy, 2023, 25, 623. Multi-Mode Bus Coupling Architecture of Superconducting Quantum Processor. Chinese Physics 77 3.3 0 Letters, 2023, 40, 010301. Proposal for quantum memory miniaturization in superconducting circuit QED. Physical Review A, 2.5 2023, 107, . 79 Modular Tunable Coupler for Superconducting Circuits. Physical Review Applied, 2023, 19, . 3.8 3 Resonance Fluorescence of a Chiral Artificial Atom. Physical Review X, 2023, 13, . 8.9 Exceptional-point-assisted entanglement, squeezing, and reset in a chain of three superconducting 81 3.6 0 resonators. Physical Review Research, 2023, 5, . Three-level <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="normal">i></mml:mi></mml:math> -type microwave memory via 3.6 parametric-modulation-induced transparency in a superconducting quantum circuit. Physical Review . Research. 2023. 5 Data centers with quantum random access memory and quantum networks. Physical Review A, 2023, 83 1 2.5 108,. Voltage-activated parametric entangling gates based on gatemon qubits. Physical Review Applied, 2023, 3.8 Floquet-tailored Rydberg interactions. Nature Communications, 2023, 14, . 85 12.8 1 QuCloud+: A Holistic Qubit Mapping Scheme for Single/Multi-programming on 2D/3D NISQ Quantum Computers. Transactions on Architecture and Code Optimization, 2024, 21, 1-27. Two-qubit entangling gates for superconducting quantum computers. Results in Physics, 2024, 56, 87 4.1 1 107236. Strong Dispersive Coupling Between a Mechanical Resonator and a Fluxonium Superconducting Qubit. PRX Quantum, 2023, 4, . Engineering multimode interactions in circuit quantum acoustodynamics. Nature Physics, 2024, 20, 89 16.7 1 564-570. Sequential quantum simulation of spin chains with a single circuit QED device. Physical Review A, 2024, 109, .

#	Article	IF	CITATIONS
91	Graph states of atomic ensembles engineered by photon-mediated entanglement. Nature Physics, 0, , .	16.7	0