R Vijay

List of Publications by Year in descending order

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29 papers	2,735 citations	331259 21 h-index	476904 29 g-index
29 all docs	29 docs citations	29 times ranked	2188 citing authors

#	Article	IF	Citations
1	Stabilizing Rabi oscillations in a superconducting qubit using quantum feedback. Nature, 2012, 490, 77-80.	13.7	377
2	Phase-preserving amplification near the quantum limit with a Josephson ring modulator. Nature, 2010, 465, 64-68.	13.7	357
3	Observation of Quantum Jumps in a Superconducting Artificial Atom. Physical Review Letters, 2011, 106, 110502.	2.9	293
4	Dispersive magnetometry with a quantum limited SQUID parametric amplifier. Physical Review B, 2011, 83, .	1.1	217
5	Observation of Measurement-Induced Entanglement and Quantum Trajectories of Remote Superconducting Qubits. Physical Review Letters, 2014, 112, 170501.	2.9	206
6	Invited Review Article: The Josephson bifurcation amplifier. Review of Scientific Instruments, 2009, 80, 111101.	0.6	194
7	Analog information processing at the quantum limit with a Josephson ring modulator. Nature Physics, 2010, 6, 296-302.	6.5	174
8	Dynamical strong coupling and parametric amplification of mechanical modes of graphene drums. Nature Nanotechnology, 2016, 11, 747-751.	15.6	139
9	Broadband parametric amplification with impedance engineering: Beyond the gain-bandwidth product. Applied Physics Letters, 2015, 107, .	1.5	115
10	Heralded State Preparation in a Superconducting Qubit. Physical Review Letters, 2012, 109, 050506.	2.9	113
11	Design and characterization of a lumped element single-ended superconducting microwave parametric amplifier with on-chip flux bias line. Applied Physics Letters, 2013, 103, .	1.5	73
12	Approaching ideal weak link behavior with three dimensional aluminum nanobridges. Applied Physics Letters, 2010, 96, .	1.5	56
13	Quantum nondemolition readout using a Josephson bifurcation amplifier. Physical Review B, 2007, 76, .	1.1	44
14	Single-Quasiparticle Trapping in Aluminum Nanobridge Josephson Junctions. Physical Review Letters, 2014, 112, 047002.	2.9	44
15	Single crystal silicon capacitors with low microwave loss in the single photon regime. Applied Physics Letters, 2011, 98, .	1.5	41
16	Quantum fluctuations in the chirped pendulum. Nature Physics, 2011, 7, 105-108.	6.5	39
17	Optimizing Anharmonicity in Nanoscale Weak Link Josephson Junction Oscillators. Physical Review Letters, 2009, 103, 087003.	2.9	33
18	Converting Quasiclassical States into Arbitrary Fock State Superpositions in a Superconducting Circuit. Physical Review Letters, 2017, 118, 223604.	2.9	33

#	Article	IF	Citations
19	Implementation of Pairwise Longitudinal Coupling in a Three-Qubit Superconducting Circuit. Physical Review Applied, 2017, 7, .	1.5	31
20	Understanding the Saturation Power of Josephson Parametric Amplifiers Made from SQUID Arrays. Physical Review Applied, 2019, 11, .	1.5	26
21	Programmable Superconducting Processor with Native Three-Qubit Gates. Physical Review Applied, 2020, 14, .	1.5	24
22	Experimental Quantum Randomness Processing Using Superconducting Qubits. Physical Review Letters, 2016, 117, 010502.	2.9	18
23	Multiplexed readout of four qubits in 3D circuit QED architecture using a broadband Josephson parametric amplifier. Applied Physics Letters, 2019, 114, .	1.5	18
24	Quantum state sensitivity of an autoresonant superconducting circuit. Physical Review B, 2012, 86, .	1.1	14
25	In-plane magnetic field tolerance of a dispersive aluminum nanobridge SQUID magnetometer. Applied Physics Letters, 2013, 102, 232602.	1.5	14
26	Ring-Resonator-Based Coupling Architecture for Enhanced Connectivity in a Superconducting Multiqubit Network. Physical Review Applied, 2021, 16, .	1.5	14
27	1/f noise of Josephson-junction-embedded microwave resonators at single photon energies and millikelvin temperatures. Applied Physics Letters, 2012, 100, .	1.5	13
28	Multimode superconducting circuits for realizing strongly coupled multiqubit processor units. Physical Review A, 2018, 98, .	1.0	8
29	Engineering cross resonance interaction in multi-modal quantum circuits. Applied Physics Letters, 2020, 116, .	1.5	7