

Alexander N Korotkov

List of Publications by Year in descending order

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83
papers

3,814
citations

147801

31
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128289

60
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83
all docs

83
docs citations

83
times ranked

2156
citing authors

#	ARTICLE	IF	CITATIONS
1	Error-correcting Bacon-Shor code with continuous measurement of noncommuting operators. Physical Review A, 2020, 102, .	2.5	8
2	Operation and intrinsic error budget of a two-qubit cross-resonance gate. Physical Review A, 2019, 100, .	2.5	48
3	Correlators Exceeding One in Continuous Measurements of Superconducting Qubits. Physical Review Letters, 2019, 122, 223603.	7.8	4
4	Two-time correlators for propagating squeezed microwave fields in transients. Physical Review A, 2019, 99, .	2.5	3
5	Multitime correlators in continuous measurement of qubit observables. Physical Review A, 2018, 97, .	2.5	12
6	Correlators in simultaneous measurement of non-commuting qubit observables. Npj Quantum Information, 2018, 4, .	6.7	11
7	Janus sequences of quantum measurements and the arrow of time. AIP Conference Proceedings, 2017, , .	0.4	0
8	Hybrid phase-spaceâ€Fock-space approach to evolution of a driven nonlinear resonator. Physical Review A, 2017, 96, .	2.5	3
9	Bacon-Shor code with continuous measurement of noncommuting operators. Physical Review A, 2017, 95, .	2.5	10
10	Arrow of Time for Continuous Quantum Measurement. Physical Review Letters, 2017, 119, 220507.	7.8	29
11	Quantum Bayesian approach to circuit QED measurement with moderate bandwidth. Physical Review A, 2016, 94, .	2.5	32
12	Measuring a transmon qubit in circuit QED: Dressed squeezed states. Physical Review A, 2016, 94, .	2.5	23
13	Measurement-Induced State Transitions in a Superconducting Qubit: Beyond the Rotating Wave Approximation. Physical Review Letters, 2016, 117, 190503.	7.8	91
14	Quantum theory of a bandpass Purcell filter for qubit readout. Physical Review A, 2015, 92, .	2.5	71
15	Qubit measurement error from coupling with a detuned neighbor in circuit QED. Physical Review A, 2015, 92, .	2.5	12
16	Robust quantum state transfer using tunable couplers. Physical Review B, 2015, 91, .	3.2	23
17	Violating the modified Helstrom bound with nonprojective measurements. Physical Review A, 2015, 91, .	2.5	2
18	Catching Time-Reversed Microwave Coherent State Photons with 99.4% Absorption Efficiency. Physical Review Letters, 2014, 112, .	7.8	92

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19	Purcell effect with microwave drive: Suppression of qubit relaxation rate. Physical Review B, 2014, 89, .	3.2	48
20	Compressed sensing quantum process tomography for superconducting quantum gates. Physical Review B, 2014, 90, .	3.2	45
21	Implementing generalized measurements with superconducting qubits. Physical Review A, 2014, 90, .	2.5	10
22	Avoiding loopholes with hybrid Bell-Leggett-Garg inequalities. Physical Review A, 2014, 89, .	2.5	22
23	High-fidelity controlled- $\int Z$ gate for resonator-based superconducting quantum computers. Physical Review A, 2013, 87, .	2.5	75
24	Catch and Release of Microwave Photon States. Physical Review Letters, 2013, 110, 107001.	7.8	159
25	Catch-Disperse-Release Readout for Superconducting Qubits. Physical Review Letters, 2013, 110, 210501.	7.8	25
26	Resonator- ϵ zero-qubit architecture for superconducting qubits. Physical Review A, 2012, 85, .	2.5	37
27	The Sleeping Beauty approach. Nature Physics, 2012, 8, 107-108.	16.7	4
28	Simplified quantum error detection and correction for superconducting qubits. Physical Review A, 2012, 86, .	2.5	14
29	Flying microwave qubits with nearly perfect transfer efficiency. Physical Review B, 2011, 84, .	3.2	48
30	Persistent Rabi oscillations probed via low-frequency noise correlation. Physical Review B, 2011, 83, .	3.2	5
31	Experimental violation of a Bell's inequality in time with weak measurement. Nature Physics, 2010, 6, 442-447.	16.7	293
32	Qubit State Monitoring by Measurement of Three Complementary Observables. Physical Review Letters, 2010, 105, 100506.	7.8	32
33	Decoherence suppression by quantum measurement reversal. Physical Review A, 2010, 81, .	2.5	209
34	Uncollapsing the wavefunction by undoing quantum measurements. Contemporary Physics, 2010, 51, 125-147.	1.8	32
35	Special issue on quantum computing with superconducting qubits. Quantum Information Processing, 2009, 8, 51-54.	2.2	17
36	Reversal of the Weak Measurement of a Quantum State in a Superconducting Phase Qubit. Physical Review Letters, 2008, 101, 200401.	7.8	217

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37	Quantum efficiency of binary-outcome detectors of solid-state qubits. <i>Physical Review B</i> , 2008, 78, .	3.2	10
38	Coherence of a Josephson phase qubit under partial-collapse measurement. <i>Physical Review B</i> , 2007, 76, .	3.2	13
39	Theoretical analysis of measurement crosstalk for coupled Josephson phase qubits. <i>Physical Review B</i> , 2007, 75, .	3.2	21
40	Crossover of phase qubit dynamics in the presence of a negative-result weak measurement. <i>Physical Review B</i> , 2007, 75, .	3.2	16
41	Uncollapsing the wavefunction. , 2007, , .		1
42	Undoing a Weak Quantum Measurement of a Solid-State Qubit. <i>Physical Review Letters</i> , 2006, 97, 166805.	7.8	213
43	Quantum Zeno stabilization in weak continuous measurement of two qubits. <i>Physical Review B</i> , 2006, 73, .	3.2	13
44	Non-ideal quantum feedback of a solid-state qubit. <i>Journal of Physics: Conference Series</i> , 2006, 38, 163-166.	0.4	0
45	A numerical study of transport and shot noise in 2D hopping. <i>Journal of Physics Condensed Matter</i> , 2006, 18, 1999-2012.	1.8	7
46	Signatures of Quantum Behavior in Single-Qubit Weak Measurements. <i>Physical Review Letters</i> , 2006, 96, 200404.	7.8	63
47	Leggett-Garg Inequality with a Kicked Quantum Pump. <i>Physical Review Letters</i> , 2006, 97, 026805.	7.8	82
48	Analysis of measurement errors for a superconducting phase qubit. <i>Physical Review B</i> , 2006, 74, .	3.2	10
49	Qubit feedback and control with kicked quantum nondemolition measurements: A quantum Bayesian analysis. <i>Physical Review B</i> , 2006, 74, .	3.2	61
50	Quantum feedback of a double-dot qubit. <i>Microelectronics Journal</i> , 2005, 36, 253-255.	2.0	2
51	Simple quantum feedback of a solid-state qubit. <i>Physical Review B</i> , 2005, 71, .	3.2	27
52	Squeezing of a nanomechanical resonator by quantum nondemolition measurement and feedback. <i>Physical Review B</i> , 2005, 71, .	3.2	93
53	Comment on "Continuous Quantum Measurement: Inelastic Tunneling and Lack of Current Oscillations" <i>Physical Review Letters</i> , 2005, 94, 069701.	7.8	9
54	Continuous quantum feedback of coherent oscillations in a solid-state qubit. <i>Physical Review B</i> , 2005, 72, .	3.2	22

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55	Numerical analysis of radio-frequency single-electron transistor operation. Physical Review B, 2004, 69, .	3.2	9
56	Entanglement of solid-state qubits by measurement. Physical Review B, 2003, 67, .	3.2	72
57	Nonideal quantum detectors in Bayesian formalism. Physical Review B, 2003, 67, .	3.2	27
58	Analysis of the radio-frequency single-electron transistor with large quality factor. Applied Physics Letters, 2003, 83, 2898-2900.	3.3	11
59	Spectrum of qubit oscillations from generalized Bloch equations. Physical Review B, 2003, 67, .	3.2	32
60	Single electron memory devices: Toward background charge insensitive operation. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 2860.	1.6	14
61	Analysis of integrated single-electron memory operation. Journal of Applied Physics, 2002, 92, 7291-7295.	2.5	15
62	Continuous measurement of entangled qubits. Physical Review A, 2002, 65, .	2.5	19
63	Quantum feedback control of a solid-state qubit. Physical Review B, 2002, 66, .	3.2	88
64	Selective quantum evolution of a qubit state due to continuous measurement. Physical Review B, 2001, 63, .	3.2	204
65	Output spectrum of a detector measuring quantum oscillations. Physical Review B, 2001, 63, .	3.2	81
66	Shot-noise suppression at two-dimensional hopping. Physical Review B, 2001, 63, .	3.2	26
67	Correlated quantum measurement of a solid-state qubit. Physical Review B, 2001, 64, .	3.2	11
68	Single-electron soliton avalanches in tunnel-junction arrays. Physical Review B, 2001, 64, .	3.2	8
69	Shot noise at hopping via two sites. Physical Review B, 2000, 62, R7727-R7730.	3.2	10
70	Shot noise suppression at one-dimensional hopping. Physical Review B, 2000, 61, 15975-15987.	3.2	38
71	Nonequilibrium spin distribution in a single-electron transistor. Physical Review B, 1999, 59, 89-92.	3.2	41
72	Charge sensitivity of radio frequency single-electron transistor. Applied Physics Letters, 1999, 74, 4052-4054.	3.3	53

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73	Continuous quantum measurement of a double dot. Physical Review B, 1999, 60, 5737-5742.	3.2	267
74	Single-electron logic and memory devices. International Journal of Electronics, 1999, 86, 511-547.	1.4	40
75	Possible cooling by resonant Fowler-Nordheim emission. Applied Physics Letters, 1999, 75, 2491-2493.	3.3	57
76	Single-electron-parametron-based logic devices. Journal of Applied Physics, 1998, 84, 6114-6126.	2.5	43
77	Theoretical analysis of the resistively coupled single-electron transistor. Applied Physics Letters, 1998, 72, 3226-3228.	3.3	20
78	Analysis of $Q ₀$ -Independent Single-Electron Systems. VLSI Design, 1998, 6, 341-344.	0.5	7
79	Possible Wireless Single-Electron Logic Biased by Electric Field. VLSI Design, 1998, 6, 39-41.	0.5	1
80	Single-Electron Parametron. VLSI Design, 1998, 6, 43-46.	0.5	2
81	Charge sensitivity of superconducting single-electron transistor. Applied Physics Letters, 1996, 69, 2593-2595.	3.3	27
82	Wireless single-electron logic biased by alternating electric field. Applied Physics Letters, 1995, 67, 2412-2414.	3.3	43
83	Possible performance of capacitively coupled single-electron transistors in digital circuits. Journal of Applied Physics, 1995, 78, 2520-2530.	2.5	119