

Cristian Urbina

List of Publications by Year in descending order

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53660

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96
docs citations

96
times ranked

4788
citing authors

#	ARTICLE	IF	CITATIONS
1	Signatures of Interactions in the Andreev Spectrum of Nanowire Josephson Junctions. Physical Review Letters, 2022, 128, .	2.9	19
2	Circuit-QED with phase-biased Josephson weak links. Physical Review Research, 2021, 3, .	1.3	18
3	From Adiabatic to Dispersive Readout of Quantum Circuits. Physical Review Letters, 2020, 125, 077701.	2.9	13
4	Spin-Orbit Splitting of Andreev States Revealed by Microwave Spectroscopy. Physical Review X, 2019, 9, .	2.8	84
5	Conduction channels of an InAs-Al nanowire Josephson weak link. New Journal of Physics, 2017, 19, 092002.	1.2	47
6	Coherent manipulation of Andreev states in superconducting atomic contacts. Science, 2015, 349, 1199-1202.	6.0	161
7	Dynamics of quasiparticle trapping in Andreev levels. Physical Review B, 2014, 89, .	1.1	45
8	Superconducting atomic contacts inductively coupled to a microwave resonator. Journal of Physics Condensed Matter, 2014, 26, 474208.	0.7	3
9	Theory of microwave spectroscopy of Andreev bound states with a Josephson junction. Physical Review B, 2014, 90, .	1.1	17
10	Exciting Andreev pairs in a superconducting atomic contact. Nature, 2013, 499, 312-315.	13.7	136
11	Supercurrent Spectroscopy of Andreev States. Physical Review X, 2013, 3, .	2.8	49
12	Superconducting quantum point contacts. Comptes Rendus Physique, 2012, 13, 89-100.	0.3	9
13	Role of Geometry on the Color of Flux Noise in dc SQUIDs. IEEE Transactions on Applied Superconductivity, 2011, 21, 856-859.	1.1	7
14	Evidence for Long-Lived Quasiparticles Trapped in Superconducting Point Contacts. Physical Review Letters, 2011, 106, 257003.	2.9	78
15	Asymmetric Noise Probed with a Josephson Junction. Physical Review Letters, 2009, 102, 067002.	2.9	33
16	Phase Controlled Superconducting Proximity Effect Probed by Tunneling Spectroscopy. Physical Review Letters, 2008, 100, 197002.	2.9	153
17	BLOCH OSCILLATIONS IN A JOSEPHSON CIRCUIT. , 2008, , .		0
18	Crossover from Josephson to Multiple Andreev Reflection Currents in Atomic Contacts. Physical Review Letters, 2007, 99, 067008.	2.9	20

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19	Measurement of the Current-Phase Relation of Superconducting Atomic Contacts. Physical Review Letters, 2007, 99, 127005.	2.9	104
20	Superconducting Atomic Contacts under Microwave Irradiation. Physical Review Letters, 2006, 97, 067006.	2.9	39
21	Flicker ($1/f$) noise in the critical current of Josephson junctions at 0.09 K. Applied Physics Letters, 2004, 85, 5296-5298.	1.5	56
22	Manipulation and Readout of a Josephson Qubit. , 2004, , 13-21.		0
23	Towards quantum electrical circuits. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 18, 7-10.	1.3	2
24	Rabi oscillations, Ramsey fringes and spin echoes in an electrical circuit. Fortschritte Der Physik, 2003, 51, 462-468.	1.5	34
25	Decoherence of a superconducting qubit due to bias noise. Physical Review B, 2003, 67, .	1.1	242
26	Banishing quasiparticles from Josephson-junction qubits: Why and how to do it. IEEE Transactions on Applied Superconductivity, 2003, 13, 989-993.	1.1	50
27	Quantum Noise and Multiple Andreev Reflections in Superconducting Contacts. , 2003, , 51-71.		0
28	Superconducting quantum bit based on the Cooper pair box. , 2003, , 173-195.		0
29	Ramsey Fringe Measurement of Decoherence in a Novel Superconducting Quantum Bit Based on the Cooper Pair Box. Physica Scripta, 2002, T102, 162.	1.2	3
30	Manipulating the Quantum State of an Electrical Circuit. Science, 2002, 296, 886-889.	6.0	1,425
31	Rabi Oscillations in a Large Josephson-Junction Qubit. Physical Review Letters, 2002, 89, 117901.	2.9	862
32	Probing the Conduction Channels of Gold Atomic-Size Contacts: Proximity Effect and Multiple Andreev Reflections. , 2002, , 107-119.		1
33	Multiple-Charge-Quanta Shot Noise in Superconducting Atomic Contacts. Physical Review Letters, 2001, 86, 4104-4107.	2.9	113
34	Multiple Andreev Reflections Revealed by the Energy Distribution of Quasiparticles. Physical Review Letters, 2001, 86, 1078-1081.	2.9	32
35	Proximity Effect and Multiple Andreev Reflections in Gold Atomic Contacts. Physical Review Letters, 2001, 86, 284-287.	2.9	87
36	Direct Link between Coulomb Blockade and Shot Noise in a Quantum-Coherent Structure. Physical Review Letters, 2001, 87, 046802.	2.9	56

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37	Conduction channels of superconducting quantum point contacts. <i>Physica B: Condensed Matter</i> , 2000, 280, 425-431.	1.3	13
38	Supercurrent in Atomic Point Contacts and Andreev States. <i>Physical Review Letters</i> , 2000, 85, 170-173.	2.9	72
39	Conductance Channels of Gold Atomic-Size Contacts. , 2000, , 27-34.		0
40	Electron transport through a gold-bisthiolterthiophene-gold junction. , 1999, , .		0
41	Evidence for Saturation of Channel Transmission from Conductance Fluctuations in Atomic-Size Point Contacts. <i>Physical Review Letters</i> , 1999, 82, 1530-1533.	2.9	124
42	Single cooper pair electronics. <i>Applied Superconductivity</i> , 1999, 6, 491-494.	0.5	3
43	Electron transport through a metal-molecule-metal junction. <i>Physical Review B</i> , 1999, 59, 12505-12513.	1.1	549
44	The signature of chemical valence in the electrical conduction through a single-atom contact. <i>Nature</i> , 1998, 394, 154-157.	13.7	597
45	What are Landauer's conduction channels in an atomic-size metallic contact?. <i>Superlattices and Microstructures</i> , 1998, 23, 747-756.	1.4	6
46	High frequency satellites in resonant activation. <i>Chemical Physics</i> , 1998, 235, 47-50.	0.9	7
47	Strong Tunneling in the Single-Electron Transistor. <i>Physical Review Letters</i> , 1997, 79, 1349-1352.	2.9	97
48	Conduction Channel Transmissions of Atomic-Size Aluminum Contacts. <i>Physical Review Letters</i> , 1997, 78, 3535-3538.	2.9	382
49	Conductance quantization in metals: The influence of subband formation on the relative stability of specific contact diameters. <i>Physical Review B</i> , 1997, 56, 12566-12572.	1.1	59
50	Adjustable nanofabricated atomic size contacts. <i>Review of Scientific Instruments</i> , 1996, 67, 108-111.	0.6	295
51	Transfer of Single Electrons and Single Cooper Pairs in Metallic Nanostructures. <i>NATO ASI Series Series B: Physics</i> , 1995, , 65-87.	0.2	0
52	Effect of a Transmission Line Resonator on a Small Capacitance Tunnel Junction. <i>Physical Review Letters</i> , 1994, 73, 3455-3458.	2.9	96
53	Observation of the effect of an electromagnetic environment with sharp resonances on the current-voltage characteristics of a small capacitance tunnel junction. <i>Physica B: Condensed Matter</i> , 1994, 203, 397-403.	1.3	8
54	Measurement of the incremental charge of a superconducting island. <i>Physica B: Condensed Matter</i> , 1994, 197, 500-505.	1.3	4

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55	Hot-electron effects in metals. Physical Review B, 1994, 49, 5942-5955.	1.1	394
56	An extremely low noise photodetector based on the single electron transistor. Journal of Low Temperature Physics, 1993, 93, 767-772.	0.6	6
57	Two-electron quantization of the charge on a superconductor. Nature, 1993, 365, 422-424.	13.7	84
58	Passing electrons one by one: is a 10^{-8} accuracy achievable?. IEEE Transactions on Instrumentation and Measurement, 1993, 42, 324-330.	2.4	18
59	Measurement of the even-odd free-energy difference of an isolated superconductor. Physical Review Letters, 1993, 70, 994-997.	2.9	198
60	Very low noise photodetector based on the single electron transistor. Applied Physics Letters, 1992, 61, 2820-2822.	1.5	52
61	Thermal activation of a hysteretic dc superconducting quantum interference device from its different zero-voltage states. Physical Review B, 1992, 46, 5507-5522.	1.1	52
62	Manipulating Electrons One by One. Springer Series in Electrophysics, 1992, , 23-44.	0.2	1
63	Single-Electron Pump Based on Charging Effects. Europhysics Letters, 1992, 17, 249-254.	0.7	469
64	Single-electron transfer in metallic nanostructures. Nature, 1992, 360, 547-553.	13.7	201
65	On the observability of Coulomb blockade and single-electron tunneling. Ultramicroscopy, 1992, 42-44, 22-32.	0.8	4
66	Macroscopic Quantum Effects in the Current-Biased Josephson Junction. Modern Problems in Condensed Matter Sciences, 1992, 34, 313-345.	0.1	8
67	Measurement of the latency time of Macroscopic Quantum Tunneling. Physica B: Condensed Matter, 1991, 169, 26-31.	1.3	4
68	Single electron pump fabricated with ultrasmall normal tunnel junctions. Physica B: Condensed Matter, 1991, 169, 573-574.	1.3	168
69	Single electron tunneling rates in multijunction circuits. European Physical Journal B, 1991, 84, 143-155.	0.6	73
70	Direct observation of macroscopic charge quantization. European Physical Journal B, 1991, 85, 327-332.	0.6	241
71	Single Cooper pair pump. European Physical Journal B, 1991, 85, 349-355.	0.6	70
72	Controlled transfer of single charge carriers. IEEE Transactions on Magnetics, 1991, 27, 2578-2580.	1.2	29

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73	Observability of the coulomb blockade in single tunnel junctions. Physica B: Condensed Matter, 1990, 165-166, 977-978.	1.3	7
74	Effect of the electromagnetic environment on the Coulomb blockade in ultrasmall tunnel junctions. Physical Review Letters, 1990, 64, 1824-1827.	2.9	477
75	Dynamical isoperimeter pattern in the square sine-Gordon system. Physical Review B, 1990, 42, 8418-8425.	1.1	13
76	Frequency-locked turnstile device for single electrons. Physical Review Letters, 1990, 64, 2691-2694.	2.9	541
77	Hot electron limitation to the sensitivity of the dc superconducting quantum interference device. Applied Physics Letters, 1989, 54, 2599-2601.	1.5	53
78	Escape oscillations of a Josephson junction switching out of the zero-voltage state. Physical Review Letters, 1989, 62, 1788-1791.	2.9	52
79	Hot electron effect in the DC SQUID. IEEE Transactions on Magnetics, 1989, 25, 1001-1004.	1.2	27
80	Effect of an Adjustable Admittance on the Macroscopic Energy Levels of a Current Biased Josephson Junction. Physica Scripta, 1989, T25, 118-121.	1.2	12
81	Observation of the Temporal Decoupling Effect on the Macroscopic Quantum Tunneling of a Josephson Junction. Physica Scripta, 1989, T29, 121-124.	1.2	92
82	Measuring the time spent traversing the barrier while tunneling. Physica B: Condensed Matter, 1988, 152, 159-161.	1.3	16
83	Observation of the a.c. Josephson Effect Inside Copper-Oxide-Based Superconductors. Europhysics Letters, 1987, 3, 1237-1242.	0.7	108
84	Low frequency noise in dc superconducting quantum interference devices below 1 K. Applied Physics Letters, 1987, 50, 772-774.	1.5	174
85	Excess noise in dc SQUIDs from 4.2K to 0.022K. IEEE Transactions on Magnetics, 1987, 23, 1662-1665.	1.2	31
86	Decay of the Zero Voltage State of a Josephson Junction Shunted by an Adjustable Impedance. Japanese Journal of Applied Physics, 1987, 26, 1629.	0.8	1
87	Rotating transverse nuclear helimagnetism in CaF ₂ . I. Prediction and experimental study. Journal of Physics C: Solid State Physics, 1986, 19, 2275-2297.	1.5	6
88	Rotating transverse nuclear helimagnetism in CaF ₂ . II. Theoretical approximations. Journal of Physics C: Solid State Physics, 1986, 19, 2299-2328.	1.5	4
89	Direct Observation of Rotational Brownian Motion of Spheres by NMR. Physical Review Letters, 1984, 52, 1180-1183.	2.9	8
90	Rotating Transverse Helical Nuclear Magnetic Ordering. Physical Review Letters, 1982, 48, 206-209.	2.9	11

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91	Field-entropy phase diagram of a nuclear dipolar antiferromagnet. Journal De Physique, 1982, 43, 1461-1467.	1.8	4
92	Low field behaviour of Tm ²⁺ in CaF ₂ at ultra-low nuclear spin temperature. Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1980, 100, 333-342.	0.9	2
93	Evidence for quadrupolar glass phases in solid hydrogen at reduced ortho concentrations. Physical Review B, 1978, 17, 5016-5024.	1.1	149