Dmitry S Golubev

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2686671/publications.pdf

Version: 2024-02-01

105 papers	3,101 citations	136950 32 h-index	168389 53 g-index
108 all docs	108 docs citations	108 times ranked	2096 citing authors

#	Article	IF	Citations
1	Superconductivity in one dimension. Physics Reports, 2008, 464, 1-70.	25.6	299
2	Quantum Phase Slips and Transport in Ultrathin Superconducting Wires. Physical Review Letters, 1997, 78, 1552-1555.	7.8	269
3	Parity-Affected Superconductivity in Ultrasmall Metallic Grains. Physical Review Letters, 1996, 77, 3189-3192.	7.8	188
4	Quantum tunneling of the order parameter in superconducting nanowires. Physical Review B, 2001, 64, .	3.2	178
5	Quantum Decoherence in Disordered Mesoscopic Systems. Physical Review Letters, 1998, 81, 1074-1077.	7.8	141
6	Nonequilibrium theory of a hot-electron bolometer with normal metal-insulator-superconductor tunnel junction. Journal of Applied Physics, 2001, 89, 6464-6472.	2.5	100
7	Bidirectional single-electron counting and the fluctuation theorem. Physical Review B, 2010, 81, .	3.2	89
8	Coulomb Interaction and Quantum Transport through a Coherent Scatterer. Physical Review Letters, 2001, 86, 4887-4890.	7.8	86
9	Irreversibility on the Level of Single-Electron Tunneling. Physical Review X, 2012, 2, .	8.9	85
10	Quantum decoherence and weak localization at low temperatures. Physical Review B, 1999, 59, 9195-9213.	3.2	80
11	Universal scaling of current fluctuations in disordered graphene. Physical Review B, 2007, 76, .	3.2	55
12	Non-local Andreev reflection in superconducting quantum dots. Physical Review B, 2007, 76, .	3.2	46
13	Strong electron tunneling through mesoscopic metallic grains. Physical Review B, 1997, 56, 15782-15793.	3.2	45
14	Full counting statistics of interacting electrons. Fortschritte Der Physik, 2006, 54, 917-938.	4.4	45
15	Thermally activated phase slips in superconducting nanowires. Physical Review B, 2008, 78, .	3.2	43
16	Heat transport through a Josephson junction. Physical Review B, 2013, 87, .	3.2	42
17	Electron transport through interacting quantum dots in the metallic regime. Physical Review B, 2004, 69, .	3.2	41
18	Spin torque switching of an in-plane magnetized system in a thermally activated region. Physical Review B, 2013, 87, .	3.2	41

#	Article	IF	Citations
19	Crossed Andreev Reflection and Charge Imbalance in Diffusive Normal-Superconducting-Normal Structures. Physical Review Letters, 2009, 103, 067006.	7.8	40
20	Induced unconventional superconductivity on the surface states of Bi2Te3 topological insulator. Nature Communications, 2017, 8, 2019.	12.8	40
21	Statistics of current fluctuations in mesoscopic coherent conductors at nonzero frequencies. Physical Review B, 2003, 68, .	3.2	39
22	Electron transport and current fluctuations in short coherent conductors. Physical Review B, 2005, 72, .	3.2	39
23	Full Counting Statistics for a Single-Electron Transistor: Nonequilibrium Effects at Intermediate Conductance. Physical Review Letters, 2006, 96, 086803.	7.8	39
24	Sideâ€Gated Transport in Focusedâ€Ionâ€Beamâ€Fabricated Multilayered Graphene Nanoribbons. Small, 2008, 4, 716-720.	10.0	38
25	Enhancing the Molecular Signature in Moleculeâ€Nanoparticle Networks Via Inelastic Cotunneling. Advanced Materials, 2013, 25, 400-404.	21.0	38
26	Lasing without Inversion in Circuit Quantum Electrodynamics. Physical Review Letters, 2011, 107, 093901.	7.8	37
27	Quantum fluctuations of the charge near the Coulomb-blockade threshold. Physical Review B, 1994, 50, 8736-8745.	3.2	36
28	On Low-Temperature Dephasing by Electron-Electron Interaction. Journal of Low Temperature Physics, 2002, 126, 1355-1376.	1.4	36
29	Interaction and quantum decoherence. Physica B: Condensed Matter, 1998, 255, 164-178.	2.7	35
30	Current fluctuations and electron-electron interactions in coherent conductors. Physical Review B, 2003, 68, .	3.2	33
31	Pure dephasing in flux qubits due to flux noise with spectral density scaling as1/fÎ±. Physical Review B, 2012, 85, .	3.2	33
32	Interactions and weak localization: Perturbation theory and beyond. Physical Review B, 2000, 62, 14061-14098.	3.2	32
33	Fluctuation theorem for a double quantum dot coupled to a point-contact electrometer. Physical Review B, 2011, 84, .	3.2	32
34	On the concept of an optimal hot-electron bolometer with NIS tunnel junctions. Physica C: Superconductivity and Its Applications, 2002, 372-376, 378-382.	1.2	28
35	Quantum dynamics of ultrasmall tunnel junctions: Real-time analysis. Physical Review B, 1992, 46, 10903-10916.	3.2	25
36	Interaction-induced quantum dephasing in mesoscopic rings. Europhysics Letters, 2003, 63, 426-432.	2.0	25

#	Article	IF	Citations
37	Bacterial Nanocellulose Nitrates. Nanomaterials, 2019, 9, 1694.	4.1	25
38	Electric field control of radiative heat transfer in a superconducting circuit. Nature Communications, 2020, 11, 4326.	12.8	25
39	Transport of interacting electrons in arrays of quantum dots and diffusive wires. Physical Review B, 2004, 70, .	3.2	24
40	Magnetic field and contact resistance dependence of non-local charge imbalance. Nanotechnology, 2010, 21, 274002.	2.6	24
41	Quantum decoherence of interacting electrons in arrays of quantum dots and diffusive conductors. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 40, 32-49.	2.7	23
42	Noise spectrum of a quantum dotâ€“resonator lasing circuit. New Journal of Physics, 2013, 15, 025044.	2.9	21
43	Topological insulator nanoribbon Josephson junctions: Evidence for size effects in transport properties. Journal of Applied Physics, 2020, 128, 194304.	2.5	21
44	Self-standardization of quality of bacterial cellulose produced by Medusomyces gisevii in nutrient media derived from Miscanthus biomass. Carbohydrate Polymers, 2021, 252, 117178.	10.2	21
45	Shot noise and Coulomb effects on nonlocal electron transport in normal-metal/superconductor/normal-metal heterostructures. Physical Review B, 2010, 82, .	3.2	20
46	Model Evidence of a Superconducting State with a Full Energy Gap in Small Cuprate Islands. Physical Review Letters, 2013, 110, 197001.	7.8	20
47	Extreme reductions of entropy in an electronic double dot. Physical Review B, 2019, 99, .	3.2	18
48	Low Temperature Decoherence by Electronâ€“Electron Interactions: Role of Quantum Fluctuations. Journal of Low Temperature Physics, 2003, 132, 11-38.	1.4	17
49	Weak localization in arrays of metallic quantum dots: Combined scattering matrix formalism and nonlinear $1/f$ model. Physical Review B, 2006, 74, .	3.2	17
50	Universal First-Passage-Time Distribution of Non-Gaussian Currents. Physical Review Letters, 2019, 122, 230602.	7.8	17
51	Charge transport and Zener tunneling in small Josephson junctions with dissipation. Physical Review B, 1996, 54, 10074-10080.	3.2	16
52	Statistics of voltage fluctuations in resistively shunted Josephson junctions. Physical Review B, 2010, 81, .	3.2	16
53	Subharmonic Shapiro steps and noise in high-T c superconductor Josephson junctions. JETP Letters, 1998, 68, 454-459.	1.4	14
54	Non-local Andreev reflection under ac bias. Europhysics Letters, 2009, 86, 37009.	2.0	14

#	Article	IF	Citations
55	Approximate solutions to Mathieu's equation. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 100, 24-30.	2.7	13
56	Photonic heat transport across a Josephson junction. Physical Review B, 2019, 100, .	3.2	13
57	Cross-correlated shot noise in three-terminal superconducting hybrid nanostructures. Physical Review B, 2019, 99, .	3.2	12
58	Photonic heat transport in three terminal superconducting circuit. Nature Communications, 2022, 13, 1552.	12.8	12
59	Relaxation and Dephasing in a Many-Fermion Generalization of the Caldeira-Leggett Model. Physical Review Letters, 2004, 93, 130404.	7.8	11
60	Weak localization in a system with a barrier: dephasing and weak Coulomb blockade. New Journal of Physics, 2008, 10, 063027.	2.9	11
61	Disorder-induced pseudodiffusive transport in graphene nanoribbons. Physical Review B, 2009, 79, .	3.2	11
62	Single-Photon Detection with a Josephson Junction Coupled to a Resonator. Physical Review Applied, 2021, 16, .	3.8	11
63	Many-fermion generalization of the Caldeira-Leggett model. Physical Review A, 2005, 72, .	2.5	9
64	Work fluctuation theorem for a classical circuit coupled to a quantum conductor. Physical Review B, 2012, 86, .	3.2	9
65	Effect of heating on critical current of YBCO nanowires. Physica C: Superconductivity and Its Applications, 2014, 506, 174-177.	1.2	9
66	Tunneling and relaxation of single quasiparticles in a normal-superconductor-normal single-electron transistor. Physical Review B, 2014, 89, .	3.2	9
67	High-Transparency Al/Bi₂Te₃Double-Barrier Heterostructures. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-4.	1.7	9
68	Submillimeter-wave mixing and noise in HTS Josephson junctions. IEEE Transactions on Applied Superconductivity, 1999, 9, 3761-3764.	1.7	7
69	Interaction and quantum decoherence in disordered conductors. Physica B: Condensed Matter, 2000, 280, 453-457.	2.7	7
70	Low-Temperature Dephasing and Renormalization in Model Systems. Journal of the Physical Society of Japan, 2003, 72, 30-35.	1.6	7
71	Test of the fluctuation theorem for single-electron transport. Journal of Applied Physics, 2013, 113, 136507.	2.5	7
72	Andreev levels as a quantum dissipative environment. Physical Review B, 2017, 96, .	3.2	7

#	Article	IF	Citations
73	Exactly solvable model of calorimetric measurements. Physical Review B, 2020, 102, .	3.2	7
74	Superconducting Cold-Electron Bolometers with JFET Readout for OLIMPO Balloon Telescope. Journal of Physics: Conference Series, 2006, 43, 1298-1302.	0.4	6
75	An electron turnstile for frequency-to-power conversion. Nature Nanotechnology, 2022, 17, 239-243.	31.5	6
76	Coulomb blockade and insulator-to-metal quantum phase transition. Europhysics Letters, 2002, 60, 113-119.	2.0	5
77	Nonlocal transport and heating in superconductors under dual-bias conditions. Physical Review B, 2013, 88, .	3.2	5
78	Thermally pumped on-chip maser. Physical Review B, 2020, 102, .	3.2	5
79	Josephson spectroscopy at submillimetre waves. Superconductor Science and Technology, 1999, 12, 995-997.	3.5	4
80	Weak localization, Aharonov-Bohm oscillations, and decoherence in arrays of quantum dots. Low Temperature Physics, 2010, 36, 933-950.	0.6	4
81	Intrinsic Quantum Dissipation in Superconducting Weak Links. Journal of Superconductivity and Novel Magnetism, 2018, 31, 715-721.	1.8	4
82	Anomalous Switching Current Distributions in Superconducting Weak Links. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.7	4
83	Determining the parameters of a random telegraph signal by digital low pass filtering. Applied Physics Letters, 2018, 112, .	3.3	4
84	Aharonov-Bohm oscillations in coupled quantum dots: Effect of electron-electron interactions. Physical Review B, 2009, 79, .	3.2	3
85	Coulomb blockade of nonlocal electron transport in metallic conductors. Physical Review B, 2012, 85, .	3.2	3
86	Robust Strong-Coupling Architecture in Circuit Quantum Electrodynamics. Physical Review Applied, 2021, 16, .	3.8	3
87	Joule heating effects in high-transparency Josephson junctions. Physical Review B, 2021, 104, .	3.2	3
88	On a theory of low temperature electron decoherence in disordered conductors. Journal of Physics: Conference Series, 2008, 129, 012016.	0.4	2
89	Intrinsic Dissipation in Superconducting Junctions Probed by Qubit Spectroscopy. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800256.	2.4	2
90	Optimization of the Cold-Electron Bolometer and a Quasiparticle Cascade Amplifier in the Voltage-Biased Mode. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.7	2

#	Article	IF	Citations
91	Quantum decay of supercurrent in thin superconducting wires. European Physical Journal D, 1996, 46, 571-572.	0.4	1
92	Non-local electron transport and Coulomb effects in three-terminal metallic conductors. Journal of Physics: Conference Series, 2012, 338, 012009.	0.4	1
93	Hanbury Brown and Twiss exchange correlations in a graphene box. Physical Review B, 2019, 100, .	3.2	1
94	Josephson Effect in Graphene and 3D Topological Insulators. Springer Series in Materials Science, 2019, , 529-553.	0.6	1
95	Superconductivity and parity effect in ultrasmall metallic particles. European Physical Journal D, 1996, 46, 2391-2392.	0.4	0
96	Strong electron tunneling in mesoscopic metallic grains. European Physical Journal D, 1996, 46, 2401-2402.	0.4	0
97	Zener tunneling in small Josephson junctions with dissipation. European Physical Journal D, 1996, 46, 655-656.	0.4	0
98	Statistics of current fluctuations and electron-electron interactions in mesoscopic coherent conductors. , 2004, 5469, 273.		0
99	Full counting statistics for electron number in quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 154-157.	0.8	0
100	Effective temperature and the fluctuation theorem in a double quantum dot coupled to a point-contact electrometer. Journal of Physics: Conference Series, 2012, 400, 042012.	0.4	0
101	Wideband superconducting nanotube electrometer. Applied Physics Letters, 2015, 107, 012601.	3.3	0
102	Thermal and quantum decay of supercurrent in highly transparent weak links. European Physical Journal: Special Topics, 2019, 227, 2001-2012.	2.6	0
103	Superconducting phase transition in inhomogeneous chains of superconducting islands. Physical Review B, 2020, 102, .	3.2	0
104	FULL COUNTING STATISTICS FOR A SINGLE-ELECTRON TRANSISTOR AT INTERMEDIATE CONDUCTANCE. , 2008, , .		0
105	Full Counting Statistics of Interacting Electrons. , 0, , 425-456.		0