

Vladimir Antonov

List of Publications by Year in descending order

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68
papers

1,436
citations

516710

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330143

37
g-index

68
all docs

68
docs citations

68
times ranked

1293
citing authors

#	ARTICLE	IF	CITATIONS
1	A single-photon detector in the far-infrared range. <i>Nature</i> , 2000, 403, 405-407.	27.8	327
2	Phase Controlled Conductance of Mesoscopic Structures with Superconducting "Mirrors". <i>Physical Review Letters</i> , 1995, 74, 5268-5271.	7.8	159
3	Phase memory effects in mesoscopic rings with superconducting "mirrors". <i>Physical Review Letters</i> , 1993, 70, 347-350.	7.8	135
4	Evidence for interacting two-level systems from the 1/f noise of a superconducting resonator. <i>Nature Communications</i> , 2014, 5, 4119.	12.8	99
5	Single-photon detector in the microwave range. <i>Applied Physics Letters</i> , 2002, 80, 4250-4252.	3.3	96
6	Counting Individual Trapped Electrons on Liquid Helium. <i>Applied Physics Letters</i> , 2005, 86, 153106.	3.3	48
7	Charge quantum interference device. <i>Nature Physics</i> , 2018, 14, 590-594.	16.7	47
8	Isolated quantum dot in application to terahertz photon counting. <i>Physical Review B</i> , 2006, 73, .	3.2	40
9	Giant quantum Hall plateaus generated by charge transfer in epitaxial graphene. <i>Scientific Reports</i> , 2016, 6, 30296.	3.3	32
10	Electrostatics of quantum dots in high magnetic fields and single far-infrared photon detection. <i>Physical Review B</i> , 2000, 62, 16731-16743.	3.2	24
11	Quantum wave mixing and visualisation of coherent and superposed photonic states in a waveguide. <i>Nature Communications</i> , 2017, 8, 1352.	12.8	24
12	Two-Level System as a Quantum Sensor for Absolute Calibration of Power. <i>Physical Review Applied</i> , 2020, 13, .	3.8	20
13	Highly sensitive detector for submillimeter wavelength range. <i>Applied Physics Letters</i> , 2004, 85, 6036-6038.	3.3	19
14	Far-infrared spectroscopy of single quantum dots in high magnetic fields. <i>Physical Review B</i> , 2002, 65, .	3.2	18
15	Mixing of coherent waves in a single three-level artificial atom. <i>Physical Review A</i> , 2018, 98, .	2.5	17
16	Probing the nanoscale origin of strain and doping in graphene-hBN heterostructures. <i>2D Materials</i> , 2019, 6, 015022.	4.4	17
17	Point contact readout for a quantum dot terahertz sensor. <i>Applied Physics Letters</i> , 2008, 93, 073501.	3.3	16
18	Electron transport in mesoscopic conductors with superconducting contacts. <i>Physica Scripta</i> , 1992, T42, 136-140.	2.5	15

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19	Magnetic bead detection using domain wall-based nanosensor. Journal of Applied Physics, 2015, 117, 17E313.	2.5	15
20	Sensitive detector for a passive terahertz imager. Journal of Applied Physics, 2006, 99, 114504.	2.5	14
21	Magnetic imaging using geometrically constrained nano-domain walls. Nanoscale, 2019, 11, 4478-4488.	5.6	14
22	Anomalous proximity effect in mesoscopic normal-metalâ€“superconductor structures. Physical Review B, 1997, 55, 3836-3840.	3.2	11
23	Metastable excited states of a closed quantum dot probed by an aluminum single-electron transistor. Physical Review B, 2006, 74, .	3.2	11
24	Sensing individual terahertz photons. Nanotechnology, 2010, 21, 165203.	2.6	11
25	Phase coherence and energy relaxation in epitaxial graphene under microwave radiation. Applied Physics Letters, 2013, 103, .	3.3	11
26	Physics of a disordered Dirac point in epitaxial graphene from temperature-dependent magnetotransport measurements. Physical Review B, 2015, 92, .	3.2	11
27	Magnetic scanning gate microscopy of a domain wall nanosensor using microparticle probe. Journal of Magnetism and Magnetic Materials, 2016, 400, 225-229.	2.3	11
28	Probing photon statistics of coherent states by continuous wave mixing on a two-level system. Physical Review A, 2019, 100, .	2.5	11
29	Electric field effects and screening in mesoscopic bismuth wires. Journal of Physics Condensed Matter, 1991, 3, 9705-9711.	1.8	10
30	Single-photon detection of THz-waves using quantum dots. Microelectronic Engineering, 2002, 63, 173-178.	2.4	10
31	V-Shaped Domain Wall Probes for Calibrated Magnetic Force Microscopy. IEEE Transactions on Magnetism, 2017, 53, 1-5.	2.1	9
32	Single FIR-photon detection using a quantum dot. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 6, 367-370.	2.7	8
33	Trapping single electrons on liquid helium. Journal of Physics and Chemistry of Solids, 2005, 66, 1539-1543.	4.0	8
34	Detection of Coherent Terahertz Radiation from a High-Temperature Superconductor Josephson Junction by a Semiconductor Quantum-Dot Detector. Physical Review Applied, 2016, 5, .	3.8	8
35	Non-linear phase memory effects in mesoscopic rings with superconducting â€œmirrorsâ€œ. Physica B: Condensed Matter, 1994, 194-196, 1105-1106.	2.7	7
36	A Highly Sensitive Detector for Radiation in the Terahertz Region. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 463-467.	4.7	7

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37	Multiple superconducting ring ratchets for ultrasensitive detection of non-equilibrium noises. Applied Physics Letters, 2016, 109, .	3.3	7
38	Strongly Absorbing Nanoscale Infrared Domains within Strained Bubbles at hBN-Graphene Interfaces. ACS Applied Materials & Interfaces, 2020, 12, 57638-57648.	8.0	7
39	ac effect in the conductance of mesoscopic normal-metal-superconductor structures. Physical Review B, 1997, 56, R8515-R8517.	3.2	6
40	Phase sensitive phenomena in Andreev interferometer. Physica C: Superconductivity and Its Applications, 2001, 352, 173-176.	1.2	6
41	Proximity effect in the conductance of mesoscopic normal metal-superconductor structures. Europhysics Letters, 1997, 38, 453-458.	2.0	5
42	Electrostatic effects in coupled quantum dot-point contact-single electron transistor devices. Journal of Applied Physics, 2012, 112, .	2.5	5
43	Influence of Geometry on Domain Wall Dynamics in Permalloy Nanodevices. IEEE Transactions on Magnetism, 2015, 51, 1-4.	2.1	5
44	Development of a Superconducting Differential Double Contour Interferometer. Nano Letters, 2017, 17, 6516-6519.	9.1	5
45	Shifted magnetoconductance oscillations in mesoscopic superconducting-normal heterostructures. Europhysics Letters, 2000, 50, 250-256.	2.0	4
46	Detection of single FIR-photon absorption using quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 7, 698-703.	2.7	4
47	Thermally excited tunneling from a metastable electronic state in a single-Cooper-pair transistor. Applied Physics Letters, 2008, 93, 173508.	3.3	4
48	Thermal excitation of large charge offsets in a single-Cooper-pair transistor. Journal of Applied Physics, 2009, 106, .	2.5	4
49	Magnetic scanning gate microscopy of CoFeB lateral spin valve. AIP Advances, 2017, 7, .	1.3	4
50	The dc power observed on the half of asymmetric superconducting ring in which current flows against electric field. Physica C: Superconductivity and Its Applications, 2019, 559, 14-20.	1.2	4
51	Plasmonic grating for circularly polarized outcoupling of waveguide-enhanced spontaneous emission. Applied Physics Letters, 2022, 120, .	3.3	4
52	Multiple current states of two phase-coupled superconducting rings. Journal of Experimental and Theoretical Physics, 2011, 113, 678-682.	0.9	3
53	Tailoring of Domain Wall Devices for Sensing Applications. IEEE Transactions on Magnetism, 2014, 50, 1-4.	2.1	3
54	Detection of a magnetic bead by hybrid nanodevices using scanning gate microscopy. AIP Advances, 2016, 6, .	1.3	3

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55	Superconducting \hat{t} qubit. Physical Review B, 2020, 102, .	3.2	3
56	Petrashov et al. reply. Physical Review Letters, 1993, 71, 2352-2352.	7.8	2
57	"Giant" Aharonov-Bohm effect in mesoscopic silver rings with bismuth electrodes. Europhysics Letters, 1996, 34, 593-598.	2.0	2
58	A quantum dot as a sensitive terahertz detector. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 34, 644-646.	2.7	2
59	Detection of black body radiation using a compact terahertz imager. Applied Physics Letters, 2020, 117, 231106.	3.3	2
60	Essence of \hat{t} model for interference phenomena in mesoscopic normal metal-superconducting structures. European Physical Journal D, 1996, 46, 2313-2314.	0.4	1
61	FIR and Microwave Photon Detection by Quantum Dots. Journal of the Physical Society of Japan, 2003, 72, 102-105.	1.6	1
62	An Electronic Array On Liquid Helium. AIP Conference Proceedings, 2006, , .	0.4	0
63	A highly sensitive terahertz photon detector based on a semiconductor quantum dot. , 2007, , .		0
64	THz Spectroscopy Using Low Temperature Mesoscopic Devices. Journal of Low Temperature Physics, 2012, 167, 467-472.	1.4	0
65	Hybrid normal metal/ferromagnetic nanojunctions for domain wall tracking. Scientific Reports, 2017, 7, 6295.	3.3	0
66	Detection of Single Submillimeter-Wave Photons Using Quantum Dots. Acta Physica Polonica A, 2000, 98, 271-278.	0.5	0
67	Phase Controlled Metallic Mesoscopic Interferometers. , 1995, , 449-458.		0
68	Compact Remote Spectral Terahertz Imager. Journal of Infrared, Millimeter, and Terahertz Waves, 0, , .	2.2	0