Vladimir Antonov

List of Publications by Year
in descending order

68 papers	1,436 citations	516710 16 h-index	330143 37 g-index
68 all docs	68 docs citations	68 times ranked	1293 citing authors

#	Article	IF	Citations
1	Plasmonic grating for circularly polarized outcoupling of waveguide-enhanced spontaneous emission. Applied Physics Letters, 2022, 120, .	3.3	4
2	Superconducting â€˜twinâ€™ qubit. Physical Review B, 2020, 102, .	3.2	3
3	Strongly Absorbing Nanoscale Infrared Domains within Strained Bubbles at hBNâ€“Graphene Interfaces. ACS Applied Materials & Interfaces, 2020, 12, 57638-57648.	8.0	7
4	Detection of black body radiation using a compact terahertz imager. Applied Physics Letters, 2020, 117, 231106.	3.3	2
5	Two-Level System as a Quantum Sensor for Absolute Calibration of Power. Physical Review Applied, 2020, 13, .	3.8	20
6	Probing photon statistics of coherent states by continuous wave mixing on a two-level system. Physical Review A, 2019, 100, .	2.5	11
7	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
8	Magnetic imaging using geometrically constrained nano-domain walls. Nanoscale, 2019, 11, 4478-4488.	5.6	14
9	Probing the nanoscale origin of strain and doping in graphene-hBN heterostructures. 2D Materials, 2019, 6, 015022.	4.4	17
10	Charge quantum interference device. Nature Physics, 2018, 14, 590-594.	16.7	47
11	Mixing of coherent waves in a single three-level artificial atom. Physical Review A, 2018, 98, .	2.5	17
12	Magnetic scanning gate microscopy of CoFeB lateral spin valve. AIP Advances, 2017, 7, .	1.3	4
13	Development of a Superconducting Differential Double Contour Interferometer. Nano Letters, 2017, 17, 6516-6519.	9.1	5
14	Hybrid normal metal/ferromagnetic nanojunctions for domain wall tracking. Scientific Reports, 2017, 7, 6295.	3.3	0
15	V-Shaped Domain Wall Probes for Calibrated Magnetic Force Microscopy. IEEE Transactions on Magnetics, 2017, 53, 1-5.	2.1	9
16	Quantum wave mixing and visualisation of coherent and superposed photonic states in a waveguide. Nature Communications, 2017, 8, 1352.	12.8	24
17	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
18	Giant quantum Hall plateaus generated by charge transfer in epitaxial graphene. Scientific Reports, 2016, 6, 30296.	3.3	32

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19	Detection of a magnetic bead by hybrid nanodevices using scanning gate microscopy. AIP Advances, 2016, 6, .	1.3	3
20	Multiple superconducting ring ratchets for ultrasensitive detection of non-equilibrium noises. Applied Physics Letters, 2016, 109, .	3.3	7
21	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
22	Physics of a disordered Dirac point in epitaxial graphene from temperature-dependent magnetotransport measurements. Physical Review B, 2015, 92, .	3.2	11
23	Influence of Geometry on Domain Wall Dynamics in Permalloy Nanodevices. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	5
24	Magnetic bead detection using domain wall-based nanosensor. Journal of Applied Physics, 2015, 117, 17E313.	2.5	15
25	Tailoring of Domain Wall Devices for Sensing Applications. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	3
26	Evidence for interacting two-level systems from the 1/f noise of a superconducting resonator. Nature Communications, 2014, 5, 4119.	12.8	99
27	Phase coherence and energy relaxation in epitaxial graphene under microwave radiation. Applied Physics Letters, 2013, 103, .	3.3	11
28	Electrostatic effects in coupled quantum dot-point contact-single electron transistor devices. Journal of Applied Physics, 2012, 112, .	2.5	5
29	THz Spectroscopy Using Low Temperature Mesoscopic Devices. Journal of Low Temperature Physics, 2012, 167, 467-472.	1.4	0
30	Multiple current states of two phase-coupled superconducting rings. Journal of Experimental and Theoretical Physics, 2011, 113, 678-682.	0.9	3
31	Sensing individual terahertz photons. Nanotechnology, 2010, 21, 165203.	2.6	11
32	Thermal excitation of large charge offsets in a single-Cooper-pair transistor. Journal of Applied Physics, 2009, 106, .	2.5	4
33	Thermally excited tunneling from a metastable electronic state in a single-Cooper-pair transistor. Applied Physics Letters, 2008, 93, 173508.	3.3	4
34	Point contact readout for a quantum dot terahertz sensor. Applied Physics Letters, 2008, 93, 073501.	3.3	16
35	A highly sensitive terahertz photon detector based on a semiconductor quantum dot. , 2007, , .		0
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	Sensitive detector for a passive terahertz imager. Journal of Applied Physics, 2006, 99, 114504.	2.5	14
38	An Electronic Array On Liquid Helium. AIP Conference Proceedings, 2006, , .	0.4	0
39	A quantum dot as a sensitive terahertz detector. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 34, 644-646.	2.7	2
40	Metastable excited states of a closed quantum dot probed by an aluminum single-electron transistor. Physical Review B, 2006, 74, .	3.2	11
41	Isolated quantum dot in application to terahertz photon counting. Physical Review B, 2006, 73, .	3.2	40
42	Trapping single electrons on liquid helium. Journal of Physics and Chemistry of Solids, 2005, 66, 1539-1543.	4.0	8
43	Counting Individual Trapped Electrons on Liquid Helium. Applied Physics Letters, 2005, 86, 153106.	3.3	48
44	Highly sensitive detector for submillimeter wavelength range. Applied Physics Letters, 2004, 85, 6036-6038.	3.3	19
45	FIR and Microwave Photon Detection by Quantum Dots. Journal of the Physical Society of Japan, 2003, 72, 102-105.	1.6	1
46	Single-photon detector in the microwave range. Applied Physics Letters, 2002, 80, 4250-4252.	3.3	96
47	Far-infrared spectroscopy of single quantum dots in high magnetic fields. Physical Review B, 2002, 65, .	3.2	18
48	Single-photon detection of THz-waves using quantum dots. Microelectronic Engineering, 2002, 63, 173-178.	2.4	10
49	Phase sensitive phenomena in Andreev interferometer. Physica C: Superconductivity and Its Applications, 2001, 352, 173-176.	1.2	6
50	Ï€-shifted magnetoconductance oscillations in mesoscopic superconducting-normal heterostructures. Europhysics Letters, 2000, 50, 250-256.	2.0	4
51	Detection of single FIR-photon absorption using quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 7, 698-703.	2.7	4
52	Single FIR-photon detection using a quantum dot. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 6, 367-370.	2.7	8
53	A single-photon detector in the far-infrared range. Nature, 2000, 403, 405-407.	27.8	327
54	Electrostatics of quantum dots in high magnetic fields and single far-infrared photon detection. Physical Review B, 2000, 62, 16731-16743.	3.2	24

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55	Detection of Single Submillimeter-Wave Photons Using Quantum Dots. Acta Physica Polonica A, 2000, 98, 271-278.	0.5	0
56	â€œProximityâ€•effect in the conductance of mesoscopic normal metal-superconductor structures. Europhysics Letters, 1997, 38, 453-458.	2.0	5
57	Anomalous proximity effect in mesoscopic normal-metalâ€“superconductor structures. Physical Review B, 1997, 55, 3836-3840.	3.2	11
58	ac effect in the conductance of mesoscopic normal-metalâ€“superconductor structures. Physical Review B, 1997, 56, R8515-R8517.	3.2	6
59	Essence of â€œproximityâ€•model for interference phenomena in mesoscopic normal metal-superconducting structures. European Physical Journal D, 1996, 46, 2313-2314.	0.4	1
60	"Giant" Aharonov-Bohm effect in mesoscopic silver rings with bismuth electrodes. Europhysics Letters, 1996, 34, 593-598.	2.0	2
61	Phase Controlled Conductance of Mesoscopic Structures with Superconducting â€œMirrorsâ€• Physical Review Letters, 1995, 74, 5268-5271.	7.8	159
62	Phase Controlled Metallic Mesoscopic Interferometers. , 1995, , 449-458.		0
63	Non-linear phase memory effects in mesoscopic rings with superconducting â€œmirrorsâ€•. Physica B: Condensed Matter, 1994, 194-196, 1105-1106.	2.7	7
64	Petrashovet al. reply. Physical Review Letters, 1993, 71, 2352-2352.	7.8	2
65	Phase memory effects in mesoscopic rings with superconducting â€˜â€˜mirrorsâ€™â€™. Physical Review Letters, 1993, 70, 347-350.	7.8	135
66	Electron transport in mesoscopic conductors with superconducting contacts. Physica Scripta, 1992, T42, 136-140.	2.5	15
67	Electric field effects and screening in mesoscopic bismuth wires. Journal of Physics Condensed Matter, 1991, 3, 9705-9711.	1.8	10
68	Compact Remote Spectral Terahertz Imager. Journal of Infrared, Millimeter, and Terahertz Waves, 0, , .	2.2	0