Alexey Aladyshkin

List of Publications by Year
in descending order

45 papers	763 citations	623734 14 h-index	526287 27 g-index
46 all docs	46 docs citations	46 times ranked	563 citing authors

#	Article	IF	Citations
1	2D system incorporating perforated Mg sheet sandwiched between Pb layer and Si(111). Applied Surface Science, 2022, 589, 152951.	6.1	1
2	Observation of Hidden Parts of Dislocation Loops in Thin Pb Films by Means of Scanning Tunneling Spectroscopy. Journal of Physical Chemistry C, 2021, 125, 26814-26822.	3.1	3
3	Quantum-well and modified image-potential states in thin Pb(111) films: an estimate for the local work function. Journal of Physics Condensed Matter, 2020, 32, 435001.	1.8	6
4	Nonuniform Quantum-Confined States and Visualization of Hidden Defects in Pb(111) Films. JETP Letters, 2019, 109, 755-761.	1.4	4
5	Microwave Impedance of Thin-Film Superconductorâ€"Normal Metal Hybrid Structures with a High Conductivity Ratio. Physics of the Solid State, 2019, 61, 1675-1681.	0.6	0
6	The Proximity and Josephson Effects in Niobium Nitrideâ€"Aluminum Bilayers. Physics of the Solid State, 2019, 61, 1544-1548.	0.6	2
7	Vortex-core properties and vortex-lattice transformation in FeSe. Physical Review B, 2019, 99, .	3.2	15
8	C60 layer growth on intact and Tl-modified Si(1â€¯1â€¯1)5â€¯Ã—â€¯2-Au surfaces. Applied Surface Science, 2018, 456, 801-807.	6.1	5
9	Peculiar superconducting properties of a thin film superconductorâ€"normal metal bilayer with large ratio of resistivities. Superconductor Science and Technology, 2018, 31, 115004.	3.5	15
10	The surface structures growthâ€™s features caused by Ge adsorption on the Au(111) surface. JETP Letters, 2017, 106, 217-222.	1.4	11
11	Tunneling interferometry and measurement of the thickness of ultrathin metallic Pb(111) films. JETP Letters, 2017, 106, 491-497.	1.4	6
12	Peculiarities of the initial stage of growth of niobium-based nanostructures on a Si(111)-7 Ã— 7 surface. Journal of Surface Investigation, 2016, 10, 273-281.	0.5	0
13	The diode effect induced by domain-wall superconductivity. Journal of Physics Condensed Matter, 2014, 26, 095702.	1.8	14
14	Edge superconductivity in Nb thin film microbridges revealed by electric transport measurements and visualized by scanning laser microscopy. Superconductor Science and Technology, 2013, 26, 095011.	3.5	8
15	Erratum to â€œFormation of bound vortexâ€"antivortex pairs and their depinning in mesoscopic cross-film cryotronsâ€•[Physica C 479 (2012) 98]. Physica C: Superconductivity and Its Applications, 2013, 492, 186.	1.2	0
16	Hybridization and interference effects for localized superconducting states in strong magnetic field. Physical Review B, 2012, 85, .	3.2	4
17	Formation of bound vortexâ€"antivortex pairs and their depinning in mesoscopic cross-film cryotrons. Physica C: Superconductivity and Its Applications, 2012, 479, 98-101.	1.2	3
18	Localization of superconductivity in superconductorâ€"electromagnet hybrids. Superconductor Science and Technology, 2012, 25, 065015.	3.5	0

#	Article	IF	Citations
19	Crossover between different regimes of inhomogeneous superconductivity in planar superconductor-ferromagnet hybrids. Physical Review B, 2011, 84, .	3.2	10
20	Domain-wall and reverse-domain superconducting states of a Pb thin-film bridge on a ferromagnetic BaFe12O19single crystal. Physical Review B, 2011, 84, .	3.2	19
21	Mesoscopic cross-film cryotrons: Vortex trapping and dc-Josephson-like oscillations of the critical current. Physical Review B, 2011, 83, .	3.2	5
22	Giant anisotropy of the resistance induced by magnetic domains in superconductor/ferromagnet hybrids. Physica C: Superconductivity and Its Applications, 2010, 470, 883-885.	1.2	2
23	Effect of ferromagnetic film thickness on magnetoresistance of thin-film superconductor-ferromagnet hybrids. Journal of Applied Physics, 2010, 108, 033911.	2.5	5
24	Reverse-domain superconductivity in superconductor-ferromagnet hybrids: Effect of a vortex-free channel on the symmetry of I-V characteristics. Applied Physics Letters, 2010, 97, .	3.3	16
25	Planar superconductor/ferromagnet hybrids: Anisotropy of resistivity induced by magnetic templates. Applied Physics Letters, 2009, 94, .	3.3	23
26	Localized superconductivity in superconductor-ferromagnet hybrid structures. Bulletin of the Russian Academy of Sciences: Physics, 2009, 73, 3-7.	0.6	1
27	Nucleation of superconductivity and vortex matter in superconductorâ€"ferromagnet hybrids. Superconductor Science and Technology, 2009, 22, 053001.	3.5	204
28	Field induced superconductivity in magnetically modulated films. Physica C: Superconductivity and Its Applications, 2008, 468, 741-744.	1.2	2
29	Magnetic tunable confinement of the superconducting condensate in superconductor/ferromagnet hybrids. Physica C: Superconductivity and Its Applications, 2008, 468, 737-740.	1.2	2
30	Interfacial superconductivity in bilayer and multilayer IVâ€"VI semiconductor heterostructures. Low Temperature Physics, 2008, 34, 985-991.	0.6	17
31	Different regimes of nucleation of superconductivity in mesoscopic superconductor/ferromagnet hybrids. Physical Review B, 2008, 77, .	3.2	5
32	Tunable anisotropic nonlinearity in superconductors with asymmetric antidot array. Applied Physics Letters, 2008, 93, 082501.	3.3	5
33	Localized superconductivity and Little-Parks effect in superconductor/ferromagnet hybrids. Physical Review B, 2007, 75, .	3.2	21
34	Magnetic confinement of the superconducting condensate in superconductor-ferromagnet hybrid composites. Physical Review B, 2007, 76, .	3.2	33
35	Domain-wall superconductivity in a ferromagnet/superconductor/ferromagnet trilayer. Physica C: Superconductivity and Its Applications, 2006, 437-438, 73-76.	1.2	6
36	Thin-film superconductor-ferromagnet hybrids: Competition between nucleation of superconductivity at domain walls and domainsâ€™ centers. Physical Review B, 2006, 74, .	3.2	42

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37	Domain-Wall Guided Nucleation of Superconductivity in Hybrid Ferromagnet-Superconductor-Ferromagnet Layered Structures. Physical Review Letters, 2005, 95, 227003.	7.8	77
38	Study of the Nonlinear Response of Superconductors in the Microwave Band Using a Local Technique. Radiophysics and Quantum Electronics, 2003, 46, 109-127.	0.5	5
39	Influence of ferromagnetic nanoparticles on the critical current of Josephson junction. Journal of Magnetism and Magnetic Materials, 2003, 258-259, 406-408.	2.3	17
40	The Littleâ€"Parks effect and multiquanta vortices in a hybrid superconductorâ€"ferromagnet system. Journal of Physics Condensed Matter, 2003, 15, 6591-6597.	1.8	14
41	Domain-wall superconductivity in hybrid superconductor-ferromagnet structures. Physical Review B, 2003, 68, .	3.2	100
42	Peculiarities of the Resistive State in Mo/Si Superlattices in a Magnetic Field. Modern Physics Letters B, 2003, 17, 627-634.	1.9	2
43	What is the best gate for vortex entry into type-II superconductor?. Physica C: Superconductivity and Its Applications, 2001, 361, 67-72.	1.2	25
44	Structure of the mixed state induced in thin YBaCuO superconducting films by the field of a small ferromagnetic particle. Journal of Experimental and Theoretical Physics, 1999, 89, 940-947.	0.9	5
45	Experimental investigation of a local mixed state induced by a small ferroparticle in YBaCuO films. IEEE Transactions on Applied Superconductivity, 1999, 9, 1602-1605.	1.7	3