Alexey Aladyshkin

List of Publications by Year
in descending order

45	763	623734	526287
papers	citations	14 h-index	27 g-index

46	46	46	563
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nucleation of superconductivity and vortex matter in superconductorâ€“ferromagnet hybrids. Superconductor Science and Technology, 2009, 22, 053001.	3.5	204
2	Domain-wall superconductivity in hybrid superconductor-ferromagnet structures. Physical Review B, 2003, 68, .	3.2	100
3	Domain-Wall Guided Nucleation of Superconductivity in Hybrid Ferromagnet-Superconductor-Ferromagnet Layered Structures. Physical Review Letters, 2005, 95, 227003.	7.8	77
4	Thin-film superconductor-ferromagnet hybrids: Competition between nucleation of superconductivity at domain walls and domainsâ€™ centers. Physical Review B, 2006, 74, .	3.2	42
5	Magnetic confinement of the superconducting condensate in superconductor-ferromagnet hybrid composites. Physical Review B, 2007, 76, .	3.2	33
6	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
7	Planar superconductor/ferromagnet hybrids: Anisotropy of resistivity induced by magnetic templates. Applied Physics Letters, 2009, 94, .	3.3	23
8	Localized superconductivity and Little-Parks effect in superconductor/ferromagnet hybrids. Physical Review B, 2007, 75, .	3.2	21
9	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
10	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
11	Interfacial superconductivity in bilayer and multilayer IVâ€“VI semiconductor heterostructures. Low Temperature Physics, 2008, 34, 985-991.	0.6	17
12	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
13	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
14	Vortex-core properties and vortex-lattice transformation in FeSe. Physical Review B, 2019, 99, .	3.2	15
15	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
16	The diode effect induced by domain-wall superconductivity. Journal of Physics Condensed Matter, 2014, 26, 095702.	1.8	14
17	The surface structures growthâ€™s features caused by Ge adsorption on the Au(111) surface. JETP Letters, 2017, 106, 217-222.	1.4	11
18	Crossover between different regimes of inhomogeneous superconductivity in planar superconductor-ferromagnet hybrids. Physical Review B, 2011, 84, .	3.2	10

#	Article	IF	Citations
19	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
20	Domain-wall superconductivity in a ferromagnet/superconductor/ferromagnet trilayer. Physica C: Superconductivity and Its Applications, 2006, 437-438, 73-76.	1.2	6
21	Tunneling interferometry and measurement of the thickness of ultrathin metallic Pb(111) films. JETP Letters, 2017, 106, 491-497.	1.4	6
22	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
23	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
24	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
25	Different regimes of nucleation of superconductivity in mesoscopic superconductor/ferromagnet hybrids. Physical Review B, 2008, 77, .	3.2	5
26	Tunable anisotropic nonlinearity in superconductors with asymmetric antidot array. Applied Physics Letters, 2008, 93, 082501.	3.3	5
27	Effect of ferromagnetic film thickness on magnetoresistance of thin-film superconductor-ferromagnet hybrids. Journal of Applied Physics, 2010, 108, 033911.	2.5	5
28	Mesoscopic cross-film cryotrons: Vortex trapping and dc-Josephson-like oscillations of the critical current. Physical Review B, 2011, 83, .	3.2	5
29	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
30	Hybridization and interference effects for localized superconducting states in strong magnetic field. Physical Review B, 2012, 85, .	3.2	4
31	Nonuniform Quantum-Confined States and Visualization of Hidden Defects in Pb(111) Films. JETP Letters, 2019, 109, 755-761.	1.4	4
32	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
33	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
34	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
35	Peculiarities of the Resistive State in Mo/Si Superlattices in a Magnetic Field. Modern Physics Letters B, 2003, 17, 627-634.	1.9	2
36	Field induced superconductivity in magnetically modulated films. Physica C: Superconductivity and Its Applications, 2008, 468, 741-744.	1.2	2

#	Article	IF	Citations
37	Magnetic tunable confinement of the superconducting condensate in superconductor/ferromagnet hybrids. Physica C: Superconductivity and Its Applications, 2008, 468, 737-740.	1.2	2
38	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
39	The Proximity and Josephson Effects in Niobium Nitrideâ€“Aluminum Bilayers. Physics of the Solid State, 2019, 61, 1544-1548.	0.6	2
40	Localized superconductivity in superconductor-ferromagnet hybrid structures. Bulletin of the Russian Academy of Sciences: Physics, 2009, 73, 3-7.	0.6	1
41	2D system incorporating perforated Mg sheet sandwiched between Pb layer and Si(111). Applied Surface Science, 2022, 589, 152951.	6.1	1
42	Localization of superconductivity in superconductorâ€“electromagnet hybrids. Superconductor Science and Technology, 2012, 25, 065015.	3.5	0
43	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
44	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
45	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