

Serghej L Prischepa

List of Publications by Year in descending order

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127
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127
docs citations

127
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951
citing authors

#	ARTICLE	IF	CITATIONS
1	Interface transparency and proximity effect in Nb/Cu triple layers realized by sputtering and molecular beam epitaxy. Superconductor Science and Technology, 2005, 18, 1-8.	1.8	88
2	Superconducting-critical-temperature oscillations in Nb/CuMn multilayers. Physical Review B, 1996, 53, 14040-14042.	1.1	73
3	Superconducting proximity effect and interface transparency in Nb [*] /Pd bilayers. Physical Review B, 2005, 72, .	1.1	57
4	Critical currents of MgB ₂ thin films deposited in situ by sputtering. Physical Review B, 2003, 67, .	1.1	41
5	Magnetic field dependence of pinning mechanisms in Bi ₂ Sr ₂ Ca ₁ Cu ₂ O _{8+x} thin films. Physica C: Superconductivity and Its Applications, 1995, 255, 239-246.	0.6	28
6	Microwave absorption in nanocomposite material of magnetically functionalized carbon nanotubes. Journal of Applied Physics, 2012, 112, .	1.1	28
7	Electrochemical Deposition and Characterization of Ni in Mesoporous Silicon. Journal of the Electrochemical Society, 2012, 159, D623-D627.	1.3	27
8	Interplay between exchange interaction and magnetic anisotropy for iron based nanoparticles in aligned carbon nanotube arrays. Carbon, 2014, 68, 337-345.	5.4	27
9	Interface transparency of Nb/Pd layered systems. European Physical Journal B, 2004, 38, 59-64.	0.6	26
10	Superconducting properties of Nb thin films deposited on porous silicon templates. Journal of Applied Physics, 2008, 104, 083917.	1.1	25
11	Nitrogen-doped twisted graphene grown on copper by atmospheric pressure CVD from a decane precursor. Beilstein Journal of Nanotechnology, 2017, 8, 145-158.	1.5	25
12	Upper critical fields and interface transparency in superconductor/ferromagnet bilayers. Physical Review B, 2007, 76, .	1.1	24
13	Structural and magnetic properties of Ni nanowires grown in mesoporous silicon templates. Thin Solid Films, 2013, 543, 133-137.	0.8	24
14	Quantum phase slips in superconducting Nb nanowire networks deposited on self-assembled Si templates. Applied Physics Letters, 2012, 101, .	1.5	22
15	CVD graphene sheets electrochemically decorated with core-shell Co/CoO nanoparticles. Applied Surface Science, 2018, 440, 1252-1260.	3.1	22
16	Vortex properties in superconducting Nb/Pd multilayers. Physical Review B, 1998, 57, 7922-7929.	1.1	21
17	Comparative study of initial stages of copper immersion deposition on bulk and porous silicon. Nanoscale Research Letters, 2013, 8, 85.	3.1	20
18	Critical temperature and interface transparency of N/S/N triple layers: theory and experiment. European Physical Journal B, 2006, 52, 9-14.	0.6	18

#	ARTICLE	IF	CITATIONS
19	Proximity effect and interface transparency in Nb/Cu multilayers. Journal of Applied Physics, 2009, 106, 113917.	1.1	18
20	Nonmonotonic behavior of the anisotropy coefficient in superconductor-ferromagnet-superconductor trilayers. Physical Review B, 2009, 80, .	1.1	18
21	Nonlinear current-voltage characteristics due to quantum tunneling of phase slips in superconducting Nb nanowire networks. Applied Physics Letters, 2013, 103, .	1.5	18
22	Angular dependence of the upper critical field in Nb/CuMn multilayers. Physical Review B, 1998, 57, 6056-6060.	1.1	17
23	Properties of Ni and Niâ€“Fe nanowires electrochemically deposited into a porous alumina template. Beilstein Journal of Nanotechnology, 2016, 7, 1709-1717.	1.5	17
24	Manifestation of coherent magnetic anisotropy in a carbon nanotube matrix with low ferromagnetic nanoparticle content. New Journal of Physics, 2015, 17, 023073.	1.2	16
25	Quantum vortex melting in Nb/CuMn multilayers. Physical Review B, 1996, 53, 1087-1090.	1.1	15
26	Superconducting properties of Nbâ€“CuMn multilayers. Journal of Applied Physics, 1995, 77, 2081-2086.	1.1	14
27	Critical-temperature-oscillations dependence on Mn concentration in superconducting Nb/CuMn multilayers. Physical Review B, 1998, 57, 14411-14415.	1.1	14
28	Upper Critical Fields of Nb/Pd Multilayers. Journal of Low Temperature Physics, 2003, 130, 509-527.	0.6	14
29	Electrochemical Deposition of Ni into Mesoporous Silicon. ECS Transactions, 2012, 41, 111-118.	0.3	14
30	Multiple order parameter configurations in superconductor/ferromagnet multilayers. Physical Review B, 2011, 84, .	1.1	13
31	Carrier transport in porous-Si/Ni/c-Si nanostructures. Journal of Alloys and Compounds, 2016, 657, 21-26.	2.8	13
32	Superconducting and structural properties of BSCCO thin films by molecular beam epitaxy. Cryogenics, 1994, 34, 859-862.	0.9	12
33	Evaluation of the specific boundary resistance of superconducting/weakly ferromagnetic hybrids by critical temperature measurements. Journal of Applied Physics, 2011, 110, 113904.	1.1	12
34	Micro Raman Investigation of Graphene Synthesized by Atmospheric Pressure CVD on Copper Foil from Decane. Physics Procedia, 2015, 72, 450-454.	1.2	12
35	Upper critical magnetic field and vortex pinning in superconducting/spin glass multilayers. Physica C: Superconductivity and Its Applications, 1999, 312, 112-120.	0.6	11
36	Electrical conductivity and magnetoresistance in twisted graphene electrochemically decorated with Co particles. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 117, 113790.	1.3	11

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37	Temperature scaling of the flux pinning force in Bi ₂ Sr ₂ Ca ₁ Cu ₂ O _{8+x} thin films. Journal of Applied Physics, 1996, 79, 4228.	1.1	10
38	Thickness dependence of pinning mechanisms in granular Nb thin films. Superconductor Science and Technology, 2006, 19, 1124-1129.	1.8	10
39	Resistive transitions in Nb/Cu _{0.41} Ni _{0.59} /Nb trilayers. JETP Letters, 2008, 88, 375-379.	0.4	10
40	Effect of the variation of the exchange energy on the superconducting critical temperature of S/F/S trilayers. European Physical Journal B, 2011, 80, 445-449.	0.6	10
41	Possibility of Determining the Graphene Doping Level Using Raman Spectra. Journal of Applied Spectroscopy, 2018, 84, 995-998.	0.3	10
42	Proximity effect in superconductor/highly paramagnetic Nb/Pd systems. Physica C: Superconductivity and Its Applications, 2004, 404, 95-98.	0.6	9
43	Evidence of fractional matching states in nanoperforated Nb thin film grown on porous silicon. Europhysics Letters, 2009, 88, 57006.	0.7	9
44	Negative differential resistance in n-type noncompensated silicon at low temperature. Applied Physics Letters, 2016, 109, .	1.5	9
45	Femtosecond light pulse response of photodetectors based on Graphene/n-Si heterojunctions. Carbon, 2019, 152, 643-651.	5.4	9
46	Porous anodic Al ₂ O ₃ ayers for superconducting films. Cryogenics, 1994, 34, 851-853.	0.9	8
47	The resistive anomaly and upward curvature of the perpendicular upper critical field in non-homogeneous superconductors. Journal of Physics Condensed Matter, 2001, 13, 3215-3221.	0.7	8
48	Effect of symmetry on the resistive characteristics of proximity coupled metallic multilayers. Physical Review B, 2003, 68, .	1.1	8
49	Nucleation of superconductivity in finite metallic multilayers: Effect of the symmetry. European Physical Journal B, 2004, 41, 439-444.	0.6	8
50	Transport properties in aggregates of Nb nanowires templated by carbon nanotube films. Carbon, 2016, 105, 544-550.	5.4	8
51	Change of the topology of a superconducting thin film electromagnetically coupled with an array of ferromagnetic nanowires. Superconductor Science and Technology, 2016, 29, 015011.	1.8	8
52	Impact of CNT medium on the interaction between ferromagnetic nanoparticles. Europhysics Letters, 2017, 117, 27007.	0.7	8
53	Disorder and vortex dynamics in high- superconductors. Superconductor Science and Technology, 1997, 10, 119-122.	1.8	7
54	Bi ₂ Sr ₂ CuO _{6+δ} /ACuO ₂ (A=Ca,Sr) superconducting multilayers obtained by Molecular Beam Epitaxy. Physica C: Superconductivity and Its Applications, 1999, 316, 215-223.	0.6	7

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55	Effect of geometrical symmetry on the angular dependence of the critical magnetic field in superconductor/normal metal multilayers. <i>Physical Review B</i> , 2005, 72, .	1.1	7
56	Role of the external surfaces on the superconducting properties of superconductor/normal metal trilayers. <i>Superlattices and Microstructures</i> , 2008, 43, 86-92.	1.4	7
57	Superconducting nanowire quantum interference device based on Nb ultrathin films deposited on self-assembled porous Si templates. <i>Nanotechnology</i> , 2014, 25, 425205.	1.3	7
58	Exchange coupling and magnetic anisotropy for different concentration of iron based nanoparticles in aligned carbon nanotube arrays. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2014, 11, 1074-1079.	0.8	7
59	Impact of aligned carbon nanotubes array on the magnetostatic isolation of closely packed ferromagnetic nanoparticles. <i>Carbon</i> , 2018, 139, 1104-1116.	5.4	7
60	Properties of $\text{Bi}_{2-x}\text{Sr}_{2x}\text{CuO}_{6+\delta}$ thin films obtained by MBE. <i>Thin Solid Films</i> , 1999, 353, 227-232.	0.8	6
61	Irreversibility line in Nb/CuMn multilayers with a regular array of antidots. <i>Physical Review B</i> , 2000, 62, 14461-14468.	1.1	6
62	Direct patterning of nitrogen-doped chemical vapor deposited graphene-based microstructures for charge carrier measurements employing femtosecond laser ablation. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 30LT01.	1.3	6
63	Flux creep-flux flow crossover in disordered superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 1997, 275, 211-219.	0.6	5
64	X-ray scattering study of interfacial roughness in Nb/PdNi multilayers. <i>Surface Science</i> , 2011, 605, 1791-1796.	0.8	5
65	NbN superconducting nanonetwork fabricated using porous silicon templates and high-resolution electron beam lithography. <i>Nanotechnology</i> , 2017, 28, 465301.	1.3	5
66	Self-Assembled Magnetically Isolated Co Nanoparticles Embedded Inside Carbon Nanotubes. <i>IEEE Transactions on Magnetics</i> , 2019, 55, 1-4.	1.2	5
67	Crossover from thermally activated to steady flow in the vortex dynamics of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+x}$ thin films. <i>Superconductor Science and Technology</i> , 1999, 12, 533-537.	1.8	4
68	Interface Properties of Superconductor-Based Heterostructures from Critical Temperature Measurements. <i>Journal of Superconductivity and Novel Magnetism</i> , 2013, 26, 2861-2862.	0.8	4
69	Vortex matching effects in Nb thin films due to Ni nanopillars embedded in anodic aluminum oxide substrates. <i>Superconductor Science and Technology</i> , 2013, 26, 035001.	1.8	4
70	Conductance spectroscopy in ferromagnet-superconductor hybrids. <i>Superconductor Science and Technology</i> , 2014, 27, 075008.	1.8	4
71	Interaction of electromagnetic radiation in the 20-200 GHz frequency range with arrays of carbon nanotubes with ferromagnetic nanoparticles. <i>Beilstein Journal of Nanotechnology</i> , 2015, 6, 1056-1064.	1.5	4
72	Low Temperature Conductivity in n -Type Noncompensated Silicon below Insulator-Metal Transition. <i>Advances in Condensed Matter Physics</i> , 2017, 2017, 1-12.	0.4	4

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73	Magnetic Relaxation Experiments in CNT-Based Magnetic Nanocomposite. Journal of Superconductivity and Novel Magnetism, 2019, 32, 3329-3337.	0.8	4
74	Pinning force and peak effect in superconductor/normal-metal multilayers. Physical Review B, 2001, 63, .	1.1	3
75	HIGH QUALITY FULLY IN-SITU MgB ₂ THIN FILMS OBTAINED BY DC MAGNETRON SPUTTERING. International Journal of Modern Physics B, 2003, 17, 779-784.	1.0	3
76	The influence of a submicrometre antidot array on the vortex topology and the pinning mechanism in layered superconductors. Superconductor Science and Technology, 2005, 18, 152-157.	1.8	3
77	Influence of Magnetic Losses on Microwave Absorption by Carbon-Nanotube Nanocomposites with a Low Concentration of Ferromagnetic Nanoparticles. Journal of Applied Spectroscopy, 2016, 83, 225-228.	0.3	3
78	Nanostructured Metal Films Formed onto Porous Silicon Template. Journal of Nano Research, 0, 39, 235-255.	0.8	3
79	2D Carbon Material/Silicon Heterojunctions for Fast Response Self-Powered Photodetector. International Journal of Nanoscience, 2019, 18, 1940088.	0.4	3
80	Superconducting critical temperature and softening of the phonon spectrum in ultrathin nb- and nbn/graphene hybrids. Superconductor Science and Technology, 0, .	1.8	3
81	Nb lift-off procedure for micropatterning Bi ₂ Sr ₂ Ca ₁ Cu ₂ O _{8+x} thin films. Journal of Applied Physics, 1995, 77, 2196-2198.	1.1	2
82	Scaling of I-V curves and flux creep in high-T _c superconductors. Physica C: Superconductivity and Its Applications, 1997, 282-287, 2019-2020.	0.6	2
83	Vortex lattice melting in perforated Nb/(Cu-Mn) multilayers. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2000, 80, 875-882.	0.6	2
84	Resistive transition and perpendicular critical magnetic field in perforated Nb/CuMn multilayers. Physica B: Condensed Matter, 2000, 284-288, 618-619.	1.3	2
85	Resistive Transitions in S/F/S Trilayers. Solid State Phenomena, 2009, 152-153, 478-481.	0.3	2
86	Asymmetry of the critical current and peak effect in superconducting multilayers. Superconductor Science and Technology, 2010, 23, 065019.	1.8	2
87	Magnetic memory effect in type-II superconductor/ferromagnet bilayers. Superconductor Science and Technology, 2014, 27, 055024.	1.8	2
88	Low-temperature conductivity of silicon doped with antimony. Semiconductors, 2015, 49, 705-711.	0.2	2
89	Anisotropy of Assemblies of Densely Packed Co-Alloy Nanoparticles Embedded in Carbon Nanotubes. IEEE Magnetism Letters, 2019, 10, 1-5.	0.6	2
90	Superconducting Order Parameter Nucleation and Critical Currents in the Presence of Weak Stray Fields in Superconductor/Insulator/Ferromagnet Hybrids. Coatings, 2021, 11, 507.	1.2	2

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91	Superconducting BSCCO thin films obtained by MBE. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1994, 16, 1961-1965.	0.4	1
92	Current dependence of pinning energy and flux dynamics in high temperature superconductors. IEEE Transactions on Applied Superconductivity, 1997, 7, 1173-1176.	1.1	1
93	Superconductivity in Bi/sub 2/Sr/sub 2/CuO/sub 6+Î/(Sr,Ca)CuO/sub 2/ multilayers obtained by molecular beam epitaxy. IEEE Transactions on Applied Superconductivity, 1999, 9, 2006-2009.	1.1	1
94	Upper Critical Field and Irreversibility Line in Bi2Sr2CuO6+Î/CaCuO2 Superconducting Superlattices Obtained by MBE. International Journal of Modern Physics B, 2000, 14, 2767-2772.	1.0	1
95	Vortex lattice melting in perforated Nb/(Cu-Mn) multilayers. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2000, 80, 875-882.	0.6	1
96	Scaling of $H_{c2}^{\text{eff}}(T)$ in Nb/CuMn Multilayers. Journal of Superconductivity and Novel Magnetism, 2001, 14, 411-414.	0.5	1
97	Evidence of vortex kink formation in antidotted layered superconductors. Physical Review B, 2002, 65, .	1.1	1
98	Increase of the critical current at the liquid-helium lambda point in superconducting perforated multilayers. Europhysics Letters, 2002, 60, 295-301.	0.7	1
99	Transport properties of Nb/PdNi bilayers. Journal of Physics and Chemistry of Solids, 2006, 67, 412-415.	1.9	1
100	Transport properties of nanoporated Nb thin films. Physica C: Superconductivity and Its Applications, 2010, 470, 957-959.	0.6	1
101	Asymmetry of the Pinning Force in Thin Nb Films in Parallel Magnetic Field. Journal of Superconductivity and Novel Magnetism, 2011, 24, 1553-1557.	0.8	1
102	1D superconductivity in porous Nb ultrathin films. Physica C: Superconductivity and Its Applications, 2012, 479, 167-169.	0.6	1
103	Structural and magnetic investigation of single wall carbon nanotube films with iron based nanoparticles inclusions synthesized by CVD technique from ferrocene/ethanol solution. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1176-1179.	0.8	1
104	Interaction of electromagnetic radiation with magnetically functionalized CNT nanocomposite in the subterahertz frequency range. Semiconductors, 2016, 50, 1702-1707.	0.2	1
105	Porous Silicon Templates for Superconducting Devices. , 2016, , 1-15.		1
106	Bi-Based Superconducting Multilayers Obtained by Molecular Beam Epitaxy. International Journal of Modern Physics B, 1999, 13, 991-996.	1.0	0
107	Anisotropy and transport properties of (Bi2Sr2CuO6+Îf)m/(CaCuO2)n multilayers obtained by molecular beam epitaxy. Physica C: Superconductivity and Its Applications, 2000, 341-348, 1903-1904.	0.6	0
108	Transition from thermally activated to regular flow of magnetic flux vortices in HTSC. Physics of the Solid State, 2000, 42, 1596-1601.	0.2	0

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109	Melting of the vortex lattice in perforated Nb/CuMn multilayers. <i>Physica C: Superconductivity and Its Applications</i> , 2002, 369, 254-257.	0.6	0
110	Role of boundary conditions in improving the working characteristics of superconductor-based nanostructures. <i>Microelectronic Engineering</i> , 2003, 69, 346-349.	1.1	0
111	Current-dependent crossover in the flux dynamics of MgB ₂ thin films. <i>Europhysics Letters</i> , 2004, 65, 540-545.	0.7	0
112	Angular Effects of the Critical Current in Nb/Pd Multilayer Structures. <i>AIP Conference Proceedings</i> , 2006, , .	0.3	0
113	Angular effects of the critical current in Nb ⁺ Pd multilayers. <i>Physical Review B</i> , 2006, 74, .	1.1	0
114	Upper critical magnetic fields in superconductor/ferromagnet hybrids. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 254201.	0.7	0
115	Two-Dimensional Regime in the Angular Dependence of the Upper Critical Field of Superconducting/Normal Metal Hybrids. <i>Journal of Superconductivity and Novel Magnetism</i> , 2010, 23, 329-332.	0.8	0
116	Superconducting Critical Temperature and Magnetic Inhomogeneities in Superconductor/Ferromagnet/Superconductor Trilayers. <i>Solid State Phenomena</i> , 0, 190, 409-412.	0.3	0
117	Low temperature injected-caused charge carrier instability in n-type silicon below insulator-to-metal transition. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 225702.	0.7	0
118	Long-Range Exchange Interaction Between Ferromagnetic Nanoparticles Embedded in Carbon Nanotubes. <i>IEEE Transactions on Magnetics</i> , 2022, 58, 1-5.	1.2	0
119	MULTILAYER AGAINST MONOLAYER BEHAVIOR IN PROXIMITY COUPLED SUPERCONDUCTING NANOSTRUCTURES. , 2005, , .		0
120	STRUCTURE AND PROPERTIES OF SUPERCONDUCTOR/FERROMAGNET HYBRIDS. , 2007, , .		0
121	PROXIMITY EFFECT AND CRITICAL MAGNETIC FIELDS IN Nb/CuNi/Nb STRUCTURES. , 2007, , .		0
122	Porous Silicon Templates for Superconducting Devices. , 2018, , 1133-1147.		0
123	Influence of deposition of cobalt particles on quantum corrections to Droude conductivity in twisted CVD graphene. <i>Izvestiya Vysshikh Uchebnykh Zavedenii Materialy Elektronnoi Tekhniki = Materials of Electronics Engineering</i> , 2019, 22, 73-83.	0.1	0
124	Delocalization of electron states in n-Si at low temperatures. <i>Doklady BGUIR</i> , 2020, 18, 28-35.	0.1	0
125	Il.2 Cuprate and other unconventional superconductors. , 2007, , 303-315.		0
126	Indirect Exchange Coupling in Carbon Nanotubes. <i>Doklady BGUIR</i> , 2022, 20, 13-20.	0.1	0