Mikhail I Petrov

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Diffusion of Strontium in the Intergranular Boundaries of La2–ÂxSrxCuO4. Russian Journal of Physical Chemistry A, 2021, 95, 1165-1168.	0.1	0
2	Universal Behavior and Temperature Evolution of the Magnetoresistance Hysteresis in Granular High-Temperature Superconductors Y–Ba–Cu–O. Physics of the Solid State, 2021, 63, 1069-1080.	0.2	2
3	Forming High-Temperature Superconducting Layers at the Interfaces between Nonsuperconducting Phases. Technical Physics Letters, 2020, 46, 1004-1007.	0.2	0
4	The Influence of CuO Dopant Nanoparticles, Prepared via the Arc Plasma Synthesis Method, on the Critical Current of YBa2Cu3O7 –1´Composites. Inorganic Materials: Applied Research, 2019, 10, 999-1002.	0.1	6
5	Magnetic Properties and Critical Current of Superconducting Nanocomposites (1 â^x)YBa2Cu3O7â^î^ + xCuO. Journal of Superconductivity and Novel Magnetism, 2018, 31, 3841-3845.	0.8	10
6	Superconductivity on Interfaces of Nonsuperconducting Granules La2CuO4 and La1.56Sr0.44CuO4. Journal of Superconductivity and Novel Magnetism, 2018, 31, 3867-3874.	0.8	6
7	Tuning the peak effect in the Y1â^'Nd Ba2Cu3O7â^'δ compound. Ceramics International, 2017, 43, 9985-9991.	2.3	10
8	Establishing of peak effect in YBCO by Nd substitution. Journal of Magnetism and Magnetic Materials, 2017, 440, 127-128.	1.0	5
9	Particularities of the Magnetic State of CuO Nanoparticles Produced by Low-Pressure Plasma Arc Discharge. Journal of Superconductivity and Novel Magnetism, 2017, 30, 931-936.	0.8	27
10	Plasma-chemical synthesis of copper oxide nanoparticles in a low-pressure arc discharge. Vacuum, 2016, 133, 25-30.	1.6	37
11	Magnetoresistance anisotropy and scaling in textured high-temperature superconductor Bi1.8Pb0.3Sr1.9Ca2Cu3O x. Physics of the Solid State, 2015, 57, 2145-2150.	0.2	13
12	Specific features of the behavior of electroarc CuO nanoparticles in a magnetic field. Physics of the Solid State, 2015, 57, 919-923.	0.2	21
13	Positive magnetoresistance of single-crystal bilayer manganites (La _{1â²z} Nd _z) _{1.4} Sr _{1.6} Mn ₂ O ₇ (z = 0, 0.1). Journal of Applied Physics, 2015, 117, 163918.	1.1	3
14	Enhancing of magnetic flux pinning in YBa2Cu3O7â^'x/CuO granular composites. Journal of Applied Physics, 2015, 118, 023907.	1.1	24
15	Study of magnetic flux pinning in granular YBa2Cu3O7 â^' y /nanoZrO2 composites. JETP Letters, 2014, 99, 99-103.	0.4	18
16	Magnetoresistance of porous polycrystalline HTSC: Effect of the transport current on magnetic flux compression in intergranular medium. Physics of the Solid State, 2014, 56, 1542-1547.	0.2	8
17	Correlation Between Magnetoresistance and Magnetization Hysteresis in a Granular High-T C Superconductor: Impact of Flux Compression in the Intergrain Medium. Journal of Superconductivity and Novel Magnetism, 2014, 27, 1425-1429.	0.8	12
18	Dominant influence of the compression effect of a magnetic flux in the intergranular medium of a granular high-temperature superconductor on dissipation processes in an external magnetic field. Physics of the Solid State, 2013, 55, 2422-2430.	0.2	14

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19	Fractal dimension of cluster boundaries in porous polycrystalline HTSC materials. Physics of the Solid State, 2012, 54, 1947-1950.	0.2	3
20	Specific features in the hysteretic behavior of the magnetoresistance of granular high-temperature superconductors. Physics of the Solid State, 2012, 54, 2155-2164.	0.2	13
21	Magnetoresistance of substituted lanthanum manganites La0.7Ca0.3MnO3upon nonequilibrium overheating of carriers. Journal of Applied Physics, 2011, 109, 083711.	1.1	2
22	General regularities of magnetoresistive effects in the polycrystalline yttrium and bismuth high-temperature superconductor systems. Physics of the Solid State, 2011, 53, 922-932.	0.2	29
23	Pinning in a porous high-temperature superconductor Bi2223. Physics of the Solid State, 2011, 53, 2409-2414.	0.2	13
24	Contributions from Inter-grain Boundaries to the Magneto-resistive Effect in Polycrystalline High-T C Superconductors. The Underlying Reason of Different Behavior for YBCO and BSCCO Systems. Journal of Superconductivity and Novel Magnetism, 2011, 24, 2129-2136.	0.8	10
25	Magnetically driven high-frequency rectification in a cooperative system of magnetic tunnel junctions: Frequency dependence. Journal of Magnetism and Magnetic Materials, 2011, 323, 1001-1005.	1.0	3
26	Compression of a magnetic flux in the intergrain medium of a YBa2Cu3O7 granular superconductor from magnetic and magnetoresistive measurements. Journal of Applied Physics, 2011, 110, 093918.	1.1	20
27	Magnetization asymmetry of type-II superconductors in high magnetic fields. Journal of Applied Physics, 2011, 109, .	1.1	40
28	Nonmonotonic behavior of magnetoresistance, R(H) hysteresis, and low-temperature heat capacity of the BaPb0.75Bi0.25O3 superconductor in a magnetic field: Possible manifestations of phase separation. Journal of Experimental and Theoretical Physics, 2010, 110, 584-593.	0.2	4
29	Asymmetry of magnetization curves of textured BSCCO. Physica C: Superconductivity and Its Applications, 2010, 470, S870-S872.	0.6	0
30	Magnetoresistance hysteresis of bulk textured Bi1.8Pb0.3Sr1.9Ca2Cu3Ox+Ag ceramics and its anisotropy. Physica C: Superconductivity and Its Applications, 2010, 470, 61-67.	0.6	16
31	Composition of ferrospinel phase and magnetic properties of microspheres and cenospheres from fly ashes. Materials Chemistry and Physics, 2009, 114, 495-503.	2.0	29
32	Mechanism of the hysteretic behavior of the magnetoresistance of granular HTSCs: The universal nature of the width of the magnetoresistance hysteresis loop. Journal of Experimental and Theoretical Physics, 2009, 108, 241-248.	0.2	28
33	Hysteresis of magnetoresistance in granular La0.7Ca0.3MnO3 at low temperatures. Physics of the Solid State, 2009, 51, 778-780.	0.2	9
34	Mechanism of formation of a negative magnetoresistance region in granular high-temperature superconductors. Physics of the Solid State, 2009, 51, 1105-1109.	0.2	13
35	Increase in the diamagnetic response from low-density Bi1.8Pb0.3Sr1.9Ca2Cu3O x high-temperature superconductors and Bi1.8Pb0.3Sr1.9Ca2Cu3O x + Ag composites. Technical Physics, 2009, 54, 1130-1134.	0.2	4
36	The effect of magnetisation relaxation of superconducting grains on time relaxation of the resistance of granular HTSC in constant applied magnetic field. Journal of Physics: Conference Series, 2009, 150, 052012.	0.3	0

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37	Magnetic Field Dependence of Intergrain Pinning Potential inÂBulk Granular Composites YBCO + CuO Demonstrating Large Magneto-Resistive Effect. Journal of Superconductivity and Novel Magnetism, 2008, 21, 243-247.	0.8	10
38	Peculiarities of the time evolution of magnetoresistance of granular HTSC in a constant applied magnetic field. Solid State Communications, 2008, 147, 284-287.	0.9	1
39	Relaxation of the remanent resistance of granular HTSC Y-Ba-Cu-O + CuO composites after magnetic field treatment. Physics of the Solid State, 2008, 50, 1014-1021.	0.2	7
40	Pinning enhancement by heterovalent substitution in Y _{1â^'<i>x</i>} RE _{<i>x</i>} Ba ₂ Cu ₃ O _{7â^'δ} . Superconductor Science and Technology, 2008, 21, 085015.	1.8	11
41	Preparation, microstructure, magnetic and transport properties of bulk textured Bi _{1.8} Pb _{0.3} Sr _{1.9} Ca ₂ Cu ₃ O _{<i>x</i>} Bi _{1.8} Pb _{0.3} Sr _{1.9} Ca ₂ Cu ₃ O _{<i>x</i>} - ceramics, Superconductor Science and Technology, 2008, 21, 105019.	and +Ag	11
42	The magnetic-field-driven effect of microwave detection in a manganite granular system. Journal Physics D: Applied Physics, 2008, 41, 015004.	1.3	7
43	Thermally activated dissipation in a novel foamed Bi-based oxide superconductor in magnetic fields. Superconductor Science and Technology, 2007, 20, 491-494.	1.8	17
44	Study of dependence upon the magnetic field and transport current of the magnetoresistive effect in YBCO-based bulk composites. Superconductor Science and Technology, 2007, 20, 495-499.	1.8	23
45	Hysteretic behavior of the magnetoresistance and the critical current of bulk Y3/4Lu1/4Ba2Cu3O7+CuO composites in a magnetic field. Physica C: Superconductivity and Its Applications, 2007, 460-462, 1307-1308.	0.6	1
46	Time relaxation of residual resistance of HTSC-based composites. Physica C: Superconductivity and Its Applications, 2007, 460-462, 1309-1310.	0.6	5
47	Crossover from S–l–S to S–F–S junctions in composites Y3/4Lu1/4Ba2Cu3O7+Y3(Al1â^'xFex)5O12. Phys C: Superconductivity and Its Applications, 2007, 460-462, 1311-1312.	sica 0.6	0
48	Enhancement of pinning in cerium doped Y(1â^'x)CexBa2Cu3O7 HTSC. Physica C: Superconductivity and Its Applications, 2007, 460-462, 1192-1193.	0.6	5
49	Magnetoresistance hysteresis in granular HTSCs as a manifestation of the magnetic flux trapped by superconducting grains in YBCO + CuO composites. Journal of Experimental and Theoretical Physics, 2007, 105, 1174-1183.	0.2	27
50	Andreev reflection and experimental temperature dependences of the critical current in heterogeneous high-temperature superconductors (polycrystals and related composites). Physics of the Solid State, 2007, 49, 619-626.	0.2	4
51	Effect of heterovalent substitution of rare-earth elements on the magnetic and transport properties of YBa2Cu3O7. Physics of the Solid State, 2007, 49, 2047-2051.	0.2	5
52	Highly textured bismuth-containing high-temperature superconductor ceramics obtained by uniaxial pressing in liquid medium: Fabrication and properties. Technical Physics Letters, 2007, 33, 740-743.	0.2	3
53	Current–voltage characteristics of break junctions of high-Tc superconductors. Physica C: Superconductivity and Its Applications, 2007, 467, 80-84.	0.6	4
54	Magnetization loop and critical current of porous Bi-based HTS. Physica C: Superconductivity and Its Applications, 2006, 434, 135-137.	0.6	20

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55	Study of current–voltage characteristics of Bi-based high-temperature superconductors with fractal cluster structure. Physica C: Superconductivity and Its Applications, 2006, 435, 19-22.	0.6	4
56	The mechanisms responsible for broadening of the resistive transition under magnetic field in the Josephson junction network realized in bulk YBCO+CuO composites. Physica C: Superconductivity and Its Applications, 2006, 435, 12-15.	0.6	9
57	Angular dependence of the magnetoresistance in Y3/4Lu1/4Ba2Cu3O7-CuO composites at 77 K. Technical Physics Letters, 2006, 32, 677-679.	0.2	4
58	Current-controlled magneto-resistive effect in bulk Y-Ba-Cu-O + CuO composites and their application as magnetic-field sensors at 77 K. Physics of Metals and Metallography, 2006, 101, S24-S26.	0.3	0
59	Andreev reflections in a Bi1.8Pb0.3Sr1.9Ca2Cu3Ox break junction. Physics of Metals and Metallography, 2006, 101, S27-S28.	0.3	1
60	Magnetic properties of a low-density Bi-based HTSC. Physics of Metals and Metallography, 2006, 101, S29-S32.	0.3	1
61	Magnetic properties of nanoparticles of cenospheres from energetic ashes. Physics of Metals and Metallography, 2006, 102, S49-S52.	0.3	Ο
62	Mössbauer and magnetic study of microspheres extracted from fly ashes of power stations. Physics of Metals and Metallography, 2006, 102, S53-S56.	0.3	3
63	Current-voltage characteristics of a foamed Bi1.8Pb0.3Sr2Ca2Cu3O x high-temperature superconductor with fractal cluster structure. Physics of the Solid State, 2006, 48, 207-212.	0.2	9
64	Mechanisms of dissipation in a Josephson medium based on a high-temperature superconductor in a magnetic field. Physics of the Solid State, 2006, 48, 826-832.	0.2	4
65	Investigation of the Josephson coupling through a magnetoactive barrier (ferrimagnet, paramagnet) in Y3/4Lu1/4Ba2Cu3O7 + Y3(Al1 â~' x Fe x)5O12 composites. Physics of the Solid State, 2006, 48, 2046-2055.	0.2	Ο
66	Switch-on and switch-off tests of inductive high-Tc superconductor based fault current limiter in the short circuit regime. Journal of Materials Processing Technology, 2005, 161, 42-45.	3.1	1
67	The synthesis, microstructure, transport and magnetic properties of Bi-based low density HTSC. Journal of Materials Processing Technology, 2005, 161, 58-61.	3.1	4
68	M�ssbauer study of magnetic microspheres isolated from power plant fly ash. Inorganic Materials, 2005, 41, 50-59.	0.2	3
69	Mរីរូ¹⁄2ssbauer study of magnetic microspheres isolated from power plant fly ash. Inorganic Materials, 2005, 41, 50-59.	0.2	13
70	Magnetoresistive effect in bulk composites 1-2-3 YBCO + CuO and 1-2-3 YBCO + BaPb1ÂxSnxO3and their application as magnetic field sensors at 77 K. Superconductor Science and Technology, 2004, 17, 175-181.	1.8	20
71	Crossover from the "clean―limit to the "dirty―limit in a network of S-N-S weak links in Y3/4Lu1/4Ba2Cu3O7 + BaPb1â^'x SnxO3 (0≤â‰9.25) composites. Physics of the Solid State, 2004, 46, 1792-1797.	0.2	2
72	Andreev reflections and experimental current–voltage characteristics of break junctions of polycrystalline HTSC. Physica C: Superconductivity and Its Applications, 2004, 408-410, 620-622.	0.6	5

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73	Title is missing!. Journal of Low Temperature Physics, 2003, 130, 347-381.	0.6	1
74	The effect of ferrimagnetic ordering in insulating component of composites HTSC+Yttrium Iron Garnet on its transport properties. Solid State Communications, 2003, 125, 281-285.	0.9	0
75	Andreev reflection in natural grain boundaries of polycrystalline high-T c superconductor La1.85Sr0.15CuO4. Physics of the Solid State, 2003, 45, 1219-1222.	0.2	3
76	Controlled magnetoresistance in Y3/4Lu1/4Ba2Cu3O7-CuO composites at 77 K. Technical Physics Letters, 2003, 29, 578-581.	0.2	1
77	Transport and magnetic properties of Y3/4Lu1/4Ba2Cu3O7 + Y3Fe5O12 composites representing a Josephson-type superconductor-ferrimagnet-superconductor weak-link network. Physics of the Solid State, 2003, 45, 1866-1873.	0.2	1
78	Synthesis, microstructure, and the transport and magnetic properties of Bi-containing high-temperature superconductors with a porous structure. Technical Physics Letters, 2003, 29, 986-988.	0.2	14
79	The effect of paramagnetic impurities in normal metal on the critical current in a network of SÂNÂS Josephson junctions in bulk Y3/4Lu1/4Ba2Cu3O7Â BaPb1ÂxFexO3composites. Superconductor Science and Technology, 2003, 16, 60-64.	1.8	1
80	A novel energy efficient SFCL with a silver-free contact switchgear for application in electricity and transportation. IEEE Transactions on Applied Superconductivity, 2002, 12, 1770-1775.	1.1	2
81	Anomalous transport properties of a paramagnetic NiTiO3 + HTSC two-phase system representing a random Josephson junction network. JETP Letters, 2002, 75, 138-141.	0.4	0
82	Temperature evolution of the hysteresis in the current-voltage characteristic of a polycrystalline high-temperature superconductor with 1-2-3 structure. Physics of the Solid State, 2002, 44, 1229-1234.	0.2	8
83	The anomalous transport properties of composites HTSC+NiTiO3. Physica C: Superconductivity and Its Applications, 2001, 361, 45-52.	0.6	5
84	Composite materials on high-Tc superconductors and BaPbO3, Ag basis. Physica C: Superconductivity and Its Applications, 2001, 364-365, 174-177.	0.6	14
85	A new concept for a current switch based on a high-temperature superconductor. Technical Physics, 2001, 46, 1299-1302.	0.2	0
86	High-temperature superconductor based composites: Large magnetoresistance in weak magnetic fields. Technical Physics Letters, 2001, 27, 952-955.	0.2	6
87	Superconductor-semiconductor-super- conductor junction network in bulk polycrystalline composites Y3/4Lu1/4Ba2Cu3O7+ Cu1-xLixO. Superconductor Science and Technology, 2001, 14, 798-805.	1.8	21
88	A dc superconducting fault current limiter using die-pressed YBa2Cu3O7ceramic. Superconductor Science and Technology, 2001, 14, 413-416.	1.8	8
89	A comparative study of transport properties of composites HTSC + MgTiO3 and HTSC + NiTiO3. The effect of paramagnetic NiTiO3. Physica C: Superconductivity and Its Applications, 2000, 341-348, 1863-1864.	0.6	7
90	Transport properties of HTSC + Ba(Pb, Met)O3 composites as functions of the electrical and magnetic characteristics of nonsuperconducting components. Physics of the Solid State, 2000, 42, 810-815.	0.2	1

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91	Applicability of the theory based on Andreev reflection to the description of experimental current–voltage characteristics of polycrystalline HTSC+normal metal composites. Physica C: Superconductivity and Its Applications, 1999, 314, 51-54.	0.6	28
92	Influence of transport current and thermal fluctuations on the resistive properties of HTSC+CuO composites. Physics of the Solid State, 1999, 41, 881-886.	0.2	9
93	Influence of magnetic scattering centers in the insulator component of the composite HTSC+Cu1â^'x NixO on its resistive properties. Physics of the Solid State, 1998, 40, 1451-1455.	0.2	6
94	Short-circuit current limiter utilizing a high-Tc superconductor. Technical Physics, 1998, 43, 1255-1256.	0.2	0
95	Transport properties of high-temperature superconductor + semiconductor composites with different carrier concentration. Physics of the Solid State, 1997, 39, 735-740.	0.2	2
96	Characteristics of current flow in composites made from a high-temperature superconductor and the low-temperature superconducting metal oxide Ba(PbBi)O3. Physics of the Solid State, 1997, 39, 362-368.	0.2	2
97	Effect of thermal fluctuations on the resistive properties of HTSC+CuO composites. Physics of the Solid State, 1997, 39, 1749-1750.	0.2	4
98	The effect of nonmagnetic and magnetic impurities in the normal metal layer — N of network of weak S-N-S junctions in composites on high temperature superconductors basis. Physica C: Superconductivity and Its Applications, 1997, 282-287, 2447-2448.	0.6	3
99	Transport properties of composites high temperature superconductor + semiconductor with different carrier concentration. Physica C: Superconductivity and Its Applications, 1997, 282-287, 2449-2450.	0.6	2
100	Thermally activated phase slippage in composites HTSC + CuO. Physica C: Superconductivity and Its Applications, 1997, 282-287, 2453-2454.	0.6	2
101	Critical currents in bulk composites. Physics Letters, Section A: General, Atomic and Solid State Physics, 1997, 237, 85-89.	0.9	25
102	The effect of heat treatment on the transport properties of the polycrystalline HTSC. Physica C: Superconductivity and Its Applications, 1994, 235-240, 3043-3044.	0.6	10
103	A study of the hysteresis property of the current-voltage characteristic in high-temperature superconductors. Solid State Communications, 1992, 82, 453-456.	0.9	17
104	Superconductivity near liquid nitrogen temperature in the Sn-Ba-Sr-Y-Cu-O system. Physica C: Superconductivity and Its Applications, 1989, 161, 493-496.	0.6	0
105	Peculiarities of the resistive state of the (Y,Lu)1Ba2Cu3O7â^î´ superconducting ceramics. Physica C: Superconductivity and Its Applications, 1988, 156, 249-250.	0.6	6