Alexander Lavrov

List of Publications by Year
in descending order

78	2,764	331670 21	168389 53
papers	citations	h-index	g-index

79	79	79	2327
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electrical Resistivity Anisotropy from Self-Organized One Dimensionality in High-Temperature Superconductors. Physical Review Letters, 2002, 88, 137005.	7.8	408
2	Achieving fast oxygen diffusion in perovskites by cation ordering. Applied Physics Letters, 2005, 86, 091910.	3.3	404
3	Transport and magnetic properties ofGdBaCo2O5+xsingle crystals: A cobalt oxide with square-latticeCoO2planes over a wide range of electron and hole doping. Physical Review B, 2005, 71, .	3.2	272
4	Mobility of the Doped Holes and the Antiferromagnetic Correlations in Underdoped High-TcCuprates. Physical Review Letters, 2001, 87, 017001.	7.8	248
5	Fast oxygen diffusion in A-site ordered perovskites. Progress in Solid State Chemistry, 2007, 35, 481-490.	7.2	163
6	Ising-Like Spin Anisotropy and Competing Antiferromagnetic-Ferromagnetic Orders inGdBaCo2O5.5Single Crystals. Physical Review Letters, 2003, 90, 227201.	7.8	142
7	Magnetic shape-memory effects in a crystal. Nature, 2002, 418, 385-386.	27.8	106
8	Unusual Magnetic Susceptibility Anisotropy in UntwinnedLa2â^'xSrxCuO4Single Crystals in the Lightly Doped Region. Physical Review Letters, 2001, 87, 017007.	7.8	99
9	Magnetoresistance Anomalies in AntiferromagneticYBa2Cu3O6+x: Fingerprints of Charged Stripes. Physical Review Letters, 1999, 83, 2813-2816.	7.8	91
10	c-axis transport and resistivity anisotropy of lightly to moderately dopedLa2â^'xSrxCuO4single crystals:â€ƒImplications on the charge transport mechanism. Physical Review B, 2002, 65, .	3.2	86
11	Origin of the large thermoelectric power in oxygen-variableRBaCo2O5+x(R=Gd,Nd). Physical Review B, 2006, 73, .	3.2	78
12	Anisotropic Magnetoresistance in Lightly DopedLa2â^'xSrxCuO4: Impact of Antiphase Domain Boundaries on the Electron Transport. Physical Review Letters, 2003, 90, 247003.	7.8	77
13	Spin-Flop Transition and the Anisotropic Magnetoresistance ofPr1.3â^'xLa0.7CexCuO4: Unexpectedly Strong Spin-Charge Coupling in the Electron-Doped Cuprates. Physical Review Letters, 2004, 92, 227003.	7.8	48
14	Two mechanisms of pseudogap formation in Bi-2201: Evidence from the c -axis magnetoresistance. Europhysics Letters, 2002, 57, 267-273.	2.0	42
15	Magnetoresistance in Heavily UnderdopedYBa2Cu3O6+x: Antiferromagnetic Correlations and Normal-State Transport. Physical Review Letters, 1999, 83, 1419-1422.	7.8	37
16	Normal-state conductivity in underdopedLa2â^'xSrxCuO4thin films:â€‚Search for nonlinear effects related to collective stripe motion. Physical Review B, 2003, 68, .	3.2	34
17	Normal-State Resistivity Anisotropy in UnderdopedRBa2Cu3O6+xCrystals. Physical Review Letters, 1998, 81, 5636-5639.	7.8	29
18	Novel Anisotropy in the Superconducting Gap Structure ofBi2Sr2CaCu2O8+ÎProbed by Quasiparticle Heat Transport. Physical Review Letters, 2002, 88, 147004.	7.8	28

#	Article	IF	Citations
19	Study of the antiferromagnetic and superconducting phase boundaries in RBa2Cu3O6+x (R î—» Tm, Lu) I. Anisotropic resistivity anomaly at the NÃ©el temperature. Physica C: Superconductivity and Its Applications, 1995, 248, 365-381.	1.2	27
20	Large magnetothermal conductivity in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Gd</mml:mi><mml:mi mathvariant="normal">Ba</mml:mi><mml:msub><mml:mi mathvariant="normal">Co</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mrow><mml:mn>5</mml:mn><mml:mo>+</mml:mo><mml:mi>x</mml:mi></mml:mrow></m crystals. Physical Review B, 2008, 77, .	3.2	25
21	Resistive transition and upper critical field in underdoped YBa2Cu3O6+x single crystals. Journal of Experimental and Theoretical Physics, 1999, 88, 148-156.	0.9	23
22	Study of the antiferromagnetic and superconducting phase boundaries in RBa2Cu3O6+x (R î—» Tm, Lu). II. Influence of low-temperature oxygen ordering on TN and Tc. Physica C: Superconductivity and Its Applications, 1995, 253, 313-324.	1.2	21
23	Synthesis and oxygenation behavior of RBaCo4O7 + Î´ (R = Y, Dy-Lu). Inorganic Materials, 2013, 49, 626-631.	0.8	21
24	Spin reorientation and in-plane magnetoresistance of lightly dopedLa2â^'xSrxCuO4in magnetic fields up to 55 T. Physical Review B, 2004, 70, .	3.2	20
25	Influence of the oxygen rearrangement on normal and superconducting properties of YBa2Cu3O6+x ceramics. Physica C: Superconductivity and Its Applications, 1992, 197, 47-52.	1.2	18
26	Low temperature order-disorder phenomena in YBa2Cu3O7â^'x an electrical resistivity study. Physics Letters, Section A: General, Atomic and Solid State Physics, 1992, 168, 71-74.	2.1	15
27	3D Metalâ€“Organic Frameworks Based on Co(II) and Bithiophendicarboxylate: Synthesis, Crystal Structures, Gas Adsorption, and Magnetic Properties. Molecules, 2021, 26, 1269.	3.8	15
28	Low-temperature resistivity of YBa2Cu3O6+x single crystals in the normal state. JETP Letters, 1997, 65, 870-876.	1.4	14
29	Competition and coexistence of antiferromagnetism and superconductivity inRBa2Cu3O6+xâ€‰(R=Lu,â€‰Y)single crystals. Physical Review B, 2009, 79, .	3.2	13
30	Spin transition and thermal expansion in the layered cobaltite GdBaCo2O5.5. Physics of the Solid State, 2010, 52, 1688-1693.	0.6	13
31	Decrease of Tc with low-temperature oxygen ordering in 90 K superconductors YBa2Cu3O6+x. Physica C: Superconductivity and Its Applications, 1993, 216, 36-48.	1.2	12
32	Structural phase transitions in YBaCo4O7 + x cobaltate upon variations in oxygen content, according to X-ray diffraction data obtained using synchrotron radiation. Bulletin of the Russian Academy of Sciences: Physics, 2013, 77, 151-154.	0.6	10
33	Charge Transport Properties of Lightly-Doped Cuprates: Behavior of the Hall Coefficient. Journal of Low Temperature Physics, 2003, 131, 793-801.	1.4	9
34	Significant suppression of weak ferromagnetism in(La1.8Eu0.2)CuO4. Physical Review B, 2003, 67, .	3.2	9
35	Thermodynamic and transport properties of underdoped cuprates from ARPES data. Physica B: Condensed Matter, 2004, 351, 250-255.	2.7	9
36	Effect of Oxygen Nonstoichiometry on the Magnetic Phase Transitions in Frustrated YBaCo4O7 + x (x =) Tj ETQq0 0 0 rgBT /Overlock 10	0.9	7

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37	CRYSTALLINE AND NANOSTRUCTURED MATERIALS BASED ON TRANSITION METAL DICHALCOGENIDES: SYNTHESIS AND ELECTRONIC PROPERTIES. Journal of Structural Chemistry, 2022, 63, 176-226.	1.0	6
38	Influence of oxygen ordering on the magnetic penetration depth in YBa2Cu3O6+x (0.39 â©½ x â©½ 0.93). Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 187, 341-345.	2.1	5
39	Antiferromagnetic correlations and the normal-state transport in heavily underdoped YBa2Cu3O6+x. Physica C: Superconductivity and Its Applications, 2000, 341-348, 1555-1558.	1.2	5
40	Coordination Polymers of Ni(II) with Thiophene Ligands: Synthesis, Structures, and Magnetic Properties. Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya, 2021, 47, 664-669.	1.0	5
41	Complexes of Copper(II) Halides with 2-(3,5-Dimethylpyrazol-1-yl)benzimidazole: Synthesis and Magnetic and Cytotoxic Properties. Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya, 2021, 47, 751-759.	1.0	5
42	Ando, Lavrov, and Segawa Reply:. Physical Review Letters, 2000, 85, 475-475.	7.8	4
43	Features of the low-temperature specific heat in underdoped YBa2Cu3O6 + x single crystals. JETP Letters, 2010, 92, 332-337.	1.4	4
44	Refinement of the composition and structure of YBaCo4â^'x Al x O7+Î´ crystals. Crystallography Reports, 2011, 56, 425-434.	0.6	4
45	Orthorhombic YBaCo4O8.4 crystals as a result of saturation of hexagonal YBaCo4O7 crystals with oxygen. Crystallography Reports, 2015, 60, 484-492.	0.6	4
46	Paramagnetic Rhenium Iodide Cluster with N-Heterocyclic Carbene. Inorganic Chemistry, 2021, 60, 6746-6752.	4.0	4
47	New nickel(II) and copper(II) complexes with 1-tert-butyl-1H- and 1,5-diaminotetrazoles. Inorganica Chimica Acta, 2021, 524, 120452.	2.4	4
48	Magnetotransport study of the charged stripes in high-Tc cuprates. Physica C: Superconductivity and Its Applications, 2000, 341-348, 1535-1538.	1.2	3
49	Yttrium barium heptaoxocobaltate YBaCo4O7+Î´: Refinement of the structure and determination of the composition. Crystallography Reports, 2013, 58, 682-686.	0.6	3
50	Magnetic Properties of 1D Ironâ€“Sulfur Compounds Formed Inside Singleâ€Walled Carbon Nanotubes. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000291.	2.4	3
51	Electron Transport Mechanism in Composites Based on Polybenzimidazole Matrix with Graphite Nanoparticles. Journal of Contemporary Physics, 2020, 55, 57-62.	0.6	3
52	Vanadium O-Centered Selenoiodide Complex: Synthesis and Structure of V₄O(Se₂)₄I₆·I₂. Inorganic Chemistry, 2021, 60, 17627-17634.	4.0	3
53	Synthesis and Properties of Iron(II) and Copper(II) Coordination Compounds with 2,6-Bis[1-(phenylimino)ethyl]pyridine. Russian Journal of General Chemistry, 2021, 91, 2167-2175.	0.8	3
54	Band gap opening in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>BiSbTeSe</mml:mi><mml:mn>2</mml:mn></mml:msub> topological surface state induced by ferromagnetic surface reordering. Physical Review Materials, 2021, 5, .	2.4	3

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55	Dendritic growth of TmBa2Cu3O6+x single crystals. Journal of Crystal Growth, 2001, 231, 171-178.	1.5	2
56	Impact of charge stripes on the c-axis transport properties of lightly doped La2â^'xSrxCuO4 single crystals. Physica C: Superconductivity and Its Applications, 2003, 392-396, 135-139.	1.2	2
57	Preparation and characterization of YBaCo4â€“y Cu y O7 + x compounds. Inorganic Materials, 2016, 52, 1045-1050.	0.8	2
58	Anomalies of thermal expansion and electrical resistivity of layered cobaltates YBaCo2O5 + x : The role of oxygen chain ordering. Physics of the Solid State, 2016, 58, 1573-1581.	0.6	2
59	Direct Synthesis and Characterization of Copper(II) 1â€Phenyltetrazolâ€5â€olates. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2021, 647, 1633-1638.	1.2	2
60	Heterometallic Re/Mo and Re/W cubane-type cluster complexes. Inorganic Chemistry Frontiers, 0, , .	6.0	2
61	Negative out-of-plane magnetoresistance in Bi-2201: superconducting fluctuations or peculiarity of the normal state?. Physica C: Superconductivity and Its Applications, 2000, 341-348, 1579-1580.	1.2	1
62	Peculiar evolution of the c-axis charge transport in La2â^'xSrxCuO4 single crystals from antiferromagnetic insulator to superconducting regime. Physica C: Superconductivity and Its Applications, 2003, 388-389, 325-326.	1.2	1
63	Origin of large thermoelectric power in oxygen deficient GdBaCo/sub 2/O/sub 5+x/. , 0, , .		1
64	Magnetic-Field Induced Superconductorâ€“Antiferromagnet Transition in Lightly Doped RBa2Cu3O6+x (Râ€‰=â€‰Lu, Y) Crystals. Journal of Superconductivity and Novel Magnetism, 2009, 22, 63-66.	1.8	1
65	Peculiarity of interrelation between electronic and magnetic properties of HTSC cuprates associated with short-range antiferromagnetic order. Journal of Experimental and Theoretical Physics, 2010, 111, 104-113.	0.9	1
66	Charge-lattice interplay in layered cobaltates RBaCo2O5+. Journal of Magnetism and Magnetic Materials, 2017, 440, 108-111.	2.3	1
67	Behavior of Cobalt and Rare-Earth Subsystems in Frustrated Cobaltites DyBaCo4O7Â+Âx. Physics of the Solid State, 2018, 60, 2507-2516.	0.6	1
68	Low-temperature (T < 180 K) relaxation processes and possible â€œelectronic phase separationâ€•in RBa2Cu3O6+x (R=Y, Tm, Lu) single crystals. JETP Letters, 1996, 63, 830-834.	1.4	0
69	On the applicability of the resonance tunneling model for describing conductivity anisotropy in TmBCO single crystals. JETP Letters, 1996, 64, 820-825.	1.4	0
70	The effect of low temperature heat treatments on the specific heat anomaly of YBa2Cu3O6.85 near the superconducting transition temperature. Physica Status Solidi A, 1996, 157, K13-K16.	1.7	0
71	Scaling in the ab resistivity of TmBaCuO single crystals in the normal state. JETP Letters, 1997, 66, 732-736.	1.4	0
72	Scaling behavior in normal-state properties of underdoped TmBaCuO single crystals. Physica B: Condensed Matter, 1999, 259-261, 526-527.	2.7	0

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73	Freezing of stripes in lightly-doped La2â^'xSrxCuO4 as manifested in magnetic and transport properties of untwinned single crystals. Physica C: Superconductivity and Its Applications, 2003, 388-389, 219-220.	1.2	0
74	SPIN-ORBITAL ORDERING AND GIANT MAGNETORESISTANCE IN COBALT OXIDES: INTRINSIC MAGNETIC-FIELD-EFFECT TRANSISTOR. , 2007, , 381-391.		0
75	A study of structural non-stoichiometry with respect to oxygen in RBaCo4O7+x single crystals. Journal of Structural Chemistry, 2017, 58, 930-939.	1.0	0
76	Effect of oxygen nonstoichiometry on magnetic phase transitions in frustrated cobaltites YBaCo4O7+x (x = 0, 0.1, 0.2). EPJ Web of Conferences, 2018, 185, 06004.	0.3	0
77	Preparation and Investigation of Compounds with the 114-Type Structure in the Y-Sc-Ba-Co-O System. Journal of Structural Chemistry, 2020, 61, 29-43.	1.0	0
78	Manifestations of the Charged Stripes in the Magnetoresistance of Heavily Underdoped Yba2Cu3O6+x. , 2000, , 152-154.		0