Sergei Istomin

List of Publications by Year
in descending order

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86	1,790	318942	340414
papers	citations	23 h-index	39 g-index

90	90	90	2203
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Synthesis and Crystal Structure of New Oxochloride (Mn,Mg)8Cl3O10. Russian Journal of Inorganic Chemistry, 2022, 67, 935-939.	0.3	0
2	Mn2O3 oxide with bixbyite structure for the electrochemical oxygen reduction reaction in alkaline media: Highly active if properly manipulated. Electrochimica Acta, 2021, 367, 137378.	2.6	21
3	KTb(MoO₄)₂ Green Phosphor with K⁺-Ion Conductivity: Derived from Different Synthesis Routes. Inorganic Chemistry, 2021, 60, 9471-9483.	1.9	8
4	Electrode materials based on complex d-metal oxides for symmetrical solid oxide fuel cells. Russian Chemical Reviews, 2021, 90, 644-676.	2.5	34
5	Interfacial recharging behavior of mixed Co, Mn-based perovskite oxides. Electrochimica Acta, 2021, 398, 139257.	2.6	3
6	Electrochemical Properties of Electrode Materials Based on Pr5Mo3O16 + Î´. Russian Journal of Electrochemistry, 2020, 56, 93-99.	0.3	9
7	New Electrode Materials for Symmetrical Solid Oxide Fuel Cells Based on Perovskites (La,Ca)(Fe,Co,Mg,Mo)O3 â€“ Î´. Russian Journal of Electrochemistry, 2020, 56, 100-109.	0.3	3
8	Synthesis and Study of (Sr,La)2FeCo0.5Mo0.5O6 â^’ Î´ Oxides with Double Perovskite Structure. Russian Journal of Inorganic Chemistry, 2019, 64, 696-704.	0.3	2
9	Oxygen surface exchange and diffusion in Pr1.75Sr0.25Ni0.75Co0.25O4Â±Î´. Physical Chemistry Chemical Physics, 2019, 21, 4779-4790.	1.3	10
10	In(CH3COO)3: The first example of group 13 elements triacetate with an infinite chain crystal structure. Polyhedron, 2019, 160, 42-45.	1.0	2
11	Crystallization Pathways of Cerium(IV) Phosphates Under Hydrothermal Conditions: A Search for New Phases with a Tunnel Structure. European Journal of Inorganic Chemistry, 2019, 2019, 3242-3248.	1.0	9
12	Challenges in the understanding oxygen reduction electrocatalysis on transition metal oxides. Current Opinion in Electrochemistry, 2019, 14, 23-31.	2.5	44
13	Evaluation of La2CoTi0.7Mg0.3O6 as an electrode material for a symmetrical SOFC. Journal of Electroceramics, 2018, 40, 162-169.	0.8	4
14	High-temperature properties of (La,Ca)(Fe,Mg,Mo)O3-Î´ perovskites as prospective electrode materials for symmetrical SOFC. Journal of Solid State Chemistry, 2018, 258, 1-10.	1.4	7
15	Crystal Structure and Coordination of B-Cations in the Ruddlesdenâ€“Popper Phases Sr3â^’xPrx(Fe1.25Ni0.75)O7â^’Î´ (0 â‰¤ x â‰¤ 0.4). Inorganics, 2018, 6, 89.	1.2	3
16	Pr5Mo3O16 + Î´: A New Anode Material for Solid Oxide Fuel Cells. Russian Journal of Inorganic Chemistry, 2018, 63, 1291-1296.	0.3	17
17	Rotating ring-disk electrode as a quantitative tool for the investigation of the oxygen evolution reaction. Electrochimica Acta, 2018, 286, 304-312.	2.6	25
18	High-temperature properties of new perovskite-like oxides. Russian Journal of Inorganic Chemistry, 2017, 62, 1021-1025.	0.3	5

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19	Wide-Range Tuning of the Mo Oxidation State in La1-xSrxFe2/3Mo1/3O3 Perovskites. European Journal of Inorganic Chemistry, 2016, 2016, 2942-2951.	1.0	1
20	Praseodymium Cuprate Thin Film Cathodes for Intermediate Temperature Solid Oxide Fuel Cells: Roles of Doping, Orientation, and Crystal Structure. ACS Applied Materials & Interfaces, 2016, 8, 34295-34302.	4.0	11
21	Tuning the high-temperature properties of Pr₂NiO_{4+Î´}by simultaneous Pr- and Ni-cation replacement. RSC Advances, 2016, 6, 33951-33958.	1.7	8
22	Study of Hydrogen Peroxide Reactions on Manganese Oxides as a Tool To Decode the Oxygen Reduction Reaction Mechanism. ChemElectroChem, 2016, 3, 1667-1677.	1.7	39
23	Crystal structure and high-temperature properties of (Pr,Sr)2(Co,Mn)O4Â±Î´ with K2NiF4-type structure. Solid State Communications, 2016, 245, 31-35.	0.9	4
24	Rationalizing the Influence of the Mn(IV)/Mn(III) Red-Ox Transition on the Electrocatalytic Activity of Manganese Oxides in the Oxygen Reduction Reaction. Electrochimica Acta, 2016, 187, 161-172.	2.6	97
25	An unusual high-spin ground state of Co³⁺ in octahedral coordination in brownmillerite-type cobalt oxide. Dalton Transactions, 2015, 44, 10708-10713.	1.6	46
26	Crystal structure, thermal expansion and high-temperature electrical conductivity of A-site deficient La2â˜'Co1+(Mg Nb1â˜')1â˜'O6 double perovskites. Journal of Solid State Chemistry, 2015, 229, 243-251.	1.4	6
27	Synthesis, thermal expansion and high-temperature electrical conductivity of Co-doped (Y,Ð¡Ð°)FeO3â˜'Î´ with orthorhombic perovskite structure. Materials Research Bulletin, 2015, 66, 239-243.	2.7	4
28	Thermal expansion behavior and high-temperature electrical conductivity of A2â˜'A â€²Cu1â˜'Co O4Â± (A = La,) Tj ETQq0 0 0 rgBT /Over 381-386.	2.8	18
29	Crystal structure and high-temperature properties of the Ruddlesdenâ€“Popper phases Sr3â˜'Y (Fe1.25Ni0.75)O7â˜' (0â‰¤xâ‰¤0.75). Journal of Solid State Chemistry, 2015, 227, 45-54.	1.4	13
30	Evaluation of La1.8â˜'xPrxSr0.2CuO4â˜'Î´ oxides as cathode materials for IT-SOFCs. Materials Chemistry and Physics, 2015, 165, 91-96.	2.0	15
31	Crystal structure and high-temperature electrical conductivity of novel perovskite-related gallium and indium oxides. Journal of Solid State Electrochemistry, 2014, 18, 1415-1423.	1.2	7
32	Influence of structural arrangement of R2O2 slabs of layered cuprates on high-temperature properties important for application in IT-SOFC. Solid State Ionics, 2014, 257, 67-74.	1.3	17
33	Thermodynamic properties and oxygen stoichiometry of Ba2Cu3O5 + Î´. Russian Journal of Physical Chemistry A, 2014, 88, 372-376.	0.1	2
34	Cathode materials based on perovskite-like transition metal oxides for intermediate temperature solid oxide fuel cells. Russian Chemical Reviews, 2013, 82, 686-700.	2.5	82
35	The effect of temperature and oxygen partial pressure on the reduction mechanism in the Pr2CuO4/Ce0.9Gd0.1O1.95 system. Russian Journal of Electrochemistry, 2013, 49, 747-752.	0.3	9
36	Synthesis and characterization of perovskite-type SrxY1â˜'xFeO3â˜'Î´ (0.63â‰¤x<1.0) and Sr0.75Y0.25Fe1â˜'yMyO3â˜'Î´ (M=Cr, Mn, Ni), (y=0.2, 0.33, 0.5). Journal of Solid State Chemistry, 2013, 200, 30-38.	1.4	12

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37	Tracking of high-temperature thermal expansion and transport properties vs. oxidation state of cobalt between +2 and +3 in the La2Co1+z(Ti1â^'xMgx)1â^'zO6-system. Journal of Materials Chemistry, 2012, 22, 16269.	6.7	16
38	Structure and high-temperature properties of the (Sr,Ca,Y)(Co, Mn)O3â^'y perovskites â€" perspective cathode materials for IT-SOFC. Journal of Solid State Chemistry, 2012, 192, 186-194.	1.4	7
39	Dual role of carbon in the catalytic layers of perovskite/carbon composites for the electrocatalytic oxygen reduction reaction. Catalysis Today, 2012, 189, 83-92.	2.2	177
40	Electrochemical characterization of Pr2CuO4 cathode for IT-SOFC. International Journal of Hydrogen Energy, 2012, 37, 18357-18364.	3.8	43
41	Synthesis and characterisation of the novel double perovskites La2CrB2/3Nb1/3O6, B=Mg, Ni, Cu. Materials Research Bulletin, 2012, 47, 2449-2454.	2.7	4
42	Sr₂GaScO₅, Sr₁₀Ga₆Sc₄O₂₅, and SrGa_{0.75}Sc_{0.25}O_{2.5}: a Play in the Octahedra to Tetrahedra Ratio in Oxygen-Deficient Perovskites. Inorganic Chemistry, 2012, 51, 1094-1103.	1.9	26
43	Crystal structure and thermal expansion of LaCr1â^'xMgxO3, 0<xâ‰0.25. Materials Research Bulletin, 2012, 47, 1176-1180.	2.7	1
44	Oxygen diffusion in Sr0.75Y0.25CoO2.62. Solid State Ionics, 2011, 197, 18-24.	1.3	16
45	Phase formation, crystal structures and magnetic properties of perovskite-type phases in the system La2Co1+z(MgxTi1â^'x)1â^'zO6. Journal of Solid State Chemistry, 2011, 184, 177-190.	1.4	7
46	High-temperature crystal structure and transport properties of the layered cuprates Ln2CuO4, Ln=Pr, Nd and Sm. Journal of Solid State Chemistry, 2011, 184, 698-704.	1.4	54
47	Spin state and magnetic transformations in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Sr</mml:mtext></mml:mrow><mml:mrow><mml:mn>0.7</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> high pressures. Physical Review B, 2009, 79, .	1.1	27
48	Calcium-containing cathodic material for solid oxide fuel cells. Russian Journal of Electrochemistry, 2009, 45, 434-438.	0.3	2
49	Correlation of chemical coordination and magnetic ordering in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"		

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55	Superspace Description, Crystal Structures, and Electric Conductivity of the Ba₄In_{6â^'x}Mg_xO_{13â^'x/2} Solid Solutions. Chemistry of Materials, 2008, 20, 4457-4467.	3.2	18
56	Composition-induced phase transition in Ca14Zn6â^'xGa10+xO35+x/2 (x=0.0 and 0.5). Journal of Solid State Chemistry, 2007, 180, 1882-1888.	1.4	15
57	Synthesis and crystal structure of the new complex cobalt and nickel oxide Sr2.25Y0.75Co1.25Ni0.75O6.84. Moscow University Chemistry Bulletin, 2007, 62, 167-171.	0.2	3
58	Synthesis and characterization of Sr0.75Y0.25Co1â^'xMxO2.625+Î´ (M=Ga, 0.125â©½xâ©½0.500 and M=Fe,) Tj ETQq0 0 0 rgBT /Ove	1.4	19
59	The disordered cubic structure of Ca7Co3Ga5O18. Journal of Solid State Chemistry, 2005, 178, 2197-2204.	1.4	9
60	Transmission Electron Microscopic Study of the Defect Structure in Sr4Fe6O12+Î´Compounds with Variable Oxygen Content. Chemistry of Materials, 2005, 17, 4717-4726.	3.2	23
61	Synthesis and characterization of Sr1â^'xLnxCoO3â^'Î´, Ln=Y, Smâ€“Tm, 0.1â©½xâ©½0.5. Solid State Sciences, 2004, 6, 539-546.	1.5	79
62	Synthesis and characterization of novel 6-H perovskites Ba2Co2â^'xSbxO6â^'y, 0.6 â‰¤ x â‰¤ 0.8 and x = 1.33 (Ba3CoSb2O9). Materials Research Bulletin, 2004, 39, 1013-1022.	2.7	7
63	Synthesis and structural studies of Sr2Co2â^'xAlxO5, 0.3â©½xâ©½0.5. Journal of Solid State Chemistry, 2004, 177, 1592-1597.	1.4	23
64	Crystal Structure of the Novel Complex Cobalt Oxide Sr0.7Y0.3CoO2.62.. ChemInform, 2004, 35, no.	0.1	0
65	Synthesis, crystal and magnetic structure of a novel brownmillerite-type compound Ca2Co1.6Ga0.4O5. Journal of Solid State Chemistry, 2004, 177, 4251-4257.	1.4	12
66	Synthesis and characterization of novel 6-H perovskites Ba2Co2$minus;xSbxO6$minus;y, 0.6 $le; x $le; 0.8 and x = 1.33 (Ba3CoSb2O9). Materials Research Bulletin, 2004, 39, 1013-1022.	2.7	8
67	Neutron diffraction studies of La1â^'xSrxCoO3 magnetic structure at x=0.15 and 0.3. Journal of Magnetism and Magnetic Materials, 2003, 258-259, 300-301.	1.0	20
68	Synthesis and structural studies of Sr2Co2â^'xGaxO5, 0.3â©½xâ©½0.8. Journal of Solid State Chemistry, 2003, 173, 395-406.	1.4	29
69	Crystal Structure of the Novel Complex Cobalt Oxide Sr0.7Y0.3CoO2.62. Chemistry of Materials, 2003, 15, 4012-4020.	3.2	111
70	New anion-deficient cubic perovskites: Ba2In1 â^' xCo1 + xO5 + Î´(0 â‰¤ x â‰¤ 0.8) and Ba2 â^' xLaxCoInO5 + Î´(0.2 â‰¤ x) Tj ETQq0 0 0 r	6.7	10
71	A neutron powder diffraction study of Na1â^'xSrxTaO3 (x=0.2 and 0.3). Solid State Sciences, 2002, 4, 191-195.	1.5	4
72	A New Structure Type of the Ternary Sulfide Eu1.3Nb1.9S5. Journal of Solid State Chemistry, 2002, 164, 345-353.	1.4	4

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73	Structures and Properties of the Perovskite-Type Compounds Na1â^'xSrxNbO3 (0.1â‰¤xâ‰¤0.9)â€"From Insulating to Metallic Conductivity. Journal of Solid State Chemistry, 2002, 167, 7-16.	1.4	7
74	A Novel Complex Cobalt Gallium Oxide Ca2Co0.8Ga1.2O4.8: Synthesis and High-Temperature Electron Transport Properties. Journal of Solid State Chemistry, 2002, 167, 196-202.	1.4	9
75	Crystal Structure of the Ba4CeNb10O30 Reduced Niobate with a TTB-Type Structure. Journal of Solid State Chemistry, 2001, 157, 1-7.	1.4	7
76	An X-Ray Powder and Electron Diffraction Study of Reduced Tantalates with the Perovskite Structure, Na1â^'xSrxTaO3, 0<xâ‰¤0.4. Journal of Solid State Chemistry, 2000, 154, 427-434.	1.4	3
77	Synthesis, structure, and properties of mixed niobium(IV,V) oxides. Inorganic Materials, 2000, 36, 247-259.	0.2	22
78	Crystal structure of Î²-ZrNCl refined from X-ray powder diffraction data, electronic band structures of Î²-ZrNCl and superconducting LixZrNCl. Physica C: Superconductivity and Its Applications, 1999, 319, 219-228.	0.6	29
79	Transmission Electron Microscopy and Neutron Powder Diffraction Studies of GdFeO3 Type SrNbO3. Journal of Solid State Chemistry, 1999, 147, 421-428.	1.4	36
80	A new superconducting sulfideâ€"˜EuNb2S5'. Physica C: Superconductivity and Its Applications, 1998, 300, 67-70.	0.6	7
81	Synthesis and characterization of the reduced niobates CaLnNb2O7, Ln = La-Pr, Sm, Gd-Lu, with the pyrochlore-type structure. Materials Research Bulletin, 1998, 33, 1251-1256.	2.7	9
82	Perovskite-Type Ca1â^'xSrxNbO3(0â‰¤xâ‰¤1) Phases: A Synthesis, Structure, and Electron Microscopy Study. Journal of Solid State Chemistry, 1998, 141, 514-521.	1.4	24
83	Synthesis and characterization of reduced niobates CaLnNb2O7, Ln = Y, Nd with a pyrochlore structure. Materials Research Bulletin, 1997, 32, 421-430.	2.7	28
84	Structure and properties of Ba6 â^' xLnxNb10O30, Ln = La, Ce and Nd compounds. Materials Research Bulletin, 1997, 32, 409-419.	2.7	11
85	Synthesis, structure, and resistivity properties of K1 â^' xBaxNbO3 (0.2 â‰¤ x â‰¤ 0.5) and K0.5Sr0.5NbO3. Materials Research Bulletin, 1995, 30, 1379-1386.	2.7	24
86	Synthesis and characterisation of reduced niobates [Sr1â^'xLnxNb2O6, Ln = La, Nd]. Materials Research Bulletin, 1994, 29, 743-749.	2.7	14