

Andrey Yu Zuev

List of Publications by Year in descending order

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82
papers

1,456
citations

361413

20
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377865

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86
docs citations

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times ranked

1321
citing authors

#	ARTICLE	IF	CITATIONS
1	Gd- and Pr-based double perovskite cobaltites as oxygen electrodes for proton ceramic fuel cells and electrolyser cells. <i>Solid State Ionics</i> , 2015, 278, 120-132.	2.7	136
2	Thermodynamic stability of ternary oxides in $\text{Ln}^{\text{+}}\text{--M}^{\text{+}}\text{O}$ ($\text{Ln} = \text{La}, \text{Pr}, \text{Nd}; \text{M} = \text{Co}, \text{Ni}, \text{Cu}$) systems. <i>Journal of Solid State Chemistry</i> , 1988, 77, 1-14.	2.9	82
3	Defect formation and mechanical stability of perovskites based on LaCrO_3 for solid oxide fuel cells (SOFC). <i>Journal of the European Ceramic Society</i> , 2003, 23, 3009-3020.	5.7	80
4	Thermodynamics, defect structure, and charge transfer in doped lanthanum cobaltites: an overview. <i>Journal of Solid State Electrochemistry</i> , 2006, 10, 517-537.	2.5	69
5	Oxygen nonstoichiometry and defect structure of the double perovskite $\text{GdBaCo}_2\text{O}_6\text{--}\text{I}$. <i>Solid State Ionics</i> , 2010, 180, 1620-1625.	2.7	66
6	Oxygen nonstoichiometry, defect structure and defect-induced expansion of undoped perovskite $\text{LaMnO}_3\text{--}\text{I}$. <i>Solid State Ionics</i> , 2010, 181, 557-563.	2.7	59
7	Thermodynamics of formation of hybrid perovskite-type methylammonium lead halides. <i>Journal of Chemical Thermodynamics</i> , 2018, 116, 253-258.	2.0	54
8	Defect structure and defect-induced expansion of undoped oxygen deficient perovskite $\text{LaCoO}_3\text{--}\text{I}$. <i>Solid State Ionics</i> , 2008, 179, 1876-1879.	2.7	53
9	Defect structure and isothermal expansion of A-site and B-site substituted lanthanum chromites. <i>Solid State Ionics</i> , 2002, 147, 1-11.	2.7	52
10	Oxygen isotope exchange and diffusion in $\text{LnBaCo}_2\text{O}_6\text{--}\text{I}$ ($\text{Ln} = \text{Pr}, \text{Sm}, \text{Gd}$) with double perovskite structure. <i>Solid State Ionics</i> , 2017, 304, 96-106.	2.7	41
11	Oxygen nonstoichiometry and defect structure of undoped and doped lanthanum cobaltites. <i>Journal of Materials Science</i> , 2007, 42, 1901-1908.	3.7	26
12	Oxygen content, crystal structure and chemical expansion of $\text{PrBaCo}_{2-x}\text{Fe}_x\text{O}_{6-\delta}\text{--}\text{I}$ double perovskites. <i>Dalton Transactions</i> , 2014, 43, 11862-11866.	3.3	26
13	Formation Thermodynamics, Stability, and Decomposition Pathways of CsPbX_3 ($X = \text{Cl}, \text{Br}$). <i>Tj ETQq1 1.0.784314 rgBT /Ov</i>	3.1	26
14	Defect Structure and Defect-Induced Expansion of MIEC Oxides: Doped Lanthanum Cobaltites. <i>Journal of the Electrochemical Society</i> , 2012, 159, F594-F599.	2.9	25
15	Oxygen content, cobalt oxide exsolution and defect structure of the double perovskite $\text{PrBaCo}_2\text{O}_{6-\delta}\text{--}\text{I}$. <i>Journal of Materials Chemistry A</i> , 2016, 4, 1962-1969.	10.3	25
16	Chemical lattice strain in nonstoichiometric oxides: an overview. <i>Journal of Materials Chemistry A</i> , 2022, 10, 6351-6375.	10.3	25
17	Thermodynamic characteristics of Li_2MoO_4 , $\text{Li}_2\text{W}_0.85\text{Mo}_0.15\text{O}_4$ single crystals and stability direction for alkali molybdates. <i>Journal of Chemical Thermodynamics</i> , 2020, 143, 106059.	2.0	24
18	Investigation of $\text{GdBaCo}_{2-x}\text{Fe}_x\text{O}_{6-\delta}\text{--}\text{I}$ ($x = 0, 0.2$) composite cathodes for intermediate temperature solid oxide fuel cells. <i>Journal of Power Sources</i> , 2013, 243, 403-408.	7.8	23

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19	Thermodynamics of formation of double perovskites $GdBaCo2\tilde{x}M O_6\tilde{y}$ ($M = Fe, Mn; x= 0, 0.2$). <i>Thermochimica Acta</i> , 2011, 519, 12-15.	2.7	22
20	Crystal structure and oxygen content of the double perovskites $GdBaCo2\tilde{x}Fe O_6\tilde{y}$. <i>Journal of Solid State Chemistry</i> , 2013, 199, 154-159.	2.9	22
21	Oxygen nonstoichiometry, defect structure and related properties of $LaNi_{0.6}Fe_{0.4}O_{3-\delta}$. <i>Journal of Materials Chemistry A</i> , 2015, 3, 6028-6037.	10.3	21
22	New phase transition in $CsPbBr_3$. <i>Materials Letters</i> , 2020, 278, 128458.	2.6	20
23	Defect structure and charge transfer in the double perovskite $GdBaCo_2O_6\tilde{y}$. <i>Solid State Ionics</i> , 2011, 192, 215-219.	2.7	19
24	Crystal and defect structure of the mixed oxides $LaMn_1\tilde{x}Cu_zO_3\tilde{y}$ ($0 \leq x \leq 0.4$). <i>Solid State Ionics</i> , 2000, 129, 179-188.	2.7	18
25	Thermodynamics of $Sr_{2-x}NiMoO_6$ and $Sr_{2-x}CoMoO_6$ and their stability under reducing conditions. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 20108-20116.	2.8	18
26	Oxygen nonstoichiometry, defect structure and oxygen diffusion in the double perovskite $GdBaCo_{2-x}O_{6-\delta}$. <i>Dalton Transactions</i> , 2014, 43, 15937-15943.	3.3	17
27	$PrBaCo_2O_6\tilde{y}$ -Ce0.8Sm0.2O1.9 Composite Cathodes for Intermediate-Temperature Solid Oxide Fuel Cells: Stability and Cation Interdiffusion. <i>Energies</i> , 2019, 12, 417.	3.1	17
28	Defect structure and charge transfer in undoped and doped lanthanum cobaltites. <i>Journal of Materials Science</i> , 2007, 42, 1909-1914.	3.7	14
29	Defect structure and defect-induced expansion of doped perovskite $La_0.7Sr_0.3Co_0.9Fe_0.1O_3\tilde{y}$. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 21553-21560.	7.1	14
30	Defect structure and related properties of mayenite $Ca_{12}Al_{14}O_{33}$. <i>Solid State Ionics</i> , 2015, 276, 142-148.	2.7	14
31	Preparation, oxygen nonstoichiometry and defect structure of double perovskite $LaBaCo_2O_6\tilde{y}$. <i>Materials Letters</i> , 2018, 229, 324-326.	2.6	14
32	Double perovskites $REBaCo_{2-x}M_xO_{6-\delta}$ ($RE=La, Pr, Nd, Eu, Gd, Y$; T_j ETQ _{1.9} 0 0 rgBT ₁₄ /Overlock		
33	The phase diagram of the bismuth-calcium oxide system. <i>Materials Research Bulletin</i> , 1994, 29, 1233-1238.	5.2	13
34	Oxygen Nonstoichiometry, Defect Structure, Thermal and Chemical Expansion of Pseudo-Cubic $La_{0.8}Sr_{0.2}Co_{0.9}Ni_{0.1}O_{3-\delta}$ and Double Perovskite $GdBaCo_{2-x}O_{6-\delta}$. <i>Journal of the Electrochemical Society</i> , 2014, 161, F3032-F3038.	2.9	13
35	Interplay between chemical strain, defects and ordering in $Sr_{1-x}LaxFeO_3$ materials. <i>Acta Materialia</i> , 2019, 162, 33-45.	7.9	13
36	Oxide ion transport in undoped and Cr-doped $LaCoO_3\tilde{y}$. <i>Solid State Ionics</i> , 2007, 178, 1458-1462.	2.7	12

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37	Oxygen nonstoichiometry, crystal and defect structure of the double perovskite $\text{GdBaCo1.8Fe0.2O6}^{\sim}$. Solid State Ionics, 2012, 218, 13-17.	2.7	12
38	Oxygen content and thermodynamics of formation of double perovskites REBaCo2O6^{\sim} ($\text{RE} = \text{Gd, Pr}$). Thermochimica Acta, 2014, 578, 28-32.	2.7	12
39	Mechano-Chemical Coupling in Double Perovskites as Energy Related Materials. ECS Transactions, 2016, 72, 21-35.	0.5	12
40	The defect structure and chemical lattice strain of the double perovskites Sr2BMoO6^{\sim} ($B = \text{Mg, Fe}$). Dalton Transactions, 2016, 45, 12906-12913.	3.3	12
41	Crystal and Defect Structure of $\text{Nd}_{1.9}\text{Ce}_{0.1}\text{CuO}_{4\pm y}$. Journal of the American Ceramic Society, 1999, 82, 1037-1044.	3.8	11
42	Enthalpy increments and redox thermodynamics of SrFeO_3^{\sim} . Journal of Materials Research, 2019, 34, 3288-3295.	2.6	11
43	The origin of triple conductivity and water uptake in layered double perovskites: A case study on lanthanum-substituted GdBaCo2O6^{\sim} . Journal of Alloys and Compounds, 2020, 845, 156309.	5.5	11
44	<i>In Situ</i> and <i>ex Situ</i> Study of Cubic $\text{La}_{0.5}\text{Ba}_{0.5}\text{CoO}_3$ to Double Perovskite $\text{LaBaCo}_2\text{O}_6$ Transition and Formation of Domain Textured Phases with Fast Oxygen Exchange Capability. Inorganic Chemistry, 2018, 57, 12409-12416.	4.0	10
45	The Bi_2O_3 - SrO phase diagram. Journal of Phase Equilibria and Diffusion, 1994, 15, 573-576.	0.3	9
46	Relation between T_c and the defect structure of neodymium cerium cuprite $\text{Nd}_2\text{Cu}_x\text{O}_4$. Physics of the Solid State, 1998, 40, 157-162.	0.6	9
47	Oxygen Content and Thermodynamic Stability of YBaCo_2O_6 Double Perovskite. Advances in Materials Science and Engineering, 2018, 2018, 1-6.	1.8	9
48	Thermoelectric Behavior of $\text{BaZr}_0.9\text{Y}_0.1\text{O}_3$ Proton Conducting Electrolyte. Membranes, 2019, 9, 120.	3.0	9
49	Red-Ox Energetics and Holes Trapping in Yttrium-Substituted Barium Zirconate $\text{BaZr}_{0.9}\text{Y}_{0.1}\text{O}_{2.95}$. Journal of the Electrochemical Society, 2019, 166, F232-F238.	2.9	8
50	Redox Thermochemistry, Thermodynamics, and Solar Energy Conversion and Storage Capability of Some Double Perovskite Cobaltites. Inorganic Chemistry, 2021, 60, 18141-18153.	4.0	8
51	Oxygen content and thermodynamic stability of YBaCo_4O_7 . Solid State Ionics, 2015, 278, 1-4.	2.7	7
52	Oxygen vacancy formation and defect structure of Cu-doped lanthanum chromite LaCrCuAlO . Solid State Ionics, 2005, 176, 417-421.	2.7	6
53	Defect structure and oxide ion transport in Sr- and Cr-doped LaCoO_3 . Solid State Ionics, 2011, 192, 220-224.	2.7	6
54	Hydration-induced chemical expansion of $\text{BaCa}(1+y)/3\text{Nb}(2-y)/3\text{O}_3$ H_2O (BCN) and other proton-conducting perovskite oxides. Solid State Ionics, 2020, 358, 115516.	2.7	6

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55	Defect structure and redox energetics of NdBaCo ₂ O ₆ . Solid State Ionics, 2021, 361, 115549.	2.7	6
56	Oxygen nonstoichiometry of lanthanum strontium cuprates La _{2-x} S _x CuO ₄ . Journal of Physics and Chemistry of Solids, 1991, 52, 841-844.	4.0	5
57	Oxygen Nonstoichiometry and Electrochemical Properties of GdBaCo _{2-x} F _x O ₆ Double Perovskite Cathodes. Journal of Fuel Cell Science and Technology, 2011, 8, .	0.8	5
58	Vapor pressure of methylammonium halides. Part I: Setup verification and vapor pressure of methylammonium chloride. Thermochimica Acta, 2017, 658, 24-30.	2.7	5
59	Synthesis, Single Crystal Growth, and Properties of Cobalt Deficient Double Perovskite EuBaCo _{2-x} O ₆ ($x = 0.1$). Journal of Chemistry, 2017, 2017, 1-5.	1.9	5
60	Vapor pressure of methylammonium halides. Part II: Vapor pressure and standard entropy of methylammonium bromide. Thermochimica Acta, 2019, 674, 58-62.	2.7	5
61	Crystal structure and high-temperature thermodynamic properties of Pr-doped barium zirconates, BaZr _{1-x} Pr O ₃ ($x = 0.1, 0.5$). Journal of Physics and Chemistry of Solids, 2020, 147, 109613.	4.0	5
62	Crucial Role of Water in the Mechanosynthesis of CsPbI ₃ and Other ABX ₃ Halides. Chemistry - A European Journal, 2020, 26, 12549-12552.	3.3	5
63	Redox energetics and enthalpy increments of GdBaCo ₂ O ₆ . Thermochimica Acta, 2020, 686, 178562.	2.7	5
64	Thermodynamics of formation of solid solutions between BaZrO ₃ and BaPrO ₃ . Chimica Techno Acta, 2020, 7, 42-50.	0.7	5
65	Equilibrium of point defects and charge transfer in lanthanum cobaltite. Russian Journal of Physical Chemistry A, 2006, 80, S128-S133.	0.6	4
66	The diffusion of oxygen and ion transport in lanthanum cobaltite LaCoO ₃ . Russian Journal of Physical Chemistry A, 2008, 82, 855-859.	0.6	4
67	Conventional Methods for Measurements of Chemo-Mechanical Coupling. Kluwer International Series in Electronic Materials: Science and Technology, 2017, , 5-33.	0.5	4
68	Thermodynamic stability, oxygen content, defect structure and related properties of YBaCo _{4-x} Zn _x O ₇ ($x = 0-3$) oxides. Solid State Ionics, 2017, 309, 92-99.	2.7	4
69	Hydration thermodynamics of proton-conducting perovskite Ba ₄ Ca ₂ Nb ₂ O ₁₁ . Materials Letters, 2019, 235, 97-100.	2.6	4
70	Defect chemistry and high-temperature thermodynamics of PrBaCo ₂ O ₆ . Journal of Chemical Thermodynamics, 2021, 161, 106523.	2.0	4
71	The oxygen nonstoichiometry and defect structure of unsubstituted LaCoO ₃ cobaltite. Russian Journal of Physical Chemistry A, 2007, 81, 73-77.	0.6	3
72	Defect Equilibria in Solids and Related Properties: An Introduction. , 0, , 43-78.		3

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73	High-Resolution Thermochemical Study of Phase Stability and Rapid Oxygen Incorporation in $\text{YBaCo}_{4-x}\text{Zn}_x\text{O}_{7+\delta}$ 114-Cobaltites. <i>Journal of Physical Chemistry A</i> , 2018, 122, 9597-9604.	2.5	3
74	Defect structure and thermochemistry of $\text{YBaCo}_2\text{O}_6-\delta$. <i>Thermochimica Acta</i> , 2021, 698, 178886.	2.7	3
75	Phase diagram of the $\text{Bi}-\text{Sr}-\text{Cu}-\text{O}$ system. <i>Journal of Materials Chemistry</i> , 1994, 4, 1871-1873.	6.7	2
76	$\text{PrBaCo}_2\text{O}_6-\delta - \text{Ce}_0.8\text{Sm}_0.2\text{O}_1.9$ Composite Cathodes for Intermediate Temperature Solid Oxide Fuel Cells. <i>ECS Transactions</i> , 2015, 68, 965-976.	0.5	2
77	High-temperature heat-flux inverse drop calorimeter. <i>Thermochimica Acta</i> , 2020, 694, 178802.	2.7	2
78	Thermodynamics of $\text{BaCa}(1-x+y)/3\text{Nb}(2-x-y)/3\text{O}_3-\delta \text{H}_2\text{O}$ proton-conducting perovskites. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, 142, 1989-2001.	3.6	2
79	Oxygen Nonstoichiometry of the Copper-Substituted Lanthanum Cobaltite $\text{LaCo}_0.9\text{Cu}_0.1\text{O}_3-\delta$. <i>ECS Proceedings Volumes</i> , 1999, 1999-19, 424-431.	0.1	1
80	Defects in doped perovskite-like lanthanum cobaltite crystals $\text{La}_{1-x}\text{Sr}_x\text{Co}_{1-y}\text{MeyO}_3-\delta$ ($\text{Me} = \text{Cu}$ and Ti) $T_{\text{d}} = 800-850^{\circ}\text{C}$. <i>Journal of the Electrochemical Society</i> , 2022, 169, 024511.	2.9	1
81	Defect-Induced Properties and Thermodynamics of $\text{La}_{0.5}\text{Ba}_{0.5}\text{CoO}_3-\delta$. <i>Journal of the Electrochemical Society</i> , 2022, 169, 024511.	0.5	0
82	Defect Structure and Defect-Induced Expansion of MIEC Oxides - Doped Lanthanum Cobaltites. <i>ECS Transactions</i> , 2012, 45, 63-73.		