Anna Shlyakhtina

List of Publications by Year
in descending order

61	1,003	393982	500791
papers	citations	19 h-index	28 g-index

61	61	61	596
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Design of materials for solid oxide fuel cells, permselective membranes, and catalysts for biofuel transformation into syngas and hydrogen based on fundamental studies of their real structure, transport properties, and surface reactivity. Current Opinion in Green and Sustainable Chemistry, 2022, 33, 100558.	3.2	10
2	Proton Conductivity of La2(Hf2â^'xLax)O7â^'x/2 â€œStuffedâ€•Pyrochlores. Applied Sciences (Switzerland), 2022, 12, 4342.	1.3	6
3	Roomâ€temperature mechanochemical synthesis of RE molybdates: Impact of structural similarity and basicity of oxides. Journal of the American Ceramic Society, 2021, 104, 5698-5710.	1.9	8
4	Electrical Properties of Beryllium-Doped Gd2Zr2O7. Inorganic Materials, 2021, 57, 1184-1193.	0.2	0
5	Phase Relations and Behavior of Carbon-Containing Impurities in Ceramics Prepared from Mechanically Activated Ln2O3 + 2HfO2 (Ln = Nd, Dy) Mixtures. Inorganic Materials, 2020, 56, 528-542.	0.2	7
6	Oxygen diffusion in Mg-doped Sm and Gd zirconates with pyrochlore structure. Ionics, 2020, 26, 4621-4633.	1.2	19
7	Structure, conductivity and magnetism of orthorhombic and fluorite polymorphs in MoO3â€“Ln2O3 (Ln) Tj ETQq1 1 0.784314 rgBT /Ov	1.6	9
8	2D diffusion of oxygen in Ln10Mo2O21 (Lnâ€¯=â€¯Nd, Ho) oxides. Solid State Ionics, 2020, 346, 115229.	1.3	7
9	Gas-tight proton-conducting Nd2Ââ^'ÂxCaxZr2O7Ââ^'ÂÎ´ (xâ€‰=â€‰0, 0.05) ceramics. Journal of Solid State Electrochemistry, 2020, 24, 1475-1486.	1.2	11
10	Evolution of Oxygenâ€“Ion and Proton Conductivity in Ca-Doped Ln2Zr2O7 (Ln = Sm, Gd), Located Near Pyrochloreâ€“Fluorite Phase Boundary. Materials, 2019, 12, 2452.	1.3	24
11	Oxygen Mobility in the Materials for Solid Oxide Fuel Cells and Catalytic Membranes (Review). Russian Journal of Electrochemistry, 2019, 55, 701-718.	0.3	21
12	Structure and conductivity of Nd₆MoO₁₂-based potential electronâ€“proton conductors under dry and wet redox conditions. Inorganic Chemistry Frontiers, 2019, 6, 566-575.	3.0	15
13	Tolerance factor as the basic criterion in searching for promising oxygen-ion and proton conductors among Ln2-xDxM2O7-Î´ (Ln = La-Lu; M= Sn, Ti, Zr, Hf; D= Sr, Ca, Mg; x = 0, 0.1) 3+/4+ pyrochlores. Materials Research Bulletin, 2019, 116, 72-78.	2.7	16
14	Thermal expansion and heat capacity of Sm₂ScTaO₇ â€“ A promising material for thermal barrier coatings. Journal of the American Ceramic Society, 2019, 102, 4415-4420.	1.9	8
15	Comparative Study of Electrical Conduction and Oxygen Diffusion in the Rhombohedral and Bixbyite Ln₆MoO₁₂ (Ln = Er, Tm, Yb) Polymorphs. Inorganic Chemistry, 2019, 58, 4275-4288.	1.9	12
16	Proton and oxygen ion conductivity in the pyrochlore/fluorite family of Ln2â^'xCaxScMO7â^'Î´ (Ln = La,) Tj ETQq0 0 0 rgBT /Overlock 10 T	1.6	28
17	Kinetic aspects of the synthesis of Ln6â^'Ñ…MoO12â^'Î´ (Lnâ€¯=â€¯Sm, Ho -Yb; xâ€¯=â€¯0, 0.5) rare-earth molybdates using mechanical activation of oxides. Solid State Ionics, 2018, 320, 272-282.	1.3	13
18	Sm 6-x MoO 12-Î´ (x = 0, 0.5) and Sm 6 WO 12 â€“ Mixed electron-proton conducting materials. Solid State Ionics, 2017, 302, 143-151.	1.3	20

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19	Thermodynamic properties of Dy2O3 Â· 2ZrO2 and Ho2O3 Â· 2ZrO2 in the range 10â€“340 K. Inorganic Materials, 2017, 53, 86-92.	0.2	6
20	Polymorphism in the family of Ln_{6â^'x}MoO_{12â^'Î´} (Ln = La, Gdâ€“Lu; x = 0, 0.5) oxygen ion- and proton-conducting materials. Journal of Materials Chemistry A, 2017, 5, 7618-7630.	5.2	30
21	Effect of Pr3+/Pr4+ ratio on the oxygen ion transport and thermomechanical properties of the pyrochlore and fluorite phases in the ZrO2â€“Pr2O3 system. International Journal of Hydrogen Energy, 2016, 41, 9982-9992.	3.8	30
22	Electrical conductivity of Ln6â€“x Zr x MoO12 + Î´ (Ln = La, Nd, Sm; x = 0.2, 0.6) ceramics during thermal cycling. Inorganic Materials, 2016, 52, 1055-1062.	0.2	12
23	Crystal structure and proton conductivity of some Zr-doped rare-earth molybdates. Solid State Ionics, 2015, 271, 91-97.	1.3	26
24	Synthesis, properties and phase transitions of pyrochlore- and fluorite-like Ln2RMO7 (Ln=Sm, Ho;) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.7	20
25	Oxygen interstitial and vacancy conduction in symmetric Ln2 Â± x Zr2 Â± x O7 Â± x/2 (Ln = Nd, Sm) solid solutions. Inorganic Materials, 2014, 50, 1035-1049.	0.2	6
26	Oxide ion transport in (Nd2â^'xZrx)Zr2O7+Î´ electrolytes by an interstitial mechanism. Journal of Alloys and Compounds, 2014, 603, 274-281.	2.8	17
27	Morphotropy, isomorphism, and polymorphism of Ln 2 M 2O7-based (Ln = La-Lu, Y, Sc; M = Ti, Zr, Hf, Sn) oxides. Crystallography Reports, 2013, 58, 548-562.	0.1	25
28	Optimization of synthesis conditions for rare-earth titanate based oxygen ion conductors. Solid State Ionics, 2013, 230, 52-58.	1.3	7
29	Accommodation of niobium and cerium variable valence cations in the crystal lattice of the Ln 2 3+ Ti 2 4+ O7 (Ln = Dy, Yb) pyrochlores. Inorganic Materials, 2013, 49, 1023-1030.	0.2	0
30	Effect of oxygen partial pressure on the bulk and grain-boundary components of conductivity in (Yb1â^'xCax)2Ti2O7â^'Î´ (x=0, 0.05, 0.1) solid solutions. Materials Research Bulletin, 2013, 48, 2707-2711.	2.7	2
31	Oxygen ion conductivity of (Yb0.9 â^' x Tb x Ca0.1)2Ti2O7 â^' Î´ solid solutions. Inorganic Materials, 2012, 48, 1126-1130.	0.2	0
32	New solid electrolytes of the pyrochlore family. Russian Journal of Electrochemistry, 2012, 48, 1-25.	0.3	87
33	Nanostructuring phenomena in oxygen-conducting complex oxides of heavy REE. Russian Journal of Electrochemistry, 2011, 47, 620-627.	0.3	8
34	Antiferroelectric phase transition in pyrochlore-like (Dy1â^' xCax)2Ti2O7â^'Î´ (x=0, 0.1) high temperature conductors. Solid State Ionics, 2011, 192, 188-194.	1.3	13
35	Polymorphism and high-temperature conductivity of Ln2M2O7 (Ln=Smâ”€Lu; M=Ti, Zr, Hf) pyrochlores. Solid State Ionics, 2011, 192, 200-204.	1.3	50
36	Study of bulk and grain-boundary conductivity of Ln2+xHf2â^'xO7â^'Î´ (Ln = Sm-Gd; x = 0, 0.096) pyrochlores. Journal of Electroceramics, 2010, 24, 300-307.	0.8	21

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37	Acceptor doping of Ln2Ti2O7 (Ln=Dy, Ho, Yb) pyrochlores with divalent cations (Mg, Ca, Sr, Zn). Materials Research Bulletin, 2009, 44, 1613-1620.	2.7	18
38	Neutron diffraction investigation of the evolution of the crystal structure of oxygen-conducting solid solutions (Yb1 â˜' x Ca x)2Ti2O7 (x = 0, 0.05, 0.10). Crystallography Reports, 2009, 54, 25-30.	0.1	6
39	Ionic and Electronic Conductivity of (Ho0.9Ca0.1)2Ti2O6.9 Pyrochlore. ECS Transactions, 2009, 25, 2699-2706.	0.3	4
40	Effect of the Ca-doping on the electrical conductivity of oxide ion conductor Yb2Ti2O7. Solid State Ionics, 2008, 179, 1004-1008.	1.3	25
41	Heavily doped oxygen-ion conducting Ln2+xTi2â˜'xO7â˜'Î´ (Ln=Hoâ€"Lu; x=0.44â€"0.81) pyrochlores: Crystal structure, microstructure and electrical conductivity. Solid State Ionics, 2008, 179, 985-990.	1.3	21
42	Synthesis and high-temperature electrical conductivity of Ln2Ti2O7 and LnYTi2O7 (Ln = Dy, Ho). Inorganic Materials, 2008, 44, 299-304.	0.2	8
43	Microstructure and Electrical Conductivity of Yb_{2+x}Ti_{2-x}O_{7-x/2} Materials. Materials Science Forum, 2006, 514-516, 417-421.	0.3	5
44	Structure and electrical conductivity of Ln2+x Hf2â˜'x O7â˜'x/2 (Ln = Sm-Tb; x = 0, 0.096). Inorganic Materials, 2006, 42, 519-527.	0.2	16
45	Effect of heterovalent substitution on the electrical conductivity of (Yb1â˜'x Mx)2Ti2O7 (M = Ca, Ba; x =) Tj ETQq1 1 0.784314 rgBT /Ov	0.2	10
46	Synthesis and electrical transport properties of Lu2+xTi2â˜'xO7â˜'x/2 oxide-ion conductors. Solid State Ionics, 2006, 177, 1149-1155.	1.3	40
47	New Oxide-Ion Conductors Ln_{2+x}Ti_{2-x}O_{7-x/2} (Ln = Dy â€" Lu;) Tj ETQq1 1 0.784314 rgBT /O	1.3	24
48	Synthesis and conductivity of Yb2Ti2O7 nanoceramics. Solid State Ionics, 2005, 176, 1653-1656.	1.3	33
49	Effects of the synthesis procedure, doping and non-stoichiometry on the orderâ€"disorder transformation in LnTiO (Ln=Tmâ€"Lu) oxygen-ion conductors. Solid State Ionics, 2005, 176, 2297-2304.	1.3	59
50	Oxidation of reduced Y-Doped semiconducting barium titanate ceramics. Inorganic Materials, 2005, 41, 87-93.	0.2	1
51	Ionic conductivity in the Lu2O3-TiO2 system. Inorganic Materials, 2005, 41, 264-271.	0.2	8
52	Influence of structural defects on the electrical conductivity of (Yb1 â˜' x Scx)2Ti2O7 (x=0, 0.09, 0.3). Inorganic Materials, 2005, 41, 406-411.	0.2	3
53	Ionic Conductivity of Ln2 + x Zr2 â˜' x O7 â˜' x/2 (Ln = Sm-Gd) Solid Solutions. Inorganic Materials, 2005, 41, 854-863.	0.2	25
54	Ionic conduction of a high-temperature modification of Lu2Ti2O7. Russian Journal of Electrochemistry, 2005, 41, 265-269.	0.3	11

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55	Orderâ€“Disorder Transformations in Ln2Ti2O7(Ln = Lu, Yb, Tm, Gd). Inorganic Materials, 2004, 40, 59-65.	0.2	19
56	Study of the fluorite?pyrochlore?fluorite phase transitions in Ln2Ti2O7 (Ln=Lu, Yb, Tm). Journal of Solid State Electrochemistry, 2004, 8, 661.	1.2	47
57	New ionic conductors Ln2 + xTi2 ? xO7 ? x /2 (Ln = Dy?Lu, x = 0.132). Inorganic Materials, 2004, 40, 1317-1320.	0.2	4
58	High-temperature phase transition of Tm2Ti2O7. Inorganic Materials, 2004, 40, 1312-1316.	0.2	11
59	Structural Orderâ€“Disorder Transitions in Ln2Ti2O7 (Ln = Lu, Gd). Russian Journal of Electrochemistry, 2003, 39, 467-471.	0.3	2
60	Studies of New Order-Disorder Structural Transitions in Ln2M2O7(Ln = Lu, Gd; M = Ti). Ferroelectrics, 2003, 294, 175-190.	0.3	9
61	Studies of New Order-Disorder Structural Transitions in Ln 2 M 2 O 7 (Ln = Lu, Gd; M = Ti). Ferroelectrics, 2003, 294, 175-190.	0.3	12