Mikhail Borik

List of Publications by Year
in descending order

42 papers	359 citations	840585 11 h-index	940416 16 g-index
42 all docs	42 docs citations	42 times ranked	194 citing authors

#	Article	IF	Citations
1	Partially stabilized zirconia single crystals: growth from the melt and investigation of the properties. Journal of Crystal Growth, 2005, 275, e2173-e2179.	0.7	32
2	Phase composition, structure and mechanical properties of PSZ (partially stabilized zirconia) crystals as a function of stabilizing impurity content. Journal of Alloys and Compounds, 2014, 586, S231-S235.	2.8	32
3	Change in the phase composition, structure and mechanical properties of directed melt crystallised partially stabilised zirconia crystals depending on the concentration of Y2O3. Journal of the European Ceramic Society, 2015, 35, 1889-1894.	2.8	25
4	Fast luminescence of HfO2â€“Yb2O3 and ZrO2â€“Yb2O3 solid solutions. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 486, 234-238.	0.7	19
5	Features of the local structure and transport properties of ZrO2-Y2O3-Eu2O3 solid solutions. Journal of Alloys and Compounds, 2019, 770, 320-326.	2.8	19
6	Zirconia-based nanocrystalline material synthesized by directional crystallization from the melt. Materials Science and Engineering C, 2005, 25, 577-583.	3.8	18
7	Mechanical properties of partially stabilized zirconia crystals studied by kinetic microindentation. Inorganic Materials, 2015, 51, 548-552.	0.2	16
8	Melt growth, structure and properties of (ZrO2)1â^'(Sc2O3) solid solution crystals (x=0.035â^'0.11). Journal of Crystal Growth, 2016, 443, 54-61.	0.7	15
9	Phase composition, structure and properties of (ZrO2)1â^'â^'(Sc2O3) (Y2O3) solid solution crystals (x=0.08â€“0.11; y=0.01â€“0.02) grown by directional crystallization of the melt. Journal of Crystal Growth, 2017, 457, 122-127.	0.7	15
10	Structure and mechanical properties of crystals of partially stabilized zirconia after thermal treatment. Physics of the Solid State, 2013, 55, 1690-1696.	0.2	13
11	Structure and phase composition studies of partially stabilized zirconia. Journal of Surface Investigation, 2011, 5, 166-171.	0.1	11
12	Thermal conductivity of single-crystal ZrO2-Y2O3 solid solutions in the temperature range 50â€“300 K. Physics of the Solid State, 2012, 54, 658-661.	0.2	10
13	Nanostructured crystals of partially yttria-stabilized and Nd3+ doped zirconia: Structure and luminescent properties. Journal of Alloys and Compounds, 2015, 621, 295-300.	2.8	10
14	Room-temperature persistent spectral hole burning in Eu3+-doped inorganic glasses: the mechanisms. Journal of Luminescence, 2000, 86, 317-322.	1.5	9
15	Preparation and properties of Y2O3 partially stabilized ZrO2 crystals. Inorganic Materials, 2007, 43, 1223-1229.	0.2	9
16	Phase composition and local structure of scandia and yttria stabilized zirconia solid solution. Journal of Luminescence, 2020, 222, 117170.	1.5	9
17	Anomalies of the magnetic properties of granular oxide superconductor BaPb1 ?x Bi x O3. Journal of Low Temperature Physics, 1991, 85, 283-294.	0.6	8
18	Synthesis conditions and superconduction properties of ceramics in the (Bi,Pb)-Sr-Ca-Cu-O system. Superconductor Science and Technology, 1992, 5, 151-155.	1.8	8

#	Article	IF	Citations
19	Investigation of a Tb-Doped HfO₂ Single Crystal Grown by a Skull Melting Method. Key Engineering Materials, 0, 508, 81-86.	0.4	8
20	Effect of Y2O3 stabilizer content and annealing on the structural transformations of ZrO2. Inorganic Materials, 2012, 48, 156-160.	0.2	8
21	Spectral, luminescent, and lasing properties of ZrO2â€”Y2O3â€”Tm2O3crystals. Quantum Electronics, 2012, 42, 580-582.	0.3	7
22	Lasing characteristics of ZrO₂â€“Y₂O₃â€“Ho₂O₃crystal. Quantum Electronics, 2013, 43, 838-840.	0.3	7
23	Ionic conductivity, phase composition, and local defect structure of ZrO2-Gd2O3system solid solution crystals. Journal of Solid State Electrochemistry, 2019, 23, 2619-2626.	1.2	7
24	Mechanical properties and transformation hardening mechanism in yttria, ceria, neodymia and ytterbia co-doped zirconia based solid solutions. Materials Chemistry and Physics, 2019, 232, 28-33.	2.0	6
25	Structure and phase transformations in scandia, yttria, ytterbia and ceria-doped zirconia-based solid solutions during directional melt crystallization. Journal of Alloys and Compounds, 2020, 844, 156040.	2.8	6
26	Structure and spectral-luminescence properties of yttrium-stabilized zirconia crystals activated with Tm3+ ions. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2012, 112, 594-600.	0.2	5
27	Structure, phase composition, and spectral-luminescent properties of ZrO2-Y2O3-Er2O3 crystals. Physics of the Solid State, 2015, 57, 1579-1587.	0.2	5
28	Phase composition and spectral-luminescent properties of yttrium partially stabilized zirconia crystals doped with Nd2O3 and CeO2. Optics and Spectroscopy (English Translation of Optika I) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3	0.2	4
29	Features of a technique for investigation of partially stabilized zirconia crystals. Inorganic Materials, 2013, 49, 1338-1342.	0.2	3
30	Spectroscopy of optical centers of Eu3+ ions in ZrO2-Gd2O3-Eu2O3 crystals. Journal of Luminescence, 2018, 200, 66-73.	1.5	3
31	Thermodynamic Properties of CaNdAlO4-SrNdAlO4 Solid Solutions. Inorganic Materials, 2005, 41, 850-853.	0.2	2
32	Influence of growth and heat treatment conditions on lasing properties of ZrO2-Y2O3-Ho2O3 crystals. Optical Materials, 2020, 99, 109611.	1.7	2
33	Skull Melting Growth and Characterization of (ZrO2)0.89(Sc2O3)0.1(CeO2)0.01 Crystals. Crystals, 2020, 10, 49.	1.0	2
34	Effect of the ionic radius of stabilizing oxide cation on the local structure and transport properties of zirconia based solid solutions. Journal of Alloys and Compounds, 2021, 870, 159396.	2.8	2
35	Study of the structural and physicochemical properties of nanostructured zirconia crystals for fabricating an innovative electrosurgical tool. Doklady Physics, 2013, 58, 161-164.	0.2	1
36	Structure, phase composition, and spectral luminescence properties of partially stabilized zirconium dioxide crystals doped with Yb3+ ions. Physics of the Solid State, 2016, 58, 1308-1313.	0.2	1

#	Article	IF	Citations
37	Structure and properties of the crystals of solid electrolytes (ZrO2)1 â€“ x â€“ y (Sc2O3) x (Y2O3) y (x =) Tj ETQq1 1 0.784314 rgBT /O 2016, 52, 655-661.	0.3	1
38	Phase Stability and Transport Properties of (ZrO2)0.91â^'x(Sc2O3)0.09(Yb2O3)x Crystals (x = 0â€“0.01). Crystals, 2021, 11, 83.	1.0	1
39	Shielding anomalies in granular oxide superconductors. Physica C: Superconductivity and Its Applications, 1989, 162-164, 727-728.	0.6	0
40	Oxygen redistribution during crystal growth of ZrO2-R2O3 solid solutions. Russian Journal of Electrochemistry, 2011, 47, 442-447.	0.3	0
41	Spectroscopic studies of a tetragonalâ€“monoclinic phase transition in ZrO2â€“Y2O3â€“CeO2â€–Nd2O3 crystals. Physics of the Solid State, 2015, 57, 1984-1990.	0.2	0
42	ï»¿Thermal conductivity of single crystals zirconia stabilized by scandium, yttrium, gadolinium, and ytterbium oxides. Modern Electronic Materials, 2022, 8, 1-6.	0.2	0