Elizaveta P Simonenko

List of Publications by Year
in descending order

80 papers	1,323 citations	304368 22 h-index	476904 29 g-index
80 all docs	80 docs citations	80 times ranked	576 citing authors

#	Article	IF	Citations
1	Oxidation of graphene-modified HfB2-SiC ceramics by supersonic dissociated air flow. Journal of the European Ceramic Society, 2022, 42, 30-42.	2.8	14
2	Microextrusion printing of gas-sensitive planar anisotropic NiO nanostructures and their surface modification in an H2S atmosphere. Applied Surface Science, 2022, 578, 151984.	3.1	23
3	Quantum of selectivity testing: detection of isomers and close homologs using an AZO based e-nose without a prior training. Journal of Materials Chemistry A, 2022, 10, 8413-8423.	5.2	9
4	Gas-sensitive nanostructured ZnO films praseodymium and europium doped: Electrical conductivity, selectivity, influence of UV irradiation and humidity. Applied Surface Science, 2022, 589, 152974.	3.1	15
5	Hydrothermal Synthesis of Ag Thin Films and Their SERS Application. Nanomaterials, 2022, 12, 136.	1.9	4
6	Hydrothermally synthesized hierarchical Ce1-xSmxO2-Î´ oxides for additive manufacturing of planar solid electrolytes. Ceramics International, 2022, 48, 22401-22410.	2.3	9
7	Printing Technologies as an Emerging Approach in Gas Sensors: Survey of Literature. Sensors, 2022, 22, 3473.	2.1	20
8	Pen plotter printing of ITO thin film as a highly CO sensitive component of a resistive gas sensor. Talanta, 2021, 221, 121455.	2.9	37
9	Oxidation of HfB2-SiC-Ta4HfC5 ceramic material by a supersonic flow of dissociated air. Journal of the European Ceramic Society, 2021, 41, 1088-1098.	2.8	18
10	Microplotter printing of planar solid electrolytes in the CeO2â€“Y2O3 system. Journal of Colloid and Interface Science, 2021, 588, 209-220.	5.0	28
11	Highâ€temperature mass spectrometric study of vaporization and thermodynamics of the Cs₂Oâ€B₂O₃ system: Review and experimental investigation. Rapid Communications in Mass Spectrometry, 2021, 35, e9079.	0.7	3
12	Vaporization and thermodynamics of the Cs 2 Oâ€“MoO 3 system studied using highâ€temperature mass spectrometry. Rapid Communications in Mass Spectrometry, 2021, 35, e9097.	0.7	3
13	Dependence of the Reactivity of the Finely Divided System Ta2O5â€“HfO2â€“C on the Xerogel Carbonization Temperature. Russian Journal of Inorganic Chemistry, 2021, 66, 747-754.	0.3	4
14	PZT 50/50 nanocrystalline powders with tetragonal structure prepared via gel combustion route: Effect of heat treatment on phase and chemical compositions. Ceramics International, 2021, 47, 16232-16239.	2.3	1
15	Samarium zirconate: Thermodynamics and vaporization at high temperatures. Materials Today Communications, 2021, 27, 102200.	0.9	2
16	Microstructure and local electrophysical properties of sol-gel derived (In2O3-10%SnO2)/V2O5 films. Colloids and Interface Science Communications, 2021, 43, 100452.	2.0	10
17	Chemoresistive gas-sensing properties of highly dispersed Nb2O5 obtained by programmable precipitation. Journal of Alloys and Compounds, 2021, 868, 159090.	2.8	26
18	Chemoresistive gas-sensitive ZnO/Pt nanocomposites films applied by microplotter printing with increased sensitivity to benzene and hydrogen. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 271, 115233.	1.7	22

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19	Modification of HfB2â€“30% SiC UHTC with Graphene (1 vol %) and Its Influence on the Behavior in a Supersonic Air Jet. Russian Journal of Inorganic Chemistry, 2021, 66, 1405-1415.	0.3	10
20	Platinum Based Nanoparticles Produced by a Pulsed Spark Discharge as a Promising Material for Gas Sensors. Applied Sciences (Switzerland), 2021, 11, 526.	1.3	18
21	Influence of Carbon Deficiency and Hafnium Oxide Doping on Reactive Spark Plasma Sintering of the Ta2O5â€“C System. Russian Journal of Inorganic Chemistry, 2021, 66, 1887-1894.	0.3	3
22	Microstructural, electrophysical and gas-sensing properties of CeO2â€“Y2O3 thin films obtained by the sol-gel process. Ceramics International, 2020, 46, 121-131.	2.3	32
23	The effects of subsonic and supersonic dissociated air flow on the surface of ultra-high-temperature HfB2-30 vol% SiC ceramics obtained using the sol-gel method. Journal of the European Ceramic Society, 2020, 40, 1093-1102.	2.8	16
24	Production and Oxidation Resistance of HfB2â€“30 vol % SiC Composite Powders Modified with Y3Al5O12. Russian Journal of Inorganic Chemistry, 2020, 65, 1416-1423.	0.3	4
25	Behavior of Ultra-High Temperature Ceramic Material HfB2â€“SiCâ€“Y3Al5O12 under the Influence of Supersonic Dissociated Air Flow. Russian Journal of Inorganic Chemistry, 2020, 65, 1596-1605.	0.3	9
26	Microplotter-Printed On-Chip Combinatorial Library of Ink-Derived Multiple Metal Oxides as an â€œElectronic Olfactionâ€•Unit. ACS Applied Materials & Interfaces, 2020, 12, 56135-56150.	4.0	32
27	Oxidation of Porous HfB2â€“SiC Ultra-High-Temperature Ceramic Materials Rich in Silicon Carbide (65) Tj ETQq1 1 0.784314 rgBT /Over	0.3	12
28	Pen plotter printing of Co3O4 thin films: features of the microstructure, optical, electrophysical and gas-sensing properties. Journal of Alloys and Compounds, 2020, 832, 154957.	2.8	38
29	Reactive Hot Pressing of HfB2â€“SiCâ€“Ta4HfC5 Ultra-High Temperature Ceramics. Russian Journal of Inorganic Chemistry, 2020, 65, 446-457.	0.3	14
30	A study of â€œThe Portrait of F.P. Makerovsky in a Masquerade Costumeâ€•by Dmitry Levitsky from the collection of the State Tretyakov Gallery. Heritage Science, 2020, 8, .	1.0	3
31	Oxygen detection using nanostructured TiO2 thin films obtained by the molecular layering method. Applied Surface Science, 2019, 463, 197-202.	3.1	30
32	Thermodynamic properties of lanthanum, neodymium, gadolinium hafnates (Ln2Hf2O7): Calorimetric and KEMS studies. Journal of Materials Research, 2019, 34, 3326-3336.	1.2	6
33	Synthesis of BaCe0.9xZrxY0.1O3 nanopowders and the study of proton conductors fabricated on their basis by low-temperature spark plasma sintering. International Journal of Hydrogen Energy, 2019, 44, 20345-20354.	3.8	37
34	Behavior of HfB2â€“30â€‰vol% SiC UHTC obtained by solâ€“gel approach in the supersonic airflow. Journal of Sol-Gel Science and Technology, 2019, 92, 386-397.	1.1	25
35	Sol-gel synthesis of SiC@Y3Al5O12 composite nanopowder and preparation of porous SiC-ceramics derived from it. Materials Chemistry and Physics, 2019, 235, 121734.	2.0	12
36	Gas-sensing properties of nanostructured TiO2â€“xZrO2 thin films obtained by the solâ€“gel method. Journal of Sol-Gel Science and Technology, 2019, 92, 415-426.	1.1	17

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37	ZrB2/HfB2â€“SiC Ceramics Modified by Refractory Carbides: An Overview. Russian Journal of Inorganic Chemistry, 2019, 64, 1697-1725.	0.3	22
38	Effect of the Surface Relief of HfB2-SiC Ceramic Materials on Their High-Temperature Oxidation. Russian Journal of Inorganic Chemistry, 2019, 64, 1681-1686.	0.3	6
39	Oxidation of Ultra-High Temperature HfB2â€“SiC Ceramic Materials in Humid Air Flow. Russian Journal of Inorganic Chemistry, 2019, 64, 1849-1853.	0.3	8
40	Solâ€“Gel Synthesis of Functionally Graded SiCâ€“TiC Ceramic Material. Russian Journal of Inorganic Chemistry, 2019, 64, 1456-1463.	0.3	9
41	Solâ€“Gel Synthesis of Highly Dispersed Tantalum Hafnium Carbide Ta4HfC5. Russian Journal of Inorganic Chemistry, 2019, 64, 1317-1324.	0.3	9
42	A sol-gel synthesis and gas-sensing properties of finely dispersed ZrTiO4. Materials Chemistry and Physics, 2019, 225, 347-357.	2.0	12
43	Ink-jet printing of a TiO2â€“10%ZrO2 thin film for oxygen detection using a solution of metal alkoxoacetylacetonates. Thin Solid Films, 2019, 670, 46-53.	0.8	28
44	Microstructure, phase composition, and gas-sensing properties of nanostructured ZrO2-xY2O3 thin films and powders obtained by the sol-gel method. Ionics, 2019, 25, 1259-1270.	1.2	8
45	Gas-sensing properties of nanostructured CeO2-xZrO2 thin films obtained by the sol-gel method. Journal of Alloys and Compounds, 2019, 773, 1023-1032.	2.8	40
46	Study of the Thermal Behavior of Wedge-Shaped Samples of HfB2â€“45 vol % SiC Ultra-High-Temperature Composite in a High-Enthalpy Air Flow. Russian Journal of Inorganic Chemistry, 2018, 63, 421-432.	0.3	29
47	Sol-gel made titanium dioxide nanostructured thin films as gas-sensing materials for the detection of oxygen. Mendeleev Communications, 2018, 28, 164-166.	0.6	15
48	Glycol-citrate synthesis of fine-grained oxides La2â^'xGdxZr2O7 and preparation of corresponding ceramics using FAST/SPS process. Ceramics International, 2018, 44, 7647-7655.	2.3	12
49	Production of HfB2â€“SiC (10â€“65 vol % SiC) Ultra-High-Temperature Ceramics by Hot Pressing of HfB2â€“(SiO2â€“C) Composite Powder Synthesized by the Solâ€“Gel Method. Russian Journal of Inorganic Chemistry, 2018, 63, 1-15.	0.3	31
50	Vaporization and thermodynamic properties of lanthanum hafnate. Journal of Alloys and Compounds, 2018, 735, 2348-2355.	2.8	28
51	Nanocrystalline ZnO Obtained by the Thermal Decomposition of [Zn(H2O)(O2C5H7)2] in 1-Butanol: Synthesis and Testing as a Sensing Material. Russian Journal of Inorganic Chemistry, 2018, 63, 1519-1528.	0.3	15
52	Impact of a Supersonic Dissociated Air Flow on the Surface of HfB2â€“30 vol % SiC UHTC Produced by the Solâ€“Gel Method. Russian Journal of Inorganic Chemistry, 2018, 63, 1484-1493.	0.3	28
53	ZrB2/HfB2â€“SiC Ultra-High-Temperature Ceramic Materials Modified by Carbon Components: The Review. Russian Journal of Inorganic Chemistry, 2018, 63, 1772-1795.	0.3	20
54	Impact of a Subsonic Dissociated Air Flow on the Surface of HfB2â€“30 vol % SiC UHTC Produced by the Solâ€“Gel Method. Russian Journal of Inorganic Chemistry, 2018, 63, 1345-1355.	0.3	18

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55	Spark plasma sintering of nanopowders in the CeO2-Y2O3 system as a promising approach to the creation of nanocrystalline intermediate-temperature solid electrolytes. Ceramics International, 2018, 44, 19879-19884.	2.3	28
56	Heat-Treatment-Induced Evolution of the Mesostructure of Finely Divided Y3Al5O12 Produced by the Solâ€“Gel Method. Russian Journal of Inorganic Chemistry, 2018, 63, 691-699.	0.3	12
57	Tin Acetylacetonate as a Precursor for Producing Gas-Sensing SnO2 Thin Films. Russian Journal of Inorganic Chemistry, 2018, 63, 851-860.	0.3	11
58	Synthesis, vaporization and thermodynamic properties of superfine yttrium aluminum garnet. Journal of Alloys and Compounds, 2018, 764, 397-405.	2.8	7
59	Polymer Technology of Porous SiC Ceramics Using Milled SiO2 Fibers. Russian Journal of Inorganic Chemistry, 2018, 63, 574-582.	0.3	3
60	Preparation of porous SiC-ceramics by solâ€“gel and spark plasma sintering. Journal of Sol-Gel Science and Technology, 2017, 82, 748-759.	1.1	29
61	Production of porous ceramic materials using nanodisperse SiC powder. Russian Journal of Inorganic Chemistry, 2017, 62, 863-869.	0.3	10
62	Synthesis of nanocrystalline ZnO by the thermal decomposition of [Zn(H2O)(O2C5H7)2] in isoamyl alcohol. Russian Journal of Inorganic Chemistry, 2017, 62, 1415-1425.	0.3	15
63	Preparation of MB2/SiC and MB2/SiC-MC (M = Zr or Hf) powder composites which are promising materials for design of ultra-high-temperature ceramics. Russian Journal of Inorganic Chemistry, 2016, 61, 1649-1676.	0.3	13
64	Preparation of HfB2/SiC composite powders by solâ€“gel technology. Russian Journal of Inorganic Chemistry, 2016, 61, 1483-1498.	0.3	13
65	How xerogel carbonization conditions affect the reactivity of highly disperse SiO2â€“C composites in the solâ€“gel synthesis of nanocrystalline silicon carbide. Russian Journal of Inorganic Chemistry, 2016, 61, 1347-1360.	0.3	8
66	Behavior of HfB2-SiC (10, 15, and 20 vol %) ceramic materials in high-enthalpy air flows. Russian Journal of Inorganic Chemistry, 2016, 61, 1203-1218.	0.3	29
67	Study of the synthesis of nanocrystalline mixed tantalumâ€“zirconium carbide. Physics of Atomic Nuclei, 2015, 78, 1357-1365.	0.1	13
68	Synthesis, vaporization and thermodynamics of ceramic powders based on the Y2O3â€“ZrO2â€“HfO2 system. Materials Chemistry and Physics, 2015, 153, 78-87.	2.0	30
69	Preparation of high-porous SiC ceramics from polymeric composites based on diatomite powder. Journal of Materials Science, 2015, 50, 733-744.	1.7	16
70	Theoretical Ð¡onsideration of Gas Phase Hydrolytic Stability of Crown Ether Based CVD-Precursors of Metal Oxides Thin Films. Macroheterocycles, 2015, 8, 185-192.	0.9	0
71	HfB2-SiC (10â€“20 vol %) ceramic materials: Manufacture and behavior under long-term exposure to dissociated air streams. Russian Journal of Inorganic Chemistry, 2014, 59, 1361-1382.	0.3	29
72	HfB2-SiC (45 vol %) ceramic material: Manufacture and behavior under long-term exposure to dissociated air jet flow. Russian Journal of Inorganic Chemistry, 2014, 59, 1298-1311.	0.3	29

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73	Synthesis of Finely Dispersed La2Zr2O7, La2Hf2O7, Gd2Zr2O7 and Gd2Hf2O7 Oxides. Mendeleev Communications, 2013, 23, 17-18.	0.6	22
74	Synthesis, Vaporization and Thermodynamic Properties of Superfine Nd₂Hf₂O₇ and Gd₂Hf₂O₇. European Journal of Inorganic Chemistry, 2013, 2013, 4636-4644.	1.0	44
75	Tin(ii) Hexafluoroacetylacetonate as a Precursor in Atmospheric Pressure Chemical Vapour Deposition: Synthesis, Structure and Properties. Mendeleev Communications, 2012, 22, 239-241.	0.6	7
76	Finely dispersed refractory compounds for high-temperature ceramic matrix composite applications. Russian Journal of General Chemistry, 2010, 80, 658-665.	0.3	6
77	Synthesis, structure and thermochemical behavior of bis-(1,1,1,5,5,5-hexafluoro-2,4-pentanedionato)-(1,4,7,10,13,16-hexaoxa-cyclooctadecane)-strontium in comparison with its structural and thermochemical analogous. Inorganica Chimica Acta, 2009, 362, 5133-5138.	1.2	11
78	The lead(II) complexes with 18-Crown-6, 1,1,1,5,5,5-hexafluoropentane-2,4-dionate and 1,1,1-trifluoropentate-2,4-dionate anions: Synthesis, structure, and thermochemical properties. Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya, 2008, 34, 157-166.	0.3	11
79	Coordination compounds with the general formula trans-[M(18-crown-6)(C5HO2F6)2] as structural-thermochemical analogs. The complexes trans-[Pb(18-crown-6)(C5HO2F6)2] and trans-[Ba(18-crown-6)(C5HO2F6)2]. Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya, 2006, 32, 693-700.	0.3	14
80	Vaporization of Molecular Strontium and Barium Î²-Diketonates [Sr(15C5)(C5O2F6H)2] and [Ba(18C6)(C5O2F6H)2]. Structure-Thermochemical Approach. Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya, 2004, 30, 755-758.	0.3	9