Igor Leontyev

List of Publications by Year
in descending order

58 papers	721 citations	623188 14 h-index	580395 25 g-index
58 all docs	58 docs citations	58 times ranked	902 citing authors

#	Article	IF	Citations
1	Size dependence of the lattice parameters of carbon supported platinum nanoparticles: X-ray diffraction analysis and theoretical considerations. RSC Advances, 2014, 4, 35959-35965.	1.7	83
2	Catalytic Activity of Carbon-Supported Pt Nanoelectrocatalysts. Why Reducing the Size of Pt Nanoparticles is Not Always Beneficial. Journal of Physical Chemistry C, 2011, 115, 5429-5434.	1.5	76
3	New life of a forgotten method: Electrochemical route toward highly efficient Pt/C catalysts for low-temperature fuel cells. Applied Catalysis A: General, 2012, 431-432, 120-125.	2.2	49
4	Electrochemical dispergation as a simple and effective technique toward preparation of NiO based nanocomposite for supercapacitor application. Electrochimica Acta, 2013, 114, 356-362.	2.6	42
5	Electrochemically synthesized Pt/ TiO2-C catalysts for direct methanol fuel cell applications. Mendeleev Communications, 2017, 27, 67-69.	0.6	35
6	XRD and electrochemical investigation of particle size effects in platinum-cobalt cathode electrocatalysts for oxygen reduction. Journal of Alloys and Compounds, 2010, 500, 241-246.	2.8	29
7	Photocatalytic degradation of ciprofloxacin in water at nano-ZnO prepared by pulse alternating current electrochemical synthesis. Journal of Water Process Engineering, 2021, 40, 101809.	2.6	28
8	Particle size effect in carbon supported Ptâ€“Co alloy electrocatalysts prepared by the borohydride method: XRD characterization. Applied Catalysis A: General, 2009, 357, 1-4.	2.2	27
9	Electrochemically Synthesized Pt/Al2O3 Oxidation Catalysts. Catalysis Letters, 2016, 146, 452-463.	1.4	26
10	Large-scale synthesis of ZnO nanostructures by pulse electrochemical method and their photocatalytic properties. Materials Science in Semiconductor Processing, 2018, 76, 7-13.	1.9	24
11	Characterization of the electrocatalytic activity of carbon-supported platinum-based catalysts by thermal gravimetric analysis. Mendeleev Communications, 2015, 25, 468-469.	0.6	21
12	Copper oxides for energy storage application: Novel pulse alternating current synthesis. Materials Science in Semiconductor Processing, 2018, 73, 111-116.	1.9	21
13	Structural and electrocatalytic properties of Pt/C and Pt-Ni/C catalysts prepared by electrochemical dispersion. Kinetics and Catalysis, 2013, 54, 255-262.	0.3	18
14	The compressibility of nanocrystalline Pt. Applied Physics Letters, 2012, 101, .	1.5	15
15	Influence of Carbon Support on Catalytic Layer Performance of Proton Exchange Membrane Fuel Cells. Electrocatalysis, 2018, 9, 22-30.	1.5	15
16	Synthesis of Co3O4/CoOOH via electrochemical dispersion using a pulse alternating current method for lithium-ion batteries and supercapacitors. Solid State Sciences, 2018, 86, 53-59.	1.5	12
17	On the Evaluation of the Average Crystalline Size and Surface Area of Platinum Catalyst Nanoparticles. Physica Status Solidi (B): Basic Research, 2018, 255, 1800240.	0.7	12
18	Characterization of an UO2 ceramic via Raman imaging and electron back-scattering diffraction. Materials Characterization, 2019, 147, 280-285.	1.9	12

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19	Influence of the growth mechanism and thermoelastic stresses on the lattice dynamics of heteroepitaxial films of barium strontium titanate. Physics of the Solid State, 2007, 49, 1759-1765.	0.2	11
20	Ferroelectric BaTiO3 single crystal under superstrong electric fields up to 55 MV/m: A comparative experimental and theoretical study. Applied Physics Letters, 2010, 96, 142904.	1.5	11
21	Thermal expansion coefficient of carbonâ€supported Pt nanoparticles: Inâ€situ Xâ€ray diffraction study. Physica Status Solidi (B): Basic Research, 2017, 254, 1600695.	0.7	11
22	A Comparison of â€œBottom-Upâ€•and â€œTop-Downâ€•Approaches to the Synthesis of Pt/C Electrocatalysts. Processes, 2020, 8, 947.	1.3	11
23	Non-Isothermal Decomposition as Efficient and Simple Synthesis Method of NiO/C Nanoparticles for Asymmetric Supercapacitors. Nanomaterials, 2021, 11, 187.	1.9	11
24	Dipole order and stability of the ferroelectric and antiferroelectric states in lead zirconate. Physics of the Solid State, 1998, 40, 1204-1207.	0.2	10
25	One step simultaneous electrochemical synthesis of NiO/multilayer graphene nanocomposite as an electrode material for high performance supercapacitors. Mendeleev Communications, 2021, 31, 160-162.	0.6	10
26	Electric field control of antiferroelectric domain pattern. Physical Review B, 2021, 103, .	1.1	10
27	Raman spectra of Taunit carbon nanomaterial. Nanotechnologies in Russia, 2010, 5, 641-646.	0.7	7
28	Orthorhombic polar Nd-doped BiFeO₃thin film on MgO substrate. Journal of Physics Condensed Matter, 2011, 23, 332201.	0.7	7
29	Electrochemically synthesized Pt-based catalysts with different carbon supports for proton exchange membrane fuel cell applications. Mendeleev Communications, 2018, 28, 444-446.	0.6	7
30	Nonlinear properties of barium titanate in the electric field range 0â‰Eâ‰5.5Ã—07 V/m. Physics of the Solid State, 2003, 45, 1128-1130.	0.2	6
31	Critical scattering of synchrotron radiation in lead zirconateâ€“titanate with low titanium concentrations. Physics of the Solid State, 2015, 57, 2441-2446.	0.2	6
32	Oneâ€step Simultaneous Synthesis of Graphene and Pt Nanoparticles under the Action of Pulsed Alternating Current and Electrochemical Performance of Pt/Graphene Catalysts. ChemistrySelect, 2017, 2, 6979-6983.	0.7	6
33	Structural Peculiarities of the Intermediate Phase in Zr-Rich Lead Zirconate Titanate. Physics of the Solid State, 2019, 61, 1772-1778.	0.2	6
34	PtIr/C Catalysts Synthesized by Electrochemical Dispersion Method for Proton Exchange Membrane Fuel Cells. Russian Journal of Electrochemistry, 2018, 54, 561-565.	0.3	5
35	Non-isothermal decomposition of platinum acetylacetonate as a cost-efficient and Size-Controlled Synthesis of Pt/C nanoparticles. Catalysis Communications, 2018, 117, 14-18.	1.6	5
36	Pre-transitional evolution of central peaks and transverse acoustic phonon branch in single crystal lead zirconate titanate with Ti concentration 0.7%. Journal of Physics: Conference Series, 2016, 769, 012070.	0.3	4

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37	Particle size effect in nanoscale Pt3Co/C electrocatalysts for low-temperature fuel cells. Nanotechnologies in Russia, 2009, 4, 170-175.	0.7	3
38	Domain structures and correlated out-of-plane and in-plane polarization reorientations in Pb(Zr0.96Ti0.04)O3 single crystal via piezoresponse force microscopy. AIP Advances, 2016, 6, .	0.6	3
39	Composition dependence of the diffuse scattering in cubic PbZr_{1-x}Ti_xO₃. Ferroelectrics, 2016, 503, 45-51.	0.3	3
40	In Situ Investigation of Nonâ€Isothermal Decomposition of Pt Acetylacetonate as Oneâ€Step Sizeâ€Controlled Synthesis of Pt Nanoparticles. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800488.	0.8	3
41	New Electrochemical Approach for the Synthesis of Pdâ€PdO/C Electrocatalyst and Application to Formic Acid Electrooxidation. ChemistrySelect, 2019, 4, 8390-8393.	0.7	3
42	Electrochemical dispersion technique for the preparation of Sn-doped Pt particles and their use as electrocatalysts. Mendeleev Communications, 2020, 30, 663-665.	0.6	3
43	PAC Synthesis and Comparison of Catalysts for Direct Ethanol Fuel Cells. Processes, 2020, 8, 712.	1.3	3
44	Nonlinear Behavior of Barium Titanate Single Crystals in Strong Electric Fields. Ferroelectrics, 2003, 286, 73-78.	0.3	2
45	Xâ€Ray Diffraction and Dielectric Investigations of Ferroelectric PbZr_{0.958}Ti_{0.042}O₃, Antiferroelectric PbZrO₃ and PbHfO₃ Single Crystals in Superstrong Electric Fields up to 30 MV/m. Crystal Research and Technology, 2017, 52, 1700139.	0.6	2
46	Incommensurate instability and diffuse scattering at Brillouin zone boundary in Zr-rich lead zirconate titanate. Ferroelectrics, 2019, 538, 65-73.	0.3	2
47	X-ray structural and optical studies of PbZrO0.598Ti0.042O3 single crystals in electric fields up to 4Ã—107 V/m. Physics of the Solid State, 1998, 40, 299-301.	0.2	1
48	Electron spin resonance on enantiomorphic centers in PbZrO3:Gd3+ crystals. Physics of the Solid State, 1999, 41, 1169-1171.	0.2	1
49	Electrochemical Synthesis and Photocatalytic Activity of Differently Shaped CuO_x Particles. Nano Hybrids and Composites, 2017, 13, 330-333.	0.8	1
50	Evaluation of T2g band intensity distribution across a surface of an UO2 ceramic. AIP Conference Proceedings, 2018, , .	0.3	1
51	Graphene structures prepared via pulse alternating current technique. Mendeleev Communications, 2022, 32, 308-310.	0.6	1
52	Stress alteration in heteroepitaxial (Ba,Sr)TiO3/(0â€‰0â€‰1) MgO thin films via growth mechanism. Journal Physics D: Applied Physics, 2007, 40, 4271-4275.	1.3	0
53	Thin ferroelectric Nd-doped BiFeO3 films with orthorhombic structure. Bulletin of the Russian Academy of Sciences: Physics, 2010, 74, 1112-1114.	0.1	0
54	Phase transitions in PbZr1-xTixO3with low Ti concentrations studied by X-ray scattering. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, s388-s388.	0.0	0

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55	Crystallography Based on Synchrotron Radiation: Experiments of Russian Users of the ESRF BM01 Diffraction Beam Line. Journal of Surface Investigation, 2018, 12, 395-407.	0.1	0
56	Diagnostics of Carbonaceous Nanomaterial â€œTaunitâ€•by Raman Spectroscopy. Journal of Nanoelectronics and Optoelectronics, 2012, 7, 95-98.	0.1	0
57	Temperature Evolution of Inelastic Synchrotron Radiation Scattering in PbZr0.985 Ti0.015O3in the Vicinity of M-Point. , 2021, , .		0
58	Mode Coupling at around M-Point in PZT. Materials, 2022, 15, 79.	1.3	0