Irina Lukiyanchuk

List of Publications by Year
in descending order

112 papers	1,061 citations	430442 18 h-index	580395 25 g-index
112 all docs	112 docs citations	112 times ranked	462 citing authors

#	Article	IF	Citations
1	Surface morphology, composition and thermal behavior of tungsten-containing anodic spark coatings on aluminium alloy. Thin Solid Films, 2004, 446, 54-60.	0.8	64
2	Plasma electrolytic oxide layers as promising systems for catalysis. Surface and Coatings Technology, 2016, 307, 1183-1193.	2.2	43
3	Aluminum- and titanium-supported plasma electrolytic multicomponent coatings with magnetic, catalytic, biocide or biocompatible properties. Surface and Coatings Technology, 2016, 307, 1219-1235.	2.2	41
4	Magnetic properties of plasma electrolytic iron-containing oxide coatings on aluminum. Doklady Physical Chemistry, 2009, 428, 189-192.	0.2	33
5	Highly Efficient Nanoarchitectured Ni₅TiO₇ Catalyst for Biomass Gasification. ACS Applied Materials & Interfaces, 2012, 4, 4062-4066.	4.0	29
6	The effect of the conditions of formation on ferromagnetic properties of iron-containing oxide coatings on titanium. Protection of Metals and Physical Chemistry of Surfaces, 2012, 48, 543-552.	0.3	28
7	The nanostructural catalytic composition CuMoO 4 /TiO 2 + SiO 2 /Ti for combustion of diesel soot. Surface and Coatings Technology, 2013, 231, 144-148.	2.2	26
8	Comparative analysis of the composition, structure, and catalytic activity of the NiO-CuO-TiO2 on Titanium and NiO-CuO-Al2O3 on aluminum composites. Kinetics and Catalysis, 2010, 51, 266-272.	0.3	25
9	Magnetoactive oxide layers formed on titanium by plasma-electrolytic technique. Protection of Metals and Physical Chemistry of Surfaces, 2010, 46, 566-572.	0.3	24
10	Titanium-supported Ce-, Zr-containing oxide coatings modified by platinum or nickel and copper oxides and their catalytic activity in CO oxidation. Surface and Coatings Technology, 2011, 206, 417-424.	2.2	24
11	Plasma electrolytic oxide coatings on valve metals and their activity in CO oxidation. Applied Surface Science, 2014, 315, 481-489.	3.1	24
12	Tungsten oxide films on aluminum and titanium. Inorganic Materials, 2007, 43, 264-267.	0.2	20
13	Magnetic properties of plasma-electrolytic iron-containing oxide coatings on aluminum alloy. Protection of Metals and Physical Chemistry of Surfaces, 2013, 49, 309-318.	0.3	20
14	Calcium-containing biocompatible oxide-phosphate coatings on titanium. Russian Journal of Applied Chemistry, 2010, 83, 671-679.	0.1	19
15	Composition, surface structure, and thermal behavior of ZrO2 + TiO2/Ti and ZrO2 + CeO x + TiO2 composites formed by plasma-electrolytic oxidation. Protection of Metals and Physical Chemistry of Surfaces, 2012, 48, 455-461.	0.3	19
16	Anodic-Spark Oxidation of Aluminum Alloy in Tungstate Electrolytes. Russian Journal of Applied Chemistry, 2002, 75, 573-578.	0.1	18
17	Catalytic properties of aluminum/nickel-, copper-containing oxide film compositions. Kinetics and Catalysis, 2008, 49, 439-445.	0.3	18
18	Thermal behavior of Ni- and Cu-containing plasma electrolytic oxide coatings on titanium. Applied Surface Science, 2012, 258, 8667-8672.	3.1	18

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19	Composites with transition metal oxides on aluminum and titanium and their activity in CO oxidation. Surface and Coatings Technology, 2013, 231, 433-438.	2.2	18
20	The effect of nanocrystallites in the pores of PEO coatings on their magnetic properties. Surface and Coatings Technology, 2015, 269, 23-29.	2.2	18
21	W-containing oxide layers obtained on aluminum and titanium by PEO as catalysts in thiophene oxidation. Applied Surface Science, 2017, 422, 1007-1014.	3.1	18
22	Ni- and Cu-containing oxide layers on aluminum: Formation, composition, and catalytic properties. Doklady Physical Chemistry, 2007, 415, 183-185.	0.2	17
23	Ce-, Zr-containing oxide layers formed by plasma electrolytic oxidation on titanium as catalysts for oxidative desulfurization. Surface and Coatings Technology, 2019, 362, 132-140.	2.2	16
24	Effect of Ñopper Ñoating on fibers made of aluminum alloy, titanium, and FeCrAl alloy on surface morphology and activity in CO oxidation. Applied Surface Science, 2018, 436, 1-10.	3.1	15
25	Phase Composition of Coatings Formed on Titanium in Borate Electrolyte by Microarch Oxidation. Russian Journal of Applied Chemistry, 2002, 75, 569-572.	0.1	14
26	Magnetic properties of iron-containing coatings formed by plasma-electrolytic oxidation. Bulletin of the Russian Academy of Sciences: Physics, 2010, 74, 1404-1406.	0.1	14
27	Title is missing!. Protection of Metals, 2002, 38, 191-195.	0.2	13
28	Structure and magnetic characteristics of iron-modified titania layers on titanium. Journal of Alloys and Compounds, 2015, 618, 623-628.	2.8	13
29	Anodic-Spark Deposition of P- and W(Mo)-Containing Coatings onto Aluminum and Titanium Alloys. Russian Journal of Applied Chemistry, 2002, 75, 1082-1086.	0.1	12
30	IR and Py-GC/MS investigation of composite PTFE/PEO coatings on aluminum. Materials Chemistry and Physics, 2019, 221, 436-446.	2.0	12
31	Plasma electrolytic synthesis and characterization of oxide coatings with MWO4 (MÂ=ÂCo, Ni, Cu) as photo-Fenton heterogeneous catalysts. Surface and Coatings Technology, 2021, 424, 127640.	2.2	12
32	Ta-containing coatings formed on titanium and stainless steel by plasma electrolytic oxidation and/or extraction pyrolysis. Surface and Coatings Technology, 2014, 258, 1232-1238.	2.2	11
33	The structural catalyst CuMoO 4 /TiO 2 /TiO 2 + SiO 2 /Ti for diesel soot combustion. Surface and Coatings Technology, 2015, 261, 344-349.	2.2	11
34	Micrograins on the surface of anodic films. Protection of Metals and Physical Chemistry of Surfaces, 2009, 45, 71-74.	0.3	10
35	Deposition, composition, and activity in CO oxidation of anodic layers with platinum on aluminum and titanium. Russian Journal of Applied Chemistry, 2010, 83, 680-686.	0.1	10
36	Magnetism of Fe-doped Al2O3 and TiO2 layers formed on aluminum and titanium by plasma-electrolytic oxidation. Journal of Alloys and Compounds, 2020, 816, 152579.	2.8	10

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37	Titanium-supported W-containing PEO layers enriched with Mn or Zn in oxidative desulfurization and the zwitterionic liquid effect. Surface and Coatings Technology, 2020, 393, 125746.	2.2	10
38	Ti/TiO2-CoWO4-Co3(PO4)2 composites: Plasma electrolytic synthesis, optoelectronic properties, and solar light-driven photocatalytic activity. Journal of Alloys and Compounds, 2021, 863, 158066.	2.8	10
39	Formation, structure, composition, and catalytic properties of Ni-, Cu-, Mn-, Fe-, and co-containing films on aluminum. Russian Journal of Applied Chemistry, 2009, 82, 1000-1007.	0.1	9
40	Oxide layers with ferro- and ferrimagnetic characteristics formed on aluminum via plasma electrolytic oxidation. Russian Journal of Physical Chemistry A, 2013, 87, 1052-1056.	0.1	9
41	Composition, structure, magnetic and luminescent properties of EuFeO3/TiO2/Ti composites fabricated by combination of plasma electrolytic oxidation and extraction pyrolysis. Journal of Alloys and Compounds, 2015, 647, 699-706.	2.8	9
42	The effect of Fe-containing colloid particles in electrolyte on the composition and magnetic characteristics of oxide layers on titanium formed using the method of plasma electrolytic oxidation. Protection of Metals and Physical Chemistry of Surfaces, 2016, 52, 526-531.	0.3	9
43	Anodic-cathodic formation of pH-sensitive TiO2-MoOx films on titanium. Journal of Electroanalytical Chemistry, 2020, 873, 114388.	1.9	9
44	On the Surface Structure of Coatings Formed by Anodic Spark Method. Protection of Metals, 2004, 40, 352-357.	0.2	8
45	Silicate coatings on titanium, modified with transition metal oxides and their activity in CO oxidation. Russian Journal of Applied Chemistry, 2013, 86, 319-325.	0.1	8
46	Tantalum oxide-modified calcium phosphate coatings on titanium for biomedical applications. Russian Journal of Applied Chemistry, 2013, 86, 119-123.	0.1	8
47	Catalytically active cobalt-copper-oxide layers on aluminum and titanium. Protection of Metals and Physical Chemistry of Surfaces, 2014, 50, 209-217.	0.3	8
48	An X-ray photoelectron spectroscopy study of Ni, Cu-containing coatings formed by plasma electrolytic oxidation on aluminum and titanium. Journal of Structural Chemistry, 2017, 58, 1129-1136.	0.3	8
49	Thermally Controlled Formation of WO3 Nano- and Microcrystals on the Surface of Coatings Produced on Titanium by Plasma Electrolytic Oxidation. Inorganic Materials, 2019, 55, 681-686.	0.2	8
50	Effect of the Composition of Oxide Layers Formed by Plasma Electrolytic Oxidation on the Mechanism of Peroxide Oxidative Desulfurization. Kinetics and Catalysis, 2020, 61, 283-290.	0.3	8
51	Anodic-spark layers on aluminum and titanium alloys in electrolytes with sodium phosphotungstate. Russian Journal of Applied Chemistry, 2004, 77, 1460-1468.	0.1	7
52	Catalytic properties of Ni-, Cu-containing oxide film/aluminum alloy composition. Protection of Metals and Physical Chemistry of Surfaces, 2009, 45, 580-582.	0.3	7
53	The organization of the surface of multicomponent plasma-electrolytic anode layers on aluminum. Russian Journal of Physical Chemistry A, 2010, 84, 1059-1064.	0.1	7
54	The thermal effect on magnetic properties of iron-containing coatings formed on titanium by plasma-electrolytic oxidation. Protection of Metals and Physical Chemistry of Surfaces, 2012, 48, 671-677.	0.3	7

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55	Silicate coatings on titanium modified by cobalt and/or copper oxides and their activity in CO oxidation. Protection of Metals and Physical Chemistry of Surfaces, 2015, 51, 448-457.	0.3	7
56	Catalytic properties of metallic fibers fabricated by tempering of melt on a rotating heat-receiver. Protection of Metals and Physical Chemistry of Surfaces, 2017, 53, 287-293.	0.3	7
57	Ti/TiO2/NiWO4Â+ÂWO3 composites for oxidative desulfurization and denitrogenation. Surface and Coatings Technology, 2022, 434, 128200.	2.2	7
58	Anodic-Spark Layers Formed on Aluminum Alloy in Tungstate-Borate Electrolytes. Russian Journal of Applied Chemistry, 2002, 75, 1972-1978.	0.1	6
59	Pt-containing oxide layers on titanium and aluminum. Inorganic Materials, 2009, 45, 414-417.	0.2	6
60	Oxide layers with Pd-containing nanoparticles on titanium. Applied Catalysis A: General, 2014, 485, 222-229.	2.2	6
61	Oxide coatings with ferromagnetic characteristics on Al, Ti, Zr and Nb. Surface and Coatings Technology, 2020, 381, 125180.	2.2	6
62	Pt/SiO2 and Pt/TiO2/Ti compositions and their catalytic properties. Theoretical Foundations of Chemical Engineering, 2011, 45, 496-499.	0.2	5
63	Bifunctional Fe-containing coatings formed on aluminum by plasma-electrolytic oxidation. Russian Journal of Applied Chemistry, 2012, 85, 1686-1690.	0.1	5
64	Catalytically active coatings of noble metals and oxides of rare-earth elements. Russian Journal of Applied Chemistry, 2013, 86, 727-732.	0.1	5
65	Oxide coatings modified with transition and rare-earth metals on aluminum and their activity in CO oxidation. Protection of Metals and Physical Chemistry of Surfaces, 2014, 50, 508-515.	0.3	5
66	Growth of nanowires on the surfaces of multicomponent oxide coatings on titanium. Protection of Metals and Physical Chemistry of Surfaces, 2014, 50, 191-194.	0.3	5
67	Coatings with calcium and strontium phosphates and tantalum oxide on titanium for biomedical applications. Protection of Metals and Physical Chemistry of Surfaces, 2015, 51, 968-972.	0.3	5
68	Effect of the structure of the oxidized titanium surface on the particle size and properties of the deposited copperâ€“molybdate catalyst. Protection of Metals and Physical Chemistry of Surfaces, 2016, 52, 1024-1030.	0.3	5
69	Peculiarities of Magnetic States of Iron-Cobalt Coatings Formed on Aluminum by Plasma Electrolytic Oxidation. Journal of Superconductivity and Novel Magnetism, 2018, 31, 1933-1940.	0.8	5
70	Preparation and Photocatalytic Properties of Î²-Bi2O3/Bi2SiO5 Heterostructures. Russian Journal of Inorganic Chemistry, 2021, 66, 943-949.	0.3	5
71	Fe-, Ni-containing ceramic-like PEO coatings on titanium and aluminum: Comparative analysis of the formation features, composition and ferromagnetic properties. Materials Chemistry and Physics, 2022, 275, 125231.	2.0	5
72	Electrolytic-plasma oxidation in borate electrolytes. Protection of Metals, 2006, 42, 55-59.	0.2	4

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73	Surface structure of multicomponent oxide coatings on titanium. Protection of Metals and Physical Chemistry of Surfaces, 2009, 45, 709-712.	0.3	4
74	Preparation, properties, and catalytic activity of platinum-modified plasma electrolytic oxide structures on aluminum. Russian Journal of Inorganic Chemistry, 2011, 56, 1429-1435.	0.3	4
75	Ta-containing oxide coatings on titanium for biomedical application. Russian Journal of Applied Chemistry, 2013, 86, 1340-1343.	0.1	4
76	Structures and magnetic properties of iron- and cobalt-containing oxide coatings on an aluminum alloy formed in electrolytes via plasma electrolytic oxidation. Russian Journal of Physical Chemistry A, 2014, 88, 863-869.	0.1	4
77	Catalytically active composite materials with porous aluminum oxide matrix modified by Î³-MnO2 nanoparticles. Protection of Metals and Physical Chemistry of Surfaces, 2016, 52, 832-838.	0.3	4
78	Modification with Manganese of Anodic Layers Containing Tungsten Oxides. Russian Journal of Applied Chemistry, 2003, 76, 1597-1599.	0.1	3
79	Deposition of cobalt-containing films on titanium by plasma electrolytic oxidation. Russian Journal of Applied Chemistry, 2012, 85, 953-956.	0.1	3
80	Influence of Magnetostatic Interactions on Magnetization Process of Iron-Containing Coatings, Produced Using the Plasma Electrolytic Oxidation Method. Solid State Phenomena, 0, 215, 200-203.	0.3	3
81	Layers with tantalum oxides on stainless steel. Protection of Metals and Physical Chemistry of Surfaces, 2015, 51, 817-820.	0.3	3
82	Iron Distribution and Ferromagnetic Characteristics of Fe-Containing PEO Coatings on Aluminum. Protection of Metals and Physical Chemistry of Surfaces, 2018, 54, 830-833.	0.3	3
83	Temperature-controlled growth of micro- and nanocrystals on the surface of NiO+CuO/TiO2/Ti composites. Vacuum, 2019, 167, 397-406.	1.6	3
84	Plasma Electrolytic Formation of WO₃-CuO or WO₃-CuWO₄ Oxide Layers on Titanium. Key Engineering Materials, 0, 806, 51-56.	0.4	3
85	Role and behavior of ultra-thin gold films on the fiber materials surface in the CO oxidation process. Journal of Alloys and Compounds, 2021, 852, 157042.	2.8	3
86	ÐœÐ¸ÐºÑ€Ð¾ÐºÐ¾Ð½ÑƒÑÐ½Ñ‹Ðµ Ð°Ð½Ð¾Ð´Ð½Ð¾-Ð¾ÐºÑÐ¸Ð´Ð½Ñ‹Ðµ Ð¿Ð»ÐµÐ½ÐºÐ¸ Ð½Ð° ÑÐ¿ÐµÑ†ÐµÐ½Ð½Ñ‹Ñ… Ð¿Ð		
87	On the Effect of an Electrolyte and Impregnating Solution on Microcrystal Growth on the Surface of W-Containing PEO Coatings on Titanium at Oxidative Annealing. Protection of Metals and Physical Chemistry of Surfaces, 2020, 56, 1201-1209.	0.3	3
88	Magnetic characteristics of iron-modified oxide layers on titanium. Russian Journal of Physical Chemistry A, 2014, 88, 2236-2242.	0.1	2
89	Silicate anodic coatings on aluminum containing oxides of cobalt and/or copper and/or cerium and their activity in CO oxidation. Protection of Metals and Physical Chemistry of Surfaces, 2015, 51, 821-828.	0.3	2
90	Application of the extraction-pyrolysis method in formation of bioactive coatings. Theoretical Foundations of Chemical Engineering, 2016, 50, 483-489.	0.2	2

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91	The Effect of Iron Precursors in an Electrolyte on the Formation, Composition, and Magnetic Properties of Oxide Coatings on Titanium. Protection of Metals and Physical Chemistry of Surfaces, 2017, 53, 1005-1014.	0.3	2
92	Thermally Stimulated Transformation of the Surface Nanoarchitecture of Ni-and Cu-Doped Oxide Coatings on Titanium. Defect and Diffusion Forum, 0, 386, 283-289.	0.4	2
93	The Iron Distribution and Ferromagnetic Areas in PEO Coatings. Defect and Diffusion Forum, 2018, 386, 296-300.	0.4	2
94	Stability of titanium-supported layers of potassium titanates in soot oxidation. Reaction Kinetics, Mechanisms and Catalysis, 2018, 125, 859-872.	0.8	2
95	Eu2O3/SiO2 nanocomposites obtained by extraction pyrolysis. Theoretical Foundations of Chemical Engineering, 2010, 44, 769-771.	0.2	1
96	Formation, composition, and catalytic activity of multicomponent oxide structures on aluminum. Russian Journal of Applied Chemistry, 2013, 86, 1643-1649.	0.1	1
97	EuFeO₃/TiO₂/Ti Composites: Formation, Composition, Magnetic and Luminescent Properties. Solid State Phenomena, 2015, 245, 178-181.	0.3	1
98	Nanocrystallites in the Pores and Magnetic Properties of PEO Coatings. Solid State Phenomena, 2015, 245, 190-194.	0.3	1
99	Effect of electrolyte components on the magnetic and magnetoresistive characteristics of Fe-containing plasma electrolytic oxide coatings on titanium. Russian Journal of Physical Chemistry A, 2017, 91, 599-603.	0.1	1
100	Ti/TiO₂, Au Electrodes Prepared by Plasma Electrolytic Oxidation and Electron Beam Evaporation. Defect and Diffusion Forum, 2018, 386, 326-331.	0.4	1
101	Catalytic Properties of K2Ti2O5 + K2Ti4O9/TiO2/TiO2 + SiO2/Ti Composites and Their Resistance to Environment Effects during the Process of Carbon Black Oxidation. Protection of Metals and Physical Chemistry of Surfaces, 2019, 55, 109-114.	0.3	1
102	Thermal Transformation of the Surface of Mn-, W-Containing Plasma Electrolytic Oxide Coatings on Titanium. Russian Journal of Applied Chemistry, 2019, 92, 1674-1679.	0.1	1
103	Plasma Electrolytic Synthesis and Characteristics of WO3â€"FeOâ€"Fe2O3 and WO3â€"FeOâ€"Fe2(WO4)3 Heterostructures. Protection of Metals and Physical Chemistry of Surfaces, 2021, 57, 543-549.	0.3	1
104	Methods for Controlling the Surface Architecture of Coatings Formed by Plasma Electrolytic Oxidation. Solid State Phenomena, 0, 312, 341-348.	0.3	1
105	Features of Coalescence of Gold on the Surface of Different Supports during Catalytic Oxidation of CO. Protection of Metals and Physical Chemistry of Surfaces, 2021, 57, 1172-1179.	0.3	1
106	Titania coatings decorated with ultra-thin gold films: Optical, electrochemical and photoelectrochemical properties. Journal of Alloys and Compounds, 2022, 913, 165320.	2.8	1
107	Correlation of the Microrelief of the Surface of Structure and Magnetic Properties of Oxidic Coverings on the Titan. Advanced Materials Research, 0, 712-715, 352-355.	0.3	0
108	Application of Plasma Electrolytic Oxidation for the Formation of Magnetoactive Oxide Layes. Advanced Materials Research, 0, 875-877, 341-345.	0.3	0

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109	Composition and magnetic characteristics of plasma electrolytic oxide coatings on titanium. Protection of Metals and Physical Chemistry of Surfaces, 2017, 53, 826-834.	0.3	0
110	Thermally Stimulated Evolution of the Surface of Ni- and Cu-Containing Plasma-Electrolytic Oxide Coatings on Titanium. Protection of Metals and Physical Chemistry of Surfaces, 2019, 55, 719-728.	0.3	0
111	Sn-Containing Oxide Coatings: Formation, Composition, Electroanalytical and Catalytic Properties. Key Engineering Materials, 0, 806, 70-75.	0.4	0
112	Advanced Methods for the Formation of Crust Catalysts for Oxidative Desulfurization. Kinetics and Catalysis, 2021, 62, 828-837.	0.3	0