Sergey V Gnedenkov

List of Publications by Year
in descending order

78	2,615	147801 31	197818 49
papers	citations	h-index	g-index

78	78	78	1759
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Corrosion resistance of composite coatings on low-carbon steel containing hydrophobic and superhydrophobic layers in combination with oxide sublayers. Corrosion Science, 2012, 55, 238-245.	6.6	148
2	PEO coatings obtained on an Mgâ€“Mn type alloy under unipolar and bipolar modes in silicate-containing electrolytes. Surface and Coatings Technology, 2010, 204, 2316-2322.	4.8	145
3	Review of plasma electrolytic oxidation of titanium substrates: Mechanism, properties, applications and limitations. Applied Surface Science Advances, 2021, 5, 100121.	6.8	126
4	Production of hard and heat-resistant coatings on aluminium using a plasma micro-discharge. Surface and Coatings Technology, 2000, 123, 24-28.	4.8	110
5	Localized corrosion of the Mg alloys with inhibitor-containing coatings: SVET and SIET studies. Corrosion Science, 2016, 102, 269-278.	6.6	100
6	Composition and adhesion of protective coatings on aluminum. Surface and Coatings Technology, 2001, 145, 146-151.	4.8	98
7	Protective properties of inhibitor-containing composite coatings on a Mg alloy. Corrosion Science, 2016, 102, 348-354.	6.6	96
8	Recent efforts in design of TiO2(B) anodes for high-rate lithium-ion batteries: A review. Journal of Power Sources, 2019, 442, 227225.	7.8	92
9	Composite polymer-containing protective coatings on magnesium alloy MA8. Corrosion Science, 2014, 85, 52-59.	6.6	86
10	Composite fluoropolymer coatings on the MA8 magnesium alloy surface. Corrosion Science, 2016, 111, 175-185.	6.6	69
11	Increasing thickness and protective properties of PEO-coatings on aluminum alloy. Surface and Coatings Technology, 2018, 334, 29-42.	4.8	69
12	PEO-coating/substrate interface investigation by localised electrochemical impedance spectroscopy. Surface and Coatings Technology, 2010, 205, 1697-1701.	4.8	65
13	Formation and electrochemical properties of the superhydrophobic nanocomposite coating on PEO pretreated Mgâ€“Mnâ€“Ce magnesium alloy. Surface and Coatings Technology, 2013, 232, 240-246.	4.8	63
14	Plasma electrolytic oxidation of the magnesium alloy MA8 in electrolytes containing TiN nanoparticles. Journal of Materials Science and Technology, 2017, 33, 461-468.	10.7	63
15	Hard wearproof PEO-coatings formed on Mg alloy using TiN nanoparticles. Applied Surface Science, 2020, 503, 144062.	6.1	61
16	Composite hydroxyapatiteâ€“PTFE coatings on Mgâ€“Mnâ€“Ce alloy for resorbable implant applications via a plasma electrolytic oxidation-based route. Journal of the Taiwan Institute of Chemical Engineers, 2014, 45, 3104-3109.	5.3	56
17	Smart composite antibacterial coatings with active corrosion protection of magnesium alloys. Journal of Magnesium and Alloys, 2022, 10, 3589-3611.	11.9	52
18	Wetting and electrochemical properties of hydrophobic and superhydrophobic coatings on titanium. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 383, 61-66.	4.7	49

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19	Protective composite coatings obtained by plasma electrolytic oxidation on magnesium alloy MA8. Vacuum, 2015, 120, 107-114.	3.5	47
20	Localized currents and pH distribution studied during corrosion of MA8 Mg alloy in the cell culture medium. Corrosion Science, 2020, 170, 108689.	6.6	47
21	Control of the Mg alloy biodegradation via PEO and polymer-containing coatings. Corrosion Science, 2021, 182, 109254.	6.6	46
22	Composite coatings formed on Ti by PEO and fluoropolymer treatment. Applied Surface Science, 2021, 536, 147976.	6.1	45
23	Composite fluoropolymer coatings on Mg alloys formed by plasma electrolytic oxidation in combination with electrophoretic deposition. Surface and Coatings Technology, 2015, 283, 347-352.	4.8	42
24	Magnesium fabricated using additive technology: Specificity of corrosion and protection. Journal of Alloys and Compounds, 2019, 808, 151629.	5.5	40
25	The detailed corrosion performance of bioresorbable Mg-0.8Ca alloy in physiological solutions. Journal of Magnesium and Alloys, 2022, 10, 1326-1350.	11.9	40
26	Wettability and electrochemical properties of the highly hydrophobic coatings on PEO-pretreated aluminum alloy. Surface and Coatings Technology, 2016, 307, 1241-1248.	4.8	39
27	Features of the corrosion processes development at the magnesium alloys surface. Surface and Coatings Technology, 2013, 225, 112-118.	4.8	38
28	Mg alloy treatment for superhydrophobic anticorrosion coating formation. Surface Innovations, 2013, 1, 162-172.	2.3	38
29	Electrochemical properties of the superhydrophobic coatings on metals and alloys. Journal of the Taiwan Institute of Chemical Engineers, 2014, 45, 3075-3080.	5.3	36
30	Protective Composite Coatings Formed on Mg Alloy Surface by PEO Using Organofluorine Materials. Journal of Materials Science and Technology, 2017, 33, 661-667.	10.7	36
31	Bioactive Coatings Formed on Titanium by Plasma Electrolytic Oxidation: Composition and Properties. Materials, 2020, 13, 4121.	2.9	34
32	Composite coatings formed using plasma electrolytic oxidation and fluoroparaffin materials. Journal of Alloys and Compounds, 2018, 767, 353-360.	5.5	32
33	Atmospheric and Marine Corrosion of PEO and Composite Coatings Obtained on Al-Cu-Mg Aluminum Alloy. Materials, 2020, 13, 2739.	2.9	30
34	Electrochemical behaviour of the MA8 Mg alloy in minimum essential medium. Corrosion Science, 2020, 168, 108552.	6.6	30
35	Plasma Electrolytic Oxidation Coatings on Titanium Formed with Microsecond Current Pulses. Solid State Phenomena, 2014, 213, 149-153.	0.3	29
36	Hydrolysis lignin: Electrochemical properties of the organic cathode material for primary lithium battery. Journal of Industrial and Engineering Chemistry, 2014, 20, 903-910.	5.8	28

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37	Structural and electrochemical investigation of nanostructured C:TiO2â€“TiOF2 composite synthesized in plasma by an original method of pulsed high-voltage discharge. Journal of Alloys and Compounds, 2015, 621, 364-370.	5.5	28
38	Electrochemical performance of Klason lignin as a low-cost cathode-active material for primary lithium battery. Journal of Energy Chemistry, 2015, 24, 346-352.	12.9	26
39	Effect of Microstructure on the Corrosion Resistance of TIG Welded 1579 Alloy. Materials, 2019, 12, 2615.	2.9	26
40	Inhibitor-Containing Composite Coatings on Mg Alloys: Corrosion Mechanism and Self-Healing Protection. Solid State Phenomena, 0, 245, 89-96.	0.3	25
41	Characterization and Electrochemical Properties of Nanostructured Zr-Doped Anatase TiO2 Tubes Synthesized by Solâ€“Gel Template Route. Journal of Materials Science and Technology, 2017, 33, 527-534.	10.7	25
42	Effect of Hf-doping on electrochemical performance of anatase TiO ₂ as an anode material for lithium storage. Royal Society Open Science, 2018, 5, 171811.	2.4	25
43	Enhancing Lithium and Sodium Storage Properties of TiO2(B) Nanobelts by Doping with Nickel and Zinc. Nanomaterials, 2021, 11, 1703.	4.1	23
44	Microscale morphology and properties of the PEO-coating surface. Physics Procedia, 2012, 23, 98-101.	1.2	22
45	Features of the Magnesium Alloys Corrosion in the Chloride-Containing Media. Solid State Phenomena, 0, 213, 143-148.	0.3	22
46	Icephobic Performance of Combined Fluorine-Containing Composite Layers on Al-Mg-Mnâ€“Si Alloy Surface. Polymers, 2021, 13, 3827.	4.5	19
47	Fluorine substituted molybdenum oxide as cathode material for Li-ion battery. Materials Letters, 2015, 160, 175-178.	2.6	18
48	Green synthesis of silver nanoparticles using transgenicNicotiana tabacumcallus culture expressing silicatein gene from marine spongeLatrunculia oparinae. Artificial Cells, Nanomedicine and Biotechnology, 2018, 46, 1-13.	2.8	17
49	Enhancing the reversible capacity of nanostructured TiO 2 (anatase) by Zr-doping using a solâ€“gel template method. Scripta Materialia, 2015, 107, 136-139.	5.2	14
50	Effect of PEO-modes on the electrochemical and mechanical properties of coatings on MA8 magnesium alloy. Physics Procedia, 2012, 23, 90-93.	1.2	11
51	Electrochemistry of Klason Lignin. Procedia Chemistry, 2014, 11, 96-100.	0.7	11
52	Incorporation of Zirconia and Silica Nanoparticles into PEO-Coatings on Magnesium Alloys. Solid State Phenomena, 2014, 213, 125-130.	0.3	11
53	Fluorocarbon materials produced by the thermo destruction of polytetrafluoroethylene and possibility of theirs application in Li/(CFx)n batteries. Physics Procedia, 2012, 23, 86-89.	1.2	9
54	In vivo study of osteogenerating properties of calcium-phosphate coating on titanium alloy Tiâ€“6Alâ€“4V. Bio-Medical Materials and Engineering, 2017, 27, 551-560.	0.6	9

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55	Protective Properties of the Nanocomposite Coatings on Mg Alloy. Solid State Phenomena, 2014, 213, 176-179.	0.3	8
56	Fabrication of Battery Cathode Material Based on Hydrolytic Lignin. Solid State Phenomena, 0, 213, 154-159.	0.3	7
57	Nanostructured microtubes based on TiO₂doped by Zr and Hf oxides with the anatase structure. IOP Conference Series: Materials Science and Engineering, 2016, 112, 012016.	0.6	7
58	Comparison of superionic phases for some fluorine conducting materials. Physics Procedia, 2012, 23, 94-97.	1.2	4
59	Fluoropolymer-containing layer formed on MA8 magnesium alloy. Materials Today: Proceedings, 2019, 19, 1887-1890.	1.8	4
60	Incorporation of Composite Zirconia-Silica Nanoparticles into PEO-Coatings on Magnesium Alloys. Defect and Diffusion Forum, 0, 386, 321-325.	0.4	3
61	Moss-like Hierarchical Architecture Self-Assembled by Ultrathin Na2Ti3O7 Nanotubes: Synthesis, Electrical Conductivity, and Electrochemical Performance in Sodium-Ion Batteries. Nanomaterials, 2022, 12, 1905.	4.1	3
62	Composite Calcium Phosphate Coatings on Mg Alloy for Medicine. Solid State Phenomena, 2015, 245, 159-165.	0.3	2
63	Mechanical properties of PEO-coatings on the surface of magnesium alloy MA8 modified by TiN nanoparticles. AIP Conference Proceedings, 2017, , .	0.4	2
64	Protective Coatings for the Elements of Ships Power Plants which Use Sea Water. Journal of Advanced Marine Engineering and Technology, 2012, 36, 341-350.	0.4	2
65	Manganese-Doped Titanium Dioxide with Improved Electrochemical Performance for Lithium-Ion Batteries. Electrochemical Energetics, 2019, 19, 123-140.	0.2	2
66	Incorporation of TiO₂(B) Nanoparticles into PEO Coatings on MA8 Magnesium Alloy. Solid State Phenomena, 0, 312, 372-376.	0.3	2
67	Electrochemical properties of functional hybrid coatings on titanium. Physics Procedia, 2012, 23, 106-109.	1.2	1
68	Facile Synthesis of <i>Î±</i>- Fe₂O₃/Carbon Core-Shell Composite for Lithium Storage and Conversion. Defect and Diffusion Forum, 0, 386, 301-304.	0.4	1
69	Formation of Protective Coatings on AMg3 Aluminum Alloy Using Fluoropolymer Nanopowder. Solid State Phenomena, 0, 312, 330-334.	0.3	1
70	Facile synthesis of nanostructured transition metal oxides as electrodes for Li-ion batteries. AIP Conference Proceedings, 2017, , .	0.4	0
71	Responses of Dendritic Cells to Different Coatings of Titanium. Springer Proceedings in Physics, 2017, , 165-174.	0.2	0
72	Vanadium-Doped Bronze Titanium Dioxide as Anode Material for Lithium-ion Batteries with Enchanced Cycleability and Rate Performance. Electrochemical Energetics, 2020, 20, 3-19.	0.2	0

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73	PEO Coated Porous Mg/HAp Implant Materials Impregnated with Bioactive Components. Solid State Phenomena, 0, 312, 366-371.	0.3	0
74	Hybrid polymer-containing coatings, impregnated with a corrosion inhibitor, formed for protection of biodegradable magnesium alloys. , 2021, , 56-64.	0.1	0
75	Anticorrosive bioactive coatings with synthetic nanosized hydroxyapatite prepared on magnesium. , 2021, , 43-55.	0.1	0
76	Electrode materials with improved characteristics for lithium and sodium electrochemical power sources: progress and prospects (A review). , 2021, , 65-78.	0.1	0
77	Composite coatings obtained by the PEO-method followed by the deposition of a polymer from an aqueous suspension of UTPFE. , 2021, , 5-21.	0.1	0
78	Localized Corrosion Degradation of Bioresorbable Mg Alloys Promising for Medicine. , 2021, 6, .		0