Alexey Serov

List of Publications by Year
in descending order

166 papers	11,452 citations	20797 60 h-index	31818 101 g-index
169 all docs	169 docs citations	169 times ranked	9856 citing authors

#	Article	IF	Citations
1	Elucidating Oxygen Reduction Active Sites in Pyrolyzed Metalâ€“Nitrogen Coordinated Non-Precious-Metal Electrocatalyst Systems. Journal of Physical Chemistry C, 2014, 118, 8999-9008.	1.5	461
2	Chemistry of Multitudinous Active Sites for Oxygen Reduction Reaction in Transition Metalâ€“Nitrogenâ€“Carbon Electrocatalysts. Journal of Physical Chemistry C, 2015, 119, 25917-25928.	1.5	433
3	Highly quaternized polystyrene ionomers for high performance anion exchange membrane water electrolysers. Nature Energy, 2020, 5, 378-385.	19.8	372
4	Direct hydrazine fuel cells: A review. Applied Catalysis B: Environmental, 2010, 98, 1-9.	10.8	364
5	Feâ€Nâ€C Oxygen Reduction Fuel Cell Catalyst Derived from Carbendazim: Synthesis, Structure, and Reactivity. Advanced Energy Materials, 2014, 4, 1301735.	10.2	350
6	Spectroscopic insights into the nature of active sites in ironâ€“nitrogenâ€“carbon electrocatalysts for oxygen reduction in acid. Nano Energy, 2016, 29, 65-82.	8.2	269
7	CO₂ Electroreduction to Hydrocarbons on Carbon-Supported Cu Nanoparticles. ACS Catalysis, 2014, 4, 3682-3695.	5.5	267
8	Review of non-platinum anode catalysts for DMFC and PEMFC application. Applied Catalysis B: Environmental, 2009, 90, 313-320.	10.8	256
9	Self-Supported Pd_{<i>x</i>}Bi Catalysts for the Electrooxidation of Glycerol in Alkaline Media. Journal of the American Chemical Society, 2014, 136, 3937-3945.	6.6	247
10	High-performing commercial Feâ€“Nâ€“C cathode electrocatalyst for anion-exchange membrane fuel cells. Nature Energy, 2021, 6, 834-843.	19.8	238
11	Recent achievements in direct ethylene glycol fuel cells (DEGFC). Applied Catalysis B: Environmental, 2010, 97, 1-12.	10.8	226
12	Synthesis and characterization of high performing Fe-N-C catalyst for oxygen reduction reaction (ORR) in Alkaline Exchange Membrane Fuel Cells. Journal of Power Sources, 2018, 375, 214-221.	4.0	206
13	Nano-structured non-platinum catalysts for automotive fuel cell application. Nano Energy, 2015, 16, 293-300.	8.2	190
14	Metal oxides/CNT nano-composite catalysts for oxygen reduction/oxygen evolution in alkaline media. Applied Catalysis B: Environmental, 2015, 163, 623-627.	10.8	170
15	Platinum group metal-free NiMo hydrogen oxidation catalysts: high performance and durability in alkaline exchange membrane fuel cells. Journal of Materials Chemistry A, 2017, 5, 24433-24443.	5.2	161
16	Effect of pH on the Activity of Platinum Group Metal-Free Catalysts in Oxygen Reduction Reaction. ACS Catalysis, 2018, 8, 3041-3053.	5.5	158
17	Iron based catalysts from novel low-cost organic precursors for enhanced oxygen reduction reaction in neutral media microbial fuel cells. Energy and Environmental Science, 2016, 9, 2346-2353.	15.6	147
18	Binding energy shifts for nitrogenâ€containing grapheneâ€based electrocatalysts â€“ experiments and DFT calculations. Surface and Interface Analysis, 2016, 48, 293-300.	0.8	147

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19	Anode Catalysts for Direct Hydrazine Fuel Cells: From Laboratory Test to an Electric Vehicle. Angewandte Chemie - International Edition, 2014, 53, 10336-10339.	7.2	142
20	A family of Fe-N-C oxygen reduction electrocatalysts for microbial fuel cell (MFC) application: Relationships between surface chemistry and performances. Applied Catalysis B: Environmental, 2017, 205, 24-33.	10.8	135
21	Air Breathing Cathodes for Microbial Fuel Cell using Mn-, Fe-, Co- and Ni-containing Platinum Group Metal-free Catalysts. Electrochimica Acta, 2017, 231, 115-124.	2.6	131
22	Performance analysis of a non-platinum group metal catalyst based on iron-aminoantipyrine for direct methanol fuel cells. Applied Catalysis B: Environmental, 2016, 182, 297-305.	10.8	113
23	Insights on the extraordinary tolerance to alcohols of Fe-N-C cathode catalysts in highly performing direct alcohol fuel cells. Nano Energy, 2017, 34, 195-204.	8.2	113
24	Self-powered supercapacitive microbial fuel cell: The ultimate way of boosting and harvesting power. Biosensors and Bioelectronics, 2016, 78, 229-235.	5.3	112
25	Indication for a volatile element 114. Radiochimica Acta, 2010, 98, .	0.5	109
26	Three-dimensional graphene nanosheets as cathode catalysts in standard and supercapacitive microbial fuel cell. Journal of Power Sources, 2017, 356, 371-380.	4.0	108
27	Electrooxidation of ethylene glycol and glycerol by platinum-based binary and ternary nano-structured catalysts. Electrochimica Acta, 2012, 66, 295-301.	2.6	107
28	CuCo₂O₄ORR/OER Bi-Functional Catalyst: Influence of Synthetic Approach on Performance. Journal of the Electrochemical Society, 2015, 162, F449-F454.	1.3	104
29	Feâ€“Nâ€“C Catalyst Graphitic Layer Structure and Fuel Cell Performance. ACS Energy Letters, 2017, 2, 1489-1493.	8.8	104
30	Role of Nitrogen Moieties in N-Doped 3D-Graphene Nanosheets for Oxygen Electroreduction in Acidic and Alkaline Media. ACS Applied Materials & Interfaces, 2018, 10, 11623-11632.	4.0	104
31	A mechanistic study of 4-aminoantipyrine and iron derived non-platinum group metal catalyst on the oxygen reduction reaction. Electrochimica Acta, 2013, 90, 656-665.	2.6	102
32	Nickelâ€“copper supported on a carbon black hydrogen oxidation catalyst integrated into an anion-exchange membrane fuel cell. Sustainable Energy and Fuels, 2018, 2, 2268-2275.	2.5	102
33	High Performance and Costâ€Effective Direct Methanol Fuel Cells: Feâ€Nâ€C Methanolâ€Tolerant Oxygen Reduction Reaction Catalysts. ChemSusChem, 2016, 9, 1986-1995.	3.6	100
34	Transition metal-nitrogen-carbon catalysts for oxygen reduction reaction in neutral electrolyte. Electrochemistry Communications, 2017, 75, 38-42.	2.3	97
35	Highly active and durable templated non-PGM cathode catalysts derived from iron and aminoantipyrine. Electrochemistry Communications, 2012, 22, 53-56.	2.3	94
36	Thermochemical and Physical Properties of Element 112. Angewandte Chemie - International Edition, 2008, 47, 3262-3266.	7.2	89

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37	Power generation in microbial fuel cells using platinum group metal-free cathode catalyst: Effect of the catalyst loading on performance and costs. Journal of Power Sources, 2018, 378, 169-175.	4.0	85
38	Novel highly active and selective Fe-N-C oxygen reduction electrocatalysts derived from in-situ polymerization pyrolysis. Nano Energy, 2017, 38, 201-209.	8.2	84
39	Performance, methanol tolerance and stability of Fe-aminobenzimidazole derived catalyst for direct methanol fuel cells. Journal of Power Sources, 2016, 319, 235-246.	4.0	83
40	pH dependence of catalytic activity for ORR of the non-PGM catalyst derived from heat-treated Feâ€“phenanthroline. Electrochimica Acta, 2013, 87, 361-365.	2.6	82
41	High catalytic activity and pollutants resistivity using Fe-AAPyr cathode catalyst for microbial fuel cell application. Scientific Reports, 2015, 5, 16596.	1.6	82
42	Aerosol-derived Ni1â^'xZnx electrocatalysts for direct hydrazine fuel cells. Physical Chemistry Chemical Physics, 2012, 14, 5512.	1.3	81
43	Templated non-PGM cathode catalysts derived from iron and poly(ethyleneimine) precursors. Applied Catalysis B: Environmental, 2012, 127, 300-306.	10.8	81
44	PGM-free Fe-N-C catalysts for oxygen reduction reaction: Catalyst layer design. Journal of Power Sources, 2016, 326, 43-49.	4.0	79
45	Selective Aerobic Oxidation of Alcohols over Atomicallyâ€Dispersed Nonâ€Precious Metal Catalysts. ChemSusChem, 2017, 10, 359-362.	3.6	79
46	Enhancement of microbial fuel cell performance by introducing a nano-composite cathode catalyst. Electrochimica Acta, 2018, 265, 56-64.	2.6	79
47	Novel Pdâ€“In catalysts for alcohols electrooxidation in alkaline media. Electrochemistry Communications, 2013, 34, 185-188.	2.3	78
48	Original Mechanochemical Synthesis of Non-Platinum Group Metals Oxygen Reduction Reaction Catalysts Assisted by Sacrificial Support Method. Electrochimica Acta, 2015, 179, 154-160.	2.6	78
49	Highly stable precious metal-free cathode catalyst for fuel cell application. Journal of Power Sources, 2016, 327, 557-564.	4.0	76
50	Templated bi-metallic non-PGM catalysts for oxygen reduction. Electrochimica Acta, 2012, 80, 213-218.	2.6	75
51	Doubleâ€Chamber Microbial Fuel Cell with a Nonâ€Platinumâ€Group Metal Feâ€“Nâ€“C Cathode Catalyst. ChemSusChem, 2015, 8, 828-834.	3.6	75
52	Tri-metallic transition metalâ€“nitrogenâ€“carbon catalysts derived by sacrificial support method synthesis. Electrochimica Acta, 2013, 109, 433-439.	2.6	71
53	Improved power and long term performance of microbial fuel cell with Fe-N-C catalyst in air-breathing cathode. Energy, 2018, 144, 1073-1079.	4.5	71
54	Supercapacitive microbial fuel cell: Characterization and analysis for improved charge storage/delivery performance. Bioresource Technology, 2016, 218, 552-560.	4.8	67

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55	Design of Iron(II) Phthalocyanineâ€Derived Oxygen Reduction Electrocatalysts for Highâ€Powerâ€Density Microbial Fuel Cells. ChemSusChem, 2017, 10, 3243-3251.	3.6	67
56	Porous Hollow PtNi/C Electrocatalysts: Carbon Support Considerations To Meet Performance and Stability Requirements. ACS Catalysis, 2018, 8, 893-903.	5.5	67
57	Progress in development of direct dimethyl ether fuel cells. Applied Catalysis B: Environmental, 2009, 91, 1-10.	10.8	65
58	Bimetallic platinum group metal-free catalysts for high power generating microbial fuel cells. Journal of Power Sources, 2017, 366, 18-26.	4.0	62
59	Influence of platinum group metal-free catalyst synthesis on microbial fuel cell performance. Journal of Power Sources, 2018, 375, 11-20.	4.0	62
60	Mechanistic studies of oxygen reduction on Fe-PEI derived non-PGM electrocatalysts. Applied Catalysis B: Environmental, 2014, 150-151, 179-186.	10.8	61
61	Nano-structured Pd-Sn catalysts for alcohol electro-oxidation in alkaline medium. Electrochemistry Communications, 2015, 57, 48-51.	2.3	61
62	Operando XAFS study of carbon supported Ni, NiZn, and Co catalysts for hydrazine electrooxidation for use in anion exchange membrane fuel cells. Electrochimica Acta, 2015, 163, 116-122.	2.6	61
63	Highly-active Pdâ€"Cu electrocatalysts for oxidation of ubiquitous oxygenated fuels. Applied Catalysis B: Environmental, 2016, 191, 76-85.	10.8	61
64	Nano-structured platinum group metal-free catalysts and their integration in fuel cell electrode architectures. Applied Catalysis B: Environmental, 2018, 237, 1139-1147.	10.8	61
65	Direct synthesis of platinum group metal-free Fe-N-C catalyst for oxygen reduction reaction in alkaline media. Electrochemistry Communications, 2016, 72, 140-143.	2.3	60
66	Platinum group metal-free electrocatalysts: Effects of synthesis on structure and performance in proton-exchange membrane fuel cell cathodes. Journal of Power Sources, 2017, 348, 30-39.	4.0	60
67	Novel dual templating approach for preparation of highly active Fe-N-C electrocatalyst for oxygen reduction. Electrochimica Acta, 2017, 224, 49-55.	2.6	60
68	Self-feeding paper based biofuel cell/self-powered hybrid Î¼-supercapacitor integrated system. Biosensors and Bioelectronics, 2016, 86, 459-465.	5.3	59
69	Highly active and selective nickel molybdenum catalysts for direct hydrazine fuel cell. Electrochimica Acta, 2016, 215, 420-426.	2.6	59
70	Direct observations of liquid water formation at nano- and micro-scale in platinum group metal-free electrodes by operando X-ray computed tomography. Materials Today Energy, 2018, 9, 187-197.	2.5	55
71	Glycerol electrooxidation on self-supported Pd1Snx nanoparticules. Applied Catalysis B: Environmental, 2015, 176-177, 429-435.	10.8	54
72	Cathode materials for ceramic based microbial fuel cells (MFCs). International Journal of Hydrogen Energy, 2015, 40, 14706-14715.	3.8	53

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73	Modification of palladium-based catalysts by chalcogenes for direct methanol fuel cells. Electrochemistry Communications, 2007, 9, 2041-2044.	2.3	52
74	Highly active PdCu catalysts for electrooxidation of 2-propanol. Electrochemistry Communications, 2012, 22, 193-196.	2.3	51
75	Preparation, characterization, and high performance of RuSe/C for direct methanol fuel cells. Journal of Power Sources, 2008, 175, 175-182.	4.0	50
76	Mechanistic Insight into Oxideâ€Promoted Palladium Catalysts for the Electroâ€Oxidation of Ethanol. ChemSusChem, 2014, 7, 2351-2357.	3.6	49
77	Nanostructured metal-N-C electrocatalysts for CO2 reduction and hydrogen evolution reactions. Applied Catalysis B: Environmental, 2018, 232, 512-520.	10.8	48
78	Commercial platinum group metal-free cathodic electrocatalysts for highly performed direct methanol fuel cell applications. Journal of Power Sources, 2019, 437, 226948.	4.0	48
79	Borohydride-tolerant oxygen electroreduction catalyst for mixed-reactant Swiss-roll direct borohydride fuel cells. Journal of Materials Chemistry A, 2013, 1, 14384.	5.2	46
80	Mesoporous textured Fe-N-C electrocatalysts as highly efficient cathodes for proton exchange membrane fuel cells. Journal of Power Sources, 2022, 520, 230819.	4.0	46
81	High Performance Platinum Group Metal-Free Cathode Catalysts for Microbial Fuel Cell (MFC). Journal of the Electrochemical Society, 2017, 164, H3041-H3046.	1.3	45
82	Nickel-based electrocatalysts for ammonia borane oxidation: enabling materials for carbon-free-fuel direct liquid alkaline fuel cell technology. Nano Energy, 2017, 37, 248-259.	8.2	44
83	Role of Surface Chemistry on Catalyst/Ionomer Interactions for Transition Metalâ€“Nitrogenâ€“Carbon Electrocatalysts. ACS Applied Energy Materials, 2018, 1, 68-77.	2.5	44
84	Correlations between Synthesis and Performance of Fe-Based PGM-Free Catalysts in Acidic and Alkaline Media: Evolution of Surface Chemistry and Morphology. ACS Applied Energy Materials, 2019, 2, 5406-5418.	2.5	44
85	Gas phase chemical studies of superheavy elements using the Dubna gas-filled recoil separator â€“ Stopping range determination. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 28-35.	0.6	43
86	Supercapacitive microbial desalination cells: New class of power generating devices for reduction of salinity content. Applied Energy, 2017, 208, 25-36.	5.1	43
87	Nitrogen-Doped Three-Dimensional Graphene-Supported Palladium Nanocomposites: High-Performance Cathode Catalysts for Oxygen Reduction Reactions. ACS Catalysis, 2017, 7, 6609-6618.	5.5	43
88	Mesoporous iron-nitrogen co-doped carbon material as cathode catalyst for the anion exchange membrane fuel cell. Journal of Power Sources Advances, 2021, 8, 100052.	2.6	43
89	Increased power generation in supercapacitive microbial fuel cell stack using Fe N C cathode catalyst. Journal of Power Sources, 2019, 412, 416-424.	4.0	42
90	Palladium Supported on 3D Graphene as an Active Catalyst for Alcohols Electrooxidation. Journal of the Electrochemical Society, 2015, 162, F1305-F1309.	1.3	41

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91	Design of Novel Graphene Materials as a Support for Palladium Nanoparticles: Highly Active Catalysts towards Ethanol Electrooxidation. Electrochimica Acta, 2016, 203, 144-153.	2.6	40
92	Microbial Desalination Cells with Efficient Platinumâ€Groupâ€Metalâ€Free Cathode Catalysts. ChemElectroChem, 2017, 4, 3322-3330.	1.7	40
93	Electroreduction of oxygen over iron macrocyclic catalysts for DMFC applications. Journal of Applied Electrochemistry, 2009, 39, 1509-1516.	1.5	36
94	Study of the average charge states of 188Pb and 252,254No ions at the gas-filled separator TASCA. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 689, 40-46.	0.7	35
95	Modeling of Low-Temperature Fuel Cell Electrodes Using Non-Precious Metal Catalysts. Journal of the Electrochemical Society, 2015, 162, F1253-F1261.	1.3	35
96	Direct Methanol Anion Exchange Membrane Fuel Cell with a Non-Platinum Group Metal Cathode based on Iron-Aminoantipyrine Catalyst. Electrochimica Acta, 2015, 175, 202-208.	2.6	34
97	Mechanism Study of Hydrazine Electrooxidation Reaction on Nickel Oxide Surface in Alkaline Electrolyte by In Situ XAFS. Journal of the Electrochemical Society, 2016, 163, H951-H957.	1.3	34
98	Tolerance of non-platinum group metals cathodes proton exchange membrane fuel cells to air contaminants. Journal of Power Sources, 2016, 324, 556-571.	4.0	34
99	Effect of precursor nature on the performance of palladiumâ€“cobalt electrocatalysts for direct methanol fuel cells. Journal of Power Sources, 2010, 195, 175-180.	4.0	32
100	Co-generation of hydrogen and power/current pulses from supercapacitive MFCs using novel HER iron-based catalysts. Electrochimica Acta, 2016, 220, 672-682.	2.6	31
101	3D-Graphene supports for palladium nanoparticles: Effect of micro/macropores on oxygen electroreduction in Anion Exchange Membrane Fuel Cells. Journal of Power Sources, 2018, 375, 255-264.	4.0	30
102	Adsorption interaction of carrier-free thallium species with gold and quartz surfaces. Radiochimica Acta, 2013, 101, 421-426.	0.5	29
103	Non-PGM membrane electrode assemblies: Optimization for performance. International Journal of Hydrogen Energy, 2015, 40, 14676-14682.	3.8	29
104	Selective CO 2 electroreduction to C 2 H 4 on porous Cu films synthesized by sacrificial support method. Journal of CO2 Utilization, 2017, 19, 137-145.	3.3	29
105	Oxygen Reduction Reaction Electrocatalysts Derived from Iron Salt and Benzimidazole and Aminobenzimidazole Precursors and Their Application in Microbial Fuel Cell Cathodes. ACS Applied Energy Materials, 2018, 1, 5755-5765.	2.5	29
106	Iron-streptomycin derived catalyst for efficient oxygen reduction reaction in ceramic microbial fuel cells operating with urine. Journal of Power Sources, 2019, 425, 50-59.	4.0	29
107	Synthesis, characterization and catalytic activity of RuFeSe/C as a cathode catalyst for low-temperature fuel cells. Catalysis Communications, 2009, 10, 1551-1554.	1.6	28
108	Surface-modified three-dimensional graphene nanosheets as a stationary phase for chromatographic separation of chiral drugs. Scientific Reports, 2018, 8, 14747.	1.6	28

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109	Analysis of the effect of catalyst layer thickness on the performance and durability of platinum group metal-free catalysts for polymer electrolyte membrane fuel cells. Sustainable Energy and Fuels, 2019, 3, 3375-3386.	2.5	28
110	Influence of Supporting Electrolyte on Hydroxide Exchange Membrane Water Electrolysis Performance: Anolyte. Journal of the Electrochemical Society, 2021, 168, 084512.	1.3	28
111	Iron-Nicarbazin derived platinum group metal-free electrocatalyst in scalable-size air-breathing cathodes for microbial fuel cells. Electrochimica Acta, 2018, 277, 127-135.	2.6	27
112	Adsorption interaction of astatine species with quartz and gold surfaces. Radiochimica Acta, 2011, 99, 593-600.	0.5	26
113	Bio-inspired design of electrocatalysts for oxalate oxidation: a combined experimental and computational study of Mnâ€“Nâ€“C catalysts. Physical Chemistry Chemical Physics, 2015, 17, 13235-13244.	1.3	26
114	Highly durable direct hydrazine hydrate anion exchange membrane fuel cell. Journal of Power Sources, 2018, 375, 291-299.	4.0	26
115	Design of PGM-free cathodic catalyst layers for advanced PEM fuel cells. Applied Catalysis B: Environmental, 2022, 312, 121424.	10.8	26
116	Slot-die-coating operability windows for polymer electrolyte membrane fuel cell cathode catalyst layers. Journal of Colloid and Interface Science, 2022, 610, 474-485.	5.0	25
117	Implementing PGM-free electrocatalysts in high-temperature polymer electrolyte membrane fuel cells. Electrochemistry Communications, 2018, 93, 91-94.	2.3	24
118	Platinum group metal-free oxygen reduction electrocatalysts used in neutral electrolytes for bioelectrochemical reactor applications. Current Opinion in Electrochemistry, 2020, 23, 106-113.	2.5	24
119	Enhancement of Electrocatalytic Oxidation of Glycerol by Plasmonics. ChemElectroChem, 2019, 6, 241-245.	1.7	23
120	Analysis of alkaline exchange membrane fuel cells performance at different operating conditions using DC and AC methods. Journal of Power Sources, 2018, 375, 185-190.	4.0	22
121	Multiâ€functional microbial fuel cells for power, treatment and electroâ€osmotic purification of urine. Journal of Chemical Technology and Biotechnology, 2019, 94, 2098-2106.	1.6	21
122	Application of X-ray photoelectron spectroscopy to studies of electrodes in fuel cells and electrolyzers. Journal of Electron Spectroscopy and Related Phenomena, 2019, 231, 127-139.	0.8	21
123	Design of Pd-Pb Catalysts for Glycerol and Ethylene Glycol Electrooxidation in Alkaline Medium. Electrocatalysis, 2018, 9, 480-485.	1.5	20
124	Characterizing Complex Gasâ€“Solid Interfaces with in Situ Spectroscopy: Oxygen Adsorption Behavior on Feâ€“Nâ€“C Catalysts. Journal of Physical Chemistry C, 2020, 124, 16529-16543.	1.5	20
125	Promotion of Ammonia Electrooxidation on Pt nanoparticles by Nickel Oxide Support. Electrochimica Acta, 2016, 222, 1455-1463.	2.6	19
126	Role of humidity in oxidation of ultrathin GaSe. Materials Research Express, 2019, 6, 085907.	0.8	19

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127	Electron and proton conductivity of Fe-N-C cathodes for PEM fuel cells: A model-based electrochemical impedance spectroscopy measurement. Electrochemistry Communications, 2020, 118, 106795.	2.3	19
128	Effect of Active Site Poisoning on Ironâˆ'Nitrogenâˆ'Carbon Platinumâ€Groupâ€Metalâ€Free Oxygen Reduction Reaction Catalysts Operating in Neutral Media: A Rotating Disk Electrode Study. ChemElectroChem, 2020, 7, 3044-3055.	1.7	19
129	Facile synthesis of high surface area molybdenum nitride and carbide. Journal of Solid State Chemistry, 2015, 228, 232-238.	1.4	18
130	Inhibition of Surface Chemical Moieties by Tris(hydroxymethyl)aminomethane: A Key to Understanding Oxygen Reduction on Ironâ€"Nitrogenâ€"Carbon Catalysts. ACS Applied Energy Materials, 2018, 1, 1942-1949.	2.5	18
131	Critical Review of Platinum Group Metal-Free Materials for Water Electrolysis: Transition from the Laboratory to the Market. Johnson Matthey Technology Review, 2021, 65, 207-226.	0.5	17
132	Platinum group metal-free Fe-based (Fe N C) oxygen reduction electrocatalysts for direct alcohol fuel cells. Current Opinion in Electrochemistry, 2021, 29, 100756.	2.5	17
133	Palladium Nanoparticles Supported on Threeâ€Dimensional Graphene Nanosheets: Superior Cathode Electrocatalysts. ChemElectroChem, 2016, 3, 1655-1666.	1.7	16
134	Gas chromatography of indium in macroscopic and carrier-free amounts using quartz and gold as stationary phases. Radiochimica Acta, 2011, 99, 95-101.	0.5	15
135	Application of the Discrete Wavelet Transform to SEM and AFM Micrographs for Quantitative Analysis of Complex Surfaces. Langmuir, 2015, 31, 4924-4933.	1.6	15
136	Influence of Supporting Electrolyte on Hydroxide Exchange Membrane Water Electrolysis Performance: Catholyte. Journal of the Electrochemical Society, 2022, 169, 024510.	1.3	15
137	Nano-fabrication and characterization of new conceptual platinum catalysts for low temperature fuel cells. Electrochimica Acta, 2006, 52, 1670-1675.	2.6	13
138	Ni_{5.73}InSe₂ â€" a Metalâ€Rich Selenide Based on the Cu₃Auâ€Type 2D HetÂerometallic Framework: Synthesis, Structure, and Bonding. European Journal of Inorganic Chemistry, 2016, 2016, 373-379.	1.0	13
139	NiO/Nb₂O₅/C Hydrazine Electrooxidation Catalysts for Anion Exchange Membrane Fuel Cells. Journal of the Electrochemical Society, 2017, 164, F229-F234.	1.3	13
140	New quasi-2D nickel-gallium mixed chalcogenides based on the Cu3Au-type extended fragments. Journal of Alloys and Compounds, 2017, 696, 413-422.	2.8	13
141	Structure of Active Sites of Fe-N-C Nano-Catalysts for Alkaline Exchange Membrane Fuel Cells. Nanomaterials, 2018, 8, 965.	1.9	13
142	Hybrid electrocatalysts for oxygen reduction reaction: Integrating enzymatic and non-platinum group metal catalysis. Electrochimica Acta, 2016, 190, 504-510.	2.6	12
143	Resolving Challenges of Mass Transport in Non Pt-Group Metal Catalysts for Oxygen Reduction in Proton Exchange Membrane Fuel Cells. Journal of the Electrochemical Society, 2018, 165, F589-F596.	1.3	12
144	Investigating the durability of a direct methanol fuel cell equipped with commercial Platinum Group Metal-free cathodic electro-catalysts. Electrochimica Acta, 2021, 394, 139108.	2.6	12

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145	Comparing Novel PGM-Free, Platinum, and Alloyed Platinum Catalysts for HT-PEMFCs. ECS Transactions, 2018, 86, 221-229.	0.3	11
146	Impedance Spectroscopy Characterization of PEM Fuel Cells with Fe-N-C-Based Cathodes. Journal of the Electrochemical Society, 2019, 166, F653-F660.	1.3	11
147	The Effect of Proton Conductivity of Feâ€"Nâ€"Câ€"Based Cathode on PEM Fuel cell Performance. Journal of the Electrochemical Society, 2020, 167, 084501.	1.3	10
148	Ni(OH)2-free NiCu as a hydrogen evolution and oxidation electrocatalyst. Electrochemistry Communications, 2021, 125, 106999.	2.3	9
149	Practical demonstration of applicability and efficiency of platinum group metal-free based catalysts in microbial fuel cells for wastewater treatment. Journal of Power Sources, 2021, 491, 229582.	4.0	9
150	Integration of Platinum Group Metalâ€Free Catalysts and Bilirubin Oxidase into a Hybrid Material for Oxygen Reduction: Interplay of Chemistry and Morphology. ChemSusChem, 2017, 10, 1534-1542.	3.6	8
151	New Opportunity for Carbonâ€Supported Niâ€based Electrocatalysts: Gasâ€Phase CO₂ Methanation. ChemCatChem, 2021, 13, 4770-4779.	1.8	7
152	Sensing nitrite by iron-nitrogen-carbon oxygen reduction electrocatalyst. Electrochimica Acta, 2022, 402, 139514.	2.6	7
153	High performance membrane-electrode assembly based on a surface-modified membrane. Journal of Power Sources, 2007, 167, 74-78.	4.0	6
154	The thermal release of scandium from titanium metal â€" a simple way to produce pure 44Sc for PET application. Radiochimica Acta, 2011, 99, 193-196.	0.5	5
155	Palladium Nanoparticles Supported on 3D-Graphene Nanosheets for Oxygen Reduction Reactions in Alkaline Media. ECS Transactions, 2016, 72, 39-47.	0.3	5
156	Novel Hybrid Catalyst for the Oxidation of Organic Acids: Pd Nanoparticles Supported on Mnâ€Nâ€3Dâ€Graphene Nanosheets. ChemElectroChem, 2017, 4, 2336-2344.	1.7	5
157	Evaluation of Pt Alloys as Electrocatalysts for Oxalic Acid Oxidation: A Combined Experimental and Computational Study. Journal of the Electrochemical Society, 2016, 163, H787-H795.	1.3	4
158	Physicochemical Properties of ECS Supports and Pt/ECS Catalysts. ACS Applied Energy Materials, 2021, 4, 9111-9123.	2.5	4
159	Anodic materials for electrooxidation of alcohols in alkaline media. SPR Electrochemistry, 2017, , 61-101.	0.7	4
160	Novel preparation method of composite catalyst composed of Pt wires and particles for low-temperature fuel cell applications. Electrochimica Acta, 2010, 55, 737-742.	2.6	3
161	Synthesis, characterization, and photoluminescence of Er₂O₃â€"Er₂SO₂ nanoparticles on reduced graphene oxide. Nanotechnology, 2017, 28, 195603.	1.3	3
162	Novel Fe-N-C Catalysts from Organic Precursors for Neutral Media and Microbial Fuel Cell Application. ECS Meeting Abstracts, 2016, , .	0.0	1

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163	Catalysts for Electrooxidation of Ethanol and Other Biofuels. ECS Meeting Abstracts, 2013, , .	0.0	0
164	Mechanistic Studies On Fe-PEI Derived Non-PGM Catalysts for Oxygen Reduction. ECS Meeting Abstracts, 2013, , .	0.0	0
165	Palladium Alloy Catalysts Synthesized By Sacrificial Support Method for the Electrooxidation of Ethylene Glycol in Alkaline Environment. ECS Meeting Abstracts, 2013, , .	0.0	0
166	Carbon and Composite Nanostructured Materials for Energy Applications. ECS Meeting Abstracts, 2013, , .	0.0	0