Plamen Atanassov

List of Publications by Year
in descending order

359 papers	24,618 citations	7251 80 h-index	11282 141 g-index
385 all docs	385 docs citations	385 times ranked	21595 citing authors

#	Article	IF	Citations
1	Sensing nitrite by iron-nitrogen-carbon oxygen reduction electrocatalyst. Electrochimica Acta, 2022, 402, 139514.	2.6	7
2	Investigation of cathode catalyst layer interfaces evolution during accelerated stress tests for polymer electrolyte fuel cells. Applied Catalysis B: Environmental, 2022, 301, 120810.	10.8	24
3	Catalysts by pyrolysis: Direct observation of transformations during re-pyrolysis of transition metal-nitrogen-carbon materials leading to state-of-the-art platinum group metal-free electrocatalyst. Materials Today, 2022, 53, 58-70.	8.3	23
4	Nitrogen and Phosphorus Dual-Doped Silicon Carbide-Derived Carbon/Carbon Nanotube Composite for the Anion-Exchange Membrane Fuel Cell Cathode. ACS Applied Energy Materials, 2022, 5, 2949-2958.	2.5	21
5	Highly Durable and Selective Fe- and Mo-Based Atomically Dispersed Electrocatalysts for Nitrate Reduction to Ammonia via Distinct and Synergized NO₂^{â€“} Pathways. ACS Catalysis, 2022, 12, 6651-6662.	5.5	58
6	Steering Cu-Based CO₂RR Electrocatalystsâ€™ Selectivity: Effect of Hydroxyapatite Acid/Base Moieties in Promoting Formate Production. ACS Energy Letters, 2022, 7, 2304-2310.	8.8	17
7	Oxygen reduction reaction electrocatalysis in neutral media for bioelectrochemical systems. Nature Catalysis, 2022, 5, 473-484.	16.1	53
8	Robust palladium hydride catalyst for electrocatalytic formate formation with high CO tolerance. Applied Catalysis B: Environmental, 2022, 316, 121659.	10.8	11
9	Iron(II) phthalocyanine (FePc) over carbon support for oxygen reduction reaction electrocatalysts operating in alkaline electrolyte. Journal of Solid State Electrochemistry, 2021, 25, 93-104.	1.2	29
10	Hidden in plain sight: unlocking the full potential of cyclic voltammetry with the thin-film rotating (ring) disk electrode studies for the investigation of oxygen reduction reaction electrocatalysts. Current Opinion in Electrochemistry, 2021, 25, 100626.	2.5	10
11	Identification of durable and non-durable FeNx sites in Feâ€“Nâ€“C materials for proton exchange membrane fuel cells. Nature Catalysis, 2021, 4, 10-19.	16.1	368
12	Feâ€“Nâ€“C Electrocatalystsâ€™ Durability: Effects of Single Atomsâ€™ Mobility and Clustering. ACS Catalysis, 2021, 11, 484-494.	5.5	53
13	Ni(OH)2-free NiCu as a hydrogen evolution and oxidation electrocatalyst. Electrochemistry Communications, 2021, 125, 106999.	2.3	9
14	Catalytic Hybrid Electrocatalytic/Biocatalytic Cascades for Carbon Dioxide Reduction and Valorization. ACS Catalysis, 2021, 11, 5172-5188.	5.5	31
15	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
16	How Comparable are Microbial Electrochemical Systems around the Globe? An Electrochemical and Microbiological Crossâ€Laboratory Study. ChemSusChem, 2021, 14, 2267.	3.6	2
17	Transition Metal Chalcogenides as a Versatile and Tunable Platform for Catalytic CO₂ and N₂ Electroreduction. ACS Materials Au, 2021, 1, 6-36.	2.6	55
18	How Comparable are Microbial Electrochemical Systems around the Globe? An Electrochemical and Microbiological Crossâ€Laboratory Study. ChemSusChem, 2021, 14, 2313-2330.	3.6	13

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19	Aluminum-air batteries: A review of alloys, electrolytes and design. Journal of Power Sources, 2021, 498, 229762.	4.0	74
20	Mapping transition metal-MN4 macrocyclic complex catalysts performance for the critical reactivity descriptors. Current Opinion in Electrochemistry, 2021, 27, 100683.	2.5	36
21	Protocol for rapid ammonia detection via surface-enhanced Raman spectroscopy. STAR Protocols, 2021, 2, 100599.	0.5	0
22	Mapping transition metalâ€"nitrogenâ€"carbon catalystÂperformance on the critical descriptorÂdiagram. Current Opinion in Electrochemistry, 2021, 27, 100687.	2.5	34
23	Self-Anchored Platinum-Decorated Antimony-Doped-Tin Oxide as a Durable Oxygen Reduction Electrocatalyst. ACS Catalysis, 2021, 11, 7006-7017.	5.5	17
24	Catalysts by pyrolysis: Direct observation of chemical and morphological transformations leading to transition metal-nitrogen-carbon materials. Materials Today, 2021, 47, 53-68.	8.3	30
25	Probing Heterogeneous Degradation of Catalyst in PEM Fuel Cells under Realistic Automotive Conditions with Multiâ€Modal Techniques. Advanced Energy Materials, 2021, 11, 2101794.	10.2	25
26	Metal Oxide Clusters on Nitrogen-Doped Carbon are Highly Selective for CO₂ Electroreduction to CO. ACS Catalysis, 2021, 11, 10028-10042.	5.5	37
27	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
28	Graphene-based catalyst for CO2 reduction: The critical role of solvents in materials design. Journal of Catalysis, 2021, 404, 512-517.	3.1	6
29	From Hydrogen Manifesto, through Green Deal and Just Transition, to Clean Energy Act. Electrochemical Society Interface, 2021, 30, 57-60.	0.3	7
30	Charge transfer at biotic/abiotic interfaces in biological electrocatalysis. Current Opinion in Electrochemistry, 2020, 19, 175-183.	2.5	12
31	Iron-Nitrogen-Carbon Catalysts for Proton Exchange Membrane Fuel Cells. Joule, 2020, 4, 33-44.	11.7	264
32	Integrating nanostructured Pt-based electrocatalysts in proton exchange membrane fuel cells. Journal of Power Sources, 2020, 478, 228516.	4.0	44
33	Towards defect engineering in hexagonal MoS2 nanosheets for tuning hydrogen evolution and nitrogen reduction reactions. Applied Materials Today, 2020, 21, 100812.	2.3	16
34	Graphite Intercalation Compounds Derived by Green Chemistry as Oxygen Reduction Reaction Catalysts. ACS Applied Materials & Interfaces, 2020, 12, 42678-42685.	4.0	18
35	Facile All-Optical Method for In Situ Detection of Low Amounts of Ammonia. IScience, 2020, 23, 101757.	1.9	12
36	Cathode Catalysts Based on Cobalt- and Nitrogen-Doped Nanocarbon Composites for Anion Exchange Membrane Fuel Cells. ACS Applied Energy Materials, 2020, 3, 5375-5384.	2.5	61

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37	Establishing reactivity descriptors for platinum group metal (PGM)-free Feâ€“Nâ€“C catalysts for PEM fuel cells. Energy and Environmental Science, 2020, 13, 2480-2500.	15.6	205
38	Mapping of Heterogeneous Catalyst Degradation in Polymer Electrolyte Fuel Cells. Advanced Energy Materials, 2020, 10, 2000623.	10.2	24
39	Kinetic Isotope Effect as a Tool To Investigate the Oxygen Reduction Reaction on Ptâ€based Electrocatalysts â€“ Part I: Highâ€loading Pt/C and Pt Extended Surface. ChemPhysChem, 2020, 21, 468-468.	1.0	2
40	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
41	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
42	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
43	Kinetic Isotope Effect as a Tool To Investigate the Oxygen Reduction Reaction on Ptâ€based Electrocatalysts â€“ Part I: Highâ€loading Pt/C and Pt Extended Surface. ChemPhysChem, 2020, 21, 469-475.	1.0	19
44	Metalâ€“Nitrogenâ€“Carbon Electrocatalysts for CO₂ Reduction towards Syngas Generation. ChemSusChem, 2020, 13, 1688-1698.	3.6	36
45	Kinetic Isotope Effect as a Tool To Investigate the Oxygen Reduction Reaction on Ptâ€based Electrocatalysts â€“ Part II: Effect of Platinum Dispersion. ChemPhysChem, 2020, 21, 1331-1339.	1.0	4
46	Spectroâ€Electrochemical Microfluidic Platform for Monitoring Multiâ€Step Cascade Reactions. ChemElectroChem, 2019, 6, 246-251.	1.7	10
47	Enhancement of Electrocatalytic Oxidation of Glycerol by Plasmonics. ChemElectroChem, 2019, 6, 241-245.	1.7	23
48	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
49	Understanding the Oxygen Reduction Reaction Activity and Oxidative Stability of Pt Supported on Nbâ€Doped TiO 2. ChemSusChem, 2019, 12, 3409-3409.	3.6	0
50	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
51	Investigating the Nature of the Active Sites for the CO₂ Reduction Reaction on Carbon-Based Electrocatalysts. ACS Catalysis, 2019, 9, 7668-7678.	5.5	58
52	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
53	Understanding Active Sites in Pyrolyzed Feâ€“Nâ€“C Catalysts for Fuel Cell Cathodes by Bridging Density Functional Theory Calculations and ⁵⁷Fe MÃ¶ssbauer Spectroscopy. ACS Catalysis, 2019, 9, 9359-9371.	5.5	167
54	Volcano Trend in Electrocatalytic CO₂ Reduction Activity over Atomically Dispersed Metal Sites on Nitrogen-Doped Carbon. ACS Catalysis, 2019, 9, 10426-10439.	5.5	142

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55	Nitrogen-Doped Graphene Oxide Electrocatalysts for the Oxygen Reduction Reaction. ACS Applied Nano Materials, 2019, 2, 1675-1682.	2.4	69
56	Bioelectrochemistryâ€"An Electrifying Experience Over 70â€...Years. ChemElectroChem, 2019, 6, 5356-5357.	1.7	0
57	Morphological Attributes Govern Carbon Dioxide Reduction on N-Doped Carbon Electrodes. Joule, 2019, 3, 1719-1733.	11.7	132
58	Understanding the Role of Interfaces for Water Management in Platinum Group Metal-Free Electrodes in Polymer Electrolyte Fuel Cells. ACS Applied Energy Materials, 2019, 2, 3542-3553.	2.5	31
59	Modular Microfluidic Paperâ€Based Devices for Multiâ€Modal Cascade Catalysis. ChemElectroChem, 2019, 6, 2448-2455.	1.7	8
60	Kinetic Isotopic Effect Studies of Ironâ€"Nitrogenâ€"Carbon Electrocatalysts for Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2019, 123, 11476-11483.	1.5	12
61	Understanding the Oxygen Reduction Reaction Activity and Oxidative Stability of Pt Supported on Nbâ€Doped TiO₂. ChemSusChem, 2019, 12, 3468-3480.	3.6	39
62	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
63	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
64	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
65	Ceramic Microbial Fuel Cells Stack: power generation in standard and supercapacitive mode. Scientific Reports, 2018, 8, 3281.	1.6	55
66	Design of Pd-Pb Catalysts for Glycerol and Ethylene Glycol Electrooxidation in Alkaline Medium. Electrocatalysis, 2018, 9, 480-485.	1.5	20
67	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
68	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
69	Enhancement of microbial fuel cell performance by introducing a nano-composite cathode catalyst. Electrochimica Acta, 2018, 265, 56-64.	2.6	79
70	Microbial desalination cell with sulfonated sodium poly(ether ether ketone) as cation exchange membranes for enhancing power generation and salt reduction. Bioelectrochemistry, 2018, 121, 176-184.	2.4	31
71	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
72	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

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73	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
74	Nanostructured metal-N-C electrocatalysts for CO2 reduction and hydrogen evolution reactions. Applied Catalysis B: Environmental, 2018, 232, 512-520.	10.8	48
75	Understanding PGM-free catalysts by linking density functional theory calculations and structural analysis: Perspectives and challenges. Current Opinion in Electrochemistry, 2018, 9, 137-144.	2.5	85
76	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
77	Highly durable direct hydrazine hydrate anion exchange membrane fuel cell. Journal of Power Sources, 2018, 375, 291-299.	4.0	26
78	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
79	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
80	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
81	Investigation of patterned and non-patterned poly(2,6-dimethyl 1,4-phenylene) oxide based anion exchange membranes for enhanced desalination and power generation in a microbial desalination cell. Solid State Ionics, 2018, 314, 141-148.	1.3	30
82	Influence of platinum group metal-free catalyst synthesis on microbial fuel cell performance. Journal of Power Sources, 2018, 375, 11-20.	4.0	62
83	Porous Hollow PtNi/C Electrocatalysts: Carbon Support Considerations To Meet Performance and Stability Requirements. ACS Catalysis, 2018, 8, 893-903.	5.5	67
84	Hydrothermal Synthesis of Platinumâ€Groupâ€Metalâ€Free Catalysts: Structural Elucidation and Oxygen Reduction Catalysis. ChemElectroChem, 2018, 5, 1848-1853.	1.7	8
85	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
86	Structure of Active Sites of Fe-N-C Nano-Catalysts for Alkaline Exchange Membrane Fuel Cells. Nanomaterials, 2018, 8, 965.	1.9	13
87	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
88	Mechanism of Oxygen Reduction Reaction on Transition Metalâ€"Nitrogenâ€"Carbon Catalysts: Establishing the Role of Nitrogen-containing Active Sites. ACS Applied Energy Materials, 2018, 1, 5948-5953.	2.5	54
89	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
90	Implementing PGM-free electrocatalysts in high-temperature polymer electrolyte membrane fuel cells. Electrochemistry Communications, 2018, 93, 91-94.	2.3	24

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91	Fuel Cells: A Call for Total Design. Joule, 2018, 2, 1210-1211.	11.7	4
92	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
93	Fully Synthetic Approach toward Transition Metalâ€“Nitrogenâ€“Carbon Oxygen Reduction Electrocatalysts. ACS Applied Energy Materials, 2018, 1, 3802-3806.	2.5	9
94	Cascade Kinetics of an Artificial Metabolon by Molecular Dynamics and Kinetic Monte Carlo. ACS Catalysis, 2018, 8, 7719-7726.	5.5	13
95	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
96	Oxygen Binding to Active Sites of Feâ€“Nâ€“C ORR Electrocatalysts Observed by Ambient-Pressure XPS. Journal of Physical Chemistry C, 2017, 121, 2836-2843.	1.5	135
97	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
98	NiO/Nb₂O₅/C Hydrazine Electrooxidation Catalysts for Anion Exchange Membrane Fuel Cells. Journal of the Electrochemical Society, 2017, 164, F229-F234.	1.3	13
99	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
100	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
101	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
102	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
103	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
104	Improving the Performance of Methanol Biofuel Cells Utilizing an Enzyme Cascade Bioanode with DNA-Bridged Substrate Channeling. ACS Energy Letters, 2017, 2, 1435-1438.	8.8	28
105	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
106	Design of Iron(II) Phthalocyanineâ€Derived Oxygen Reduction Electrocatalysts for Highâ€Powerâ€Density Microbial Fuel Cells. ChemSusChem, 2017, 10, 3243-3251.	3.6	67
107	Feâ€“Nâ€“C Catalyst Graphitic Layer Structure and Fuel Cell Performance. ACS Energy Letters, 2017, 2, 1489-1493.	8.8	104
108	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

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109	Outer membrane cytochromes/flavin interactions in <i>Shewanella</i> spp.â€"A molecular perspective. Biointerphases, 2017, 12, 021004.	0.6	24
110	Prefaceâ€"JES Focus Issue on Biological Fuel Cells. Journal of the Electrochemical Society, 2017, 164, Y3-Y4.	1.3	0
111	Stability of carbon-supported palladium nanoparticles in alkaline media: A case study of graphitized and more amorphous supports. Electrochemistry Communications, 2017, 78, 33-37.	2.3	24
112	Hybrid molecular/enzymatic catalytic cascade for complete electro-oxidation of glycerol using a promiscuous NAD-dependent formate dehydrogenase from Candida boidinii. Chemical Communications, 2017, 53, 5368-5371.	2.2	23
113	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
114	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
115	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
116	Transition metal-nitrogen-carbon catalysts for oxygen reduction reaction in neutral electrolyte. Electrochemistry Communications, 2017, 75, 38-42.	2.3	97
117	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
118	Supercapacitive microbial desalination cells: New class of power generating devices for reduction of salinity content. Applied Energy, 2017, 208, 25-36.	5.1	43
119	Microbial Desalination Cells with Efficient Platinumâ€Groupâ€Metalâ€Free Cathode Catalysts. ChemElectroChem, 2017, 4, 3322-3330.	1.7	40
120	Bimetallic platinum group metal-free catalysts for high power generating microbial fuel cells. Journal of Power Sources, 2017, 366, 18-26.	4.0	62
121	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
122	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
123	Selective Aerobic Oxidation of Alcohols over Atomicallyâ€Dispersed Nonâ€Precious Metal Catalysts. ChemSusChem, 2017, 10, 359-362.	3.6	79
124	Carbon-Based Air-Breathing Cathodes for Microbial Fuel Cells. Catalysts, 2016, 6, 127.	1.6	58
125	PGM-free Fe-N-C catalysts for oxygen reduction reaction: Catalyst layer design. Journal of Power Sources, 2016, 326, 43-49.	4.0	79
126	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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127	Designed protein aggregates entrapping carbon nanotubes for bioelectrochemical oxygen reduction. Biotechnology and Bioengineering, 2016, 113, 2321-2327.	1.7	8
128	Self-feeding paper based biofuel cell/self-powered hybrid Î¼-supercapacitor integrated system. Biosensors and Bioelectronics, 2016, 86, 459-465.	5.3	59
129	Anodic biofilms as the interphase for electroactive bacterial growth on carbon veil. Biointerphases, 2016, 11, 031013.	0.6	16
130	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
131	Fe-carbon nitride â€œCore-shellâ€•electrocatalysts for the oxygen reduction reaction. Electrochimica Acta, 2016, 222, 1778-1791.	2.6	60
132	Promotion of Ammonia Electrooxidation on Pt nanoparticles by Nickel Oxide Support. Electrochimica Acta, 2016, 222, 1455-1463.	2.6	19
133	Core Level Shifts of Hydrogenated Pyridinic and Pyrrolic Nitrogen in the Nitrogen-Containing Graphene-Based Electrocatalysts: In-Plane vs Edge Defects. Journal of Physical Chemistry C, 2016, 120, 29225-29232.	1.5	123
134	Morphological Characterization of ALD and Doping Effects on Mesoporous SnO₂ Aerogels by XPS and Quantitative SEM Image Analysis. ACS Applied Materials & Interfaces, 2016, 8, 9849-9854.	4.0	6
135	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
136	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
137	Miniaturized supercapacitors: key materials and structures towards autonomous and sustainable devices and systems. Journal of Power Sources, 2016, 326, 717-725.	4.0	82
138	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
139	Gold nanocluster formation using morpholino oligomer as template and assembly agent within hybrid bio-nanomaterials. RSC Advances, 2016, 6, 90624-90630.	1.7	4
140	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
141	Highly stable precious metal-free cathode catalyst for fuel cell application. Journal of Power Sources, 2016, 327, 557-564.	4.0	76
142	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
143	Highly active and selective nickel molybdenum catalysts for direct hydrazine fuel cell. Electrochimica Acta, 2016, 215, 420-426.	2.6	59
144	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

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145	Palladium Nanoparticles Supported on Threeâ€Dimensional Graphene Nanosheets: Superior Cathode Electrocatalysts. ChemElectroChem, 2016, 3, 1655-1666.	1.7	16
146	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
147	Critical role of intercalated water for electrocatalytically active nitrogen-doped graphitic systems. Science Advances, 2016, 2, e1501178.	4.7	36
148	Conjugated gold nanoparticles as a tool for probing the bacterial cell envelope: The case of <i>Shewanella oneidensis</i> MR-1. Biointerphases, 2016, 11, 011003.	0.6	23
149	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
150	Proteinâ€"Support Interactions for Rationally Designed Bilirubin Oxidase Based Cathode: A Computational Study. Journal of Physical Chemistry B, 2016, 120, 3634-3641.	1.2	24
151	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
152	Functional interfaces for biomimetic energy harvesting: CNTs-DNA matrix for enzyme assembly. Biochimica Et Biophysica Acta - Bioenergetics, 2016, 1857, 612-620.	0.5	5
153	Self-powered supercapacitive microbial fuel cell: The ultimate way of boosting and harvesting power. Biosensors and Bioelectronics, 2016, 78, 229-235.	5.3	112
154	Highly-active Pdâ€"Cu electrocatalysts for oxidation of ubiquitous oxygenated fuels. Applied Catalysis B: Environmental, 2016, 191, 76-85.	10.8	61
155	Substrate channelling as an approach to cascade reactions. Nature Chemistry, 2016, 8, 299-309.	6.6	514
156	Hybrid electrocatalysts for oxygen reduction reaction: Integrating enzymatic and non-platinum group metal catalysis. Electrochimica Acta, 2016, 190, 504-510.	2.6	12
157	Bilirubin oxidase based enzymatic air-breathing cathode: Operation under pristine and contaminated conditions. Bioelectrochemistry, 2016, 108, 1-7.	2.4	50
158	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
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