

# Plamen Atanasov

## List of Publications by Citations

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354  
papers

19,781  
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73  
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127  
g-index

385  
ext. papers

22,166  
ext. citations

8  
avg, IF

7.21  
L-index

#	Paper	IF	Citations
354	Anion-exchange membranes in electrochemical energy systems. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 3135-3191	35.4	1296
353	Enzymatic biofuel cells for implantable and microscale devices. <i>Chemical Reviews</i> , <b>2004</b> , 104, 4867-86	68.1	1216
352	Cross-laboratory experimental study of non-noble-metal electrocatalysts for the oxygen reduction reaction. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2009</b> , 1, 1623-39	9.5	587
351	Substrate channelling as an approach to cascade reactions. <i>Nature Chemistry</i> , <b>2016</b> , 8, 299-309	17.6	399
350	Elucidating Oxygen Reduction Active Sites in Pyrolyzed Metal-Nitrogen Coordinated Non-Precious-Metal Electrocatalyst Systems. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 8999-9008	3.8	380
349	Chemistry of Multititudinous Active Sites for Oxygen Reduction Reaction in Transition Metal-Nitrogen-Carbon Electrocatalysts. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 25917-25928	3.8	341
348	Photoregulation of Mass Transport through a Photoresponsive Azobenzene-Modified Nanoporous Membrane. <i>Nano Letters</i> , <b>2004</b> , 4, 551-554	11.5	324
347	Durability of PEFCs at High Humidity Conditions. <i>Journal of the Electrochemical Society</i> , <b>2005</b> , 152, A104	3.9	302
346	Fe-N-C Oxygen Reduction Fuel Cell Catalyst Derived from Carbendazim: Synthesis, Structure, and Reactivity. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1301735	21.8	294
345	Microstructural Changes of Membrane Electrode Assemblies during PEFC Durability Testing at High Humidity Conditions. <i>Journal of the Electrochemical Society</i> , <b>2005</b> , 152, A1011	3.9	292
344	Catalytic activity of Co-N(x)/C electrocatalysts for oxygen reduction reaction: a density functional theory study. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 148-53	3.6	262
343	Glucose oxidase anode for biofuel cell based on direct electron transfer. <i>Electrochemistry Communications</i> , <b>2006</b> , 8, 1204-1210	5.1	245
342	Anion-Exchange Membrane Fuel Cells: Dual-Site Mechanism of Oxygen Reduction Reaction in Alkaline Media on Cobalt Polypyrrole Electrocatalysts. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 5049-5059	3.8	236
341	Non-platinum oxygen reduction electrocatalysts based on pyrolyzed transition metal macrocycles. <i>Electrochimica Acta</i> , <b>2008</b> , 53, 7875-7883	6.7	221
340	Spectroscopic insights into the nature of active sites in iron-nitrogen-carbon electrocatalysts for oxygen reduction in acid. <i>Nano Energy</i> , <b>2016</b> , 29, 65-82	17.1	217
339	Engineering of glucose oxidase for direct electron transfer via site-specific gold nanoparticle conjugation. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 19262-5	16.4	209
338	CO <sub>2</sub> Electroreduction to Hydrocarbons on Carbon-Supported Cu Nanoparticles. <i>ACS Catalysis</i> , <b>2014</b> , 4, 3682-3695	13.1	208

337	Direct Spectroscopic Observation of the Structural Origin of Peroxide Generation from Co-Based Pyrolyzed Porphyrins for ORR Applications. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 8839-8849	3.8	202
336	Bifunctional Oxygen Reduction Reaction Mechanism on Non-Platinum Catalysts Derived from Pyrolyzed Porphyrins. <i>Journal of the Electrochemical Society</i> , <b>2010</b> , 157, B54	3.9	170
335	Nano-structured non-platinum catalysts for automotive fuel cell application. <i>Nano Energy</i> , <b>2015</b> , 16, 293-300	3.0	164
334	Entrapment of enzymes and carbon nanotubes in biologically synthesized silica: glucose oxidase-catalyzed direct electron transfer. <i>Small</i> , <b>2008</b> , 4, 357-64	11	163
333	Metal oxides/CNT nano-composite catalysts for oxygen reduction/oxygen evolution in alkaline media. <i>Applied Catalysis B: Environmental</i> , <b>2015</b> , 163, 623-627	21.8	155
332	Stability, Electronic and Magnetic Properties of In-Plane Defects in Graphene: A First-Principles Study. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 8161-8166	3.8	152
331	Conductive macroporous composite chitosan-carbon nanotube scaffolds. <i>Langmuir</i> , <b>2008</b> , 24, 7004-10	4	142
330	Synthesis and characterization of high performing Fe-N-C catalyst for oxygen reduction reaction (ORR) in Alkaline Exchange Membrane Fuel Cells. <i>Journal of Power Sources</i> , <b>2018</b> , 375, 214-221	8.9	138
329	Identification of durable and non-durable Fe <sub>Nx</sub> sites in Fe <sub>Nx</sub> C materials for proton exchange membrane fuel cells. <i>Nature Catalysis</i> , <b>2021</b> , 4, 10-19	36.5	136
328	XPS Structural Studies of Nano-composite Non-platinum Electrocatalysts for Polymer Electrolyte Fuel Cells. <i>Topics in Catalysis</i> , <b>2007</b> , 46, 263-275	2.3	132
327	A density functional theory study of oxygen reduction reaction on non-PGM Fe-Nx-C electrocatalysts. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 13800-6	3.6	131
326	New materials for biological fuel cells. <i>Materials Today</i> , <b>2012</b> , 15, 166-173	21.8	129
325	Iron-Nitrogen-Carbon Catalysts for Proton Exchange Membrane Fuel Cells. <i>Joule</i> , <b>2020</b> , 4, 33-44	27.8	127
324	Iron based catalysts from novel low-cost organic precursors for enhanced oxygen reduction reaction in neutral media microbial fuel cells. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 2346-2353	35.4	126
323	Anode catalysts for direct hydrazine fuel cells: from laboratory test to an electric vehicle. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 10336-9	16.4	117
322	Platinum group metal-free NiMo hydrogen oxidation catalysts: high performance and durability in alkaline exchange membrane fuel cells. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 24433-24443	13	114
321	A family of Fe-N-C oxygen reduction electrocatalysts for microbial fuel cell (MFC) application: Relationships between surface chemistry and performances. <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 205, 24-33	21.8	112
320	Effect of pH on the Activity of Platinum Group Metal-Free Catalysts in Oxygen Reduction Reaction. <i>ACS Catalysis</i> , <b>2018</b> , 8, 3041-3053	13.1	109

3 <sup>19</sup>	A Hybrid DNA-Templated Gold Nanocluster For Enhanced Enzymatic Reduction of Oxygen. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 11678-87	16.4	106
3 <sup>18</sup>	Density Functional Theory Study of Ni <sub>N</sub> x/C Electrocatalyst for Oxygen Reduction in Alkaline and Acidic Media. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 17378-17383	3.8	106
3 <sup>17</sup>	Air Breathing Cathodes for Microbial Fuel Cell using Mn-, Fe-, Co- and Ni-containing Platinum Group Metal-free Catalysts. <i>Electrochimica Acta</i> , <b>2017</b> , 231, 115-124	6.7	104
3 <sup>16</sup>	Understanding Active Sites in Pyrolyzed Fe <sub>N</sub> C Catalysts for Fuel Cell Cathodes by Bridging Density Functional Theory Calculations and 57Fe Mössbauer Spectroscopy. <i>ACS Catalysis</i> , <b>2019</b> , 9, 9359-9371	13.1	104
3 <sup>15</sup>	Self-powered supercapacitive microbial fuel cell: The ultimate way of boosting and harvesting power. <i>Biosensors and Bioelectronics</i> , <b>2016</b> , 78, 229-235	11.8	102
3 <sup>14</sup>	Establishing reactivity descriptors for platinum group metal (PGM)-free Fe <sub>N</sub> C catalysts for PEM fuel cells. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 2480-2500	35.4	100
3 <sup>13</sup>	Performance analysis of a non-platinum group metal catalyst based on iron-aminoantipyrine for direct methanol fuel cells. <i>Applied Catalysis B: Environmental</i> , <b>2016</b> , 182, 297-305	21.8	99
3 <sup>12</sup>	Oxygen Binding to Active Sites of Fe <sub>N</sub> C ORR Electrocatalysts Observed by Ambient-Pressure XPS. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 2836-2843	3.8	97
3 <sup>11</sup>	Volcano Trend in Electrocatalytic CO <sub>2</sub> Reduction Activity over Atomically Dispersed Metal Sites on Nitrogen-Doped Carbon. <i>ACS Catalysis</i> , <b>2019</b> , 9, 10426-10439	13.1	96
3 <sup>10</sup>	Growth of phthalocyanine doped and undoped nanotubes using mild synthesis conditions for development of novel oxygen reduction catalysts. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2010</b> , 2, 3295-302	9.5	96
3 <sup>09</sup>	Enzymatic fuel cells: integrating flow-through anode and air-breathing cathode into a membrane-less biofuel cell design. <i>Biosensors and Bioelectronics</i> , <b>2011</b> , 27, 132-6	11.8	95
3 <sup>08</sup>	Oxygen-reducing enzyme cathodes produced from SLAC, a small laccase from <i>Streptomyces coelicolor</i> . <i>Biosensors and Bioelectronics</i> , <b>2008</b> , 23, 1229-35	11.8	95
3 <sup>07</sup>	Three-dimensional graphene nanosheets as cathode catalysts in standard and supercapacitive microbial fuel cell. <i>Journal of Power Sources</i> , <b>2017</b> , 356, 371-380	8.9	94
3 <sup>06</sup>	A mechanistic study of 4-aminoantipyrine and iron derived non-platinum group metal catalyst on the oxygen reduction reaction. <i>Electrochimica Acta</i> , <b>2013</b> , 90, 656-665	6.7	92
3 <sup>05</sup>	CuCo <sub>2</sub> O <sub>4</sub> ORR/OER Bi-Functional Catalyst: Influence of Synthetic Approach on Performance. <i>Journal of the Electrochemical Society</i> , <b>2015</b> , 162, F449-F454	3.9	92
3 <sup>04</sup>	Electrooxidation of ethylene glycol and glycerol by platinum-based binary and ternary nano-structured catalysts. <i>Electrochimica Acta</i> , <b>2012</b> , 66, 295-301	6.7	88
3 <sup>03</sup>	Parameters characterization and optimization of activated carbon (AC) cathodes for microbial fuel cell application. <i>Bioresource Technology</i> , <b>2014</b> , 163, 54-63	11	87
3 <sup>02</sup>	Direct electron transfer catalyzed by bilirubin oxidase for air breathing gas-diffusion electrodes. <i>Electrochemistry Communications</i> , <b>2011</b> , 13, 247-249	5.1	87

301	Computational and experimental evidence for a new TM-N3/C moiety family in non-PGM electrocatalysts. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 17785-9	3.6	86
300	High Performance and Cost-Effective Direct Methanol Fuel Cells: Fe-N-C Methanol-Tolerant Oxygen Reduction Reaction Catalysts. <i>ChemSusChem</i> , <b>2016</b> , 9, 1986-95	8.3	85
299	Insights on the extraordinary tolerance to alcohols of Fe-N-C cathode catalysts in highly performing direct alcohol fuel cells. <i>Nano Energy</i> , <b>2017</b> , 34, 195-204	17.1	84
298	Predictive modeling of electrocatalyst structure based on structure-to-property correlations of x-ray photoelectron spectroscopic and electrochemical measurements. <i>Langmuir</i> , <b>2008</b> , 24, 9082-8	4	83
297	Highly active and durable templated non-PGM cathode catalysts derived from iron and aminoantipyrine. <i>Electrochemistry Communications</i> , <b>2012</b> , 22, 53-56	5.1	82
296	Direct Bioelectrocatalysis of PQQ-Dependent Glucose Dehydrogenase. <i>Electroanalysis</i> , <b>2007</b> , 19, 1562-1568	8.0	80
295	Fe-N-C Catalyst Graphitic Layer Structure and Fuel Cell Performance. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 1489-1493	23.1	79
294	Bioelectrocatalysis of Oxygen Reduction Reaction by Laccase on Gold Electrodes. <i>Electroanalysis</i> , <b>2004</b> , 16, 1182-1185	3	79
293	Morphological Attributes Govern Carbon Dioxide Reduction on N-Doped Carbon Electrodes. <i>Joule</i> , <b>2019</b> , 3, 1719-1733	27.8	78
292	Kinetic and Mechanistic Parameters of Laccase Catalyzed Direct Electrochemical Oxygen Reduction Reaction. <i>ACS Catalysis</i> , <b>2012</b> , 2, 38-44	13.1	78
291	High catalytic activity and pollutants resistivity using Fe-AAPyr cathode catalyst for microbial fuel cell application. <i>Scientific Reports</i> , <b>2015</b> , 5, 16596	4.9	77
290	Core Level Shifts of Hydrogenated Pyridinic and Pyrrolic Nitrogen in the Nitrogen-Containing Graphene-Based Electrocatalysts: In-Plane vs Edge Defects. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 29225-29232	3.8	77
289	Density functional theory study of the oxygen reduction reaction mechanism in a BN co-doped graphene electrocatalyst. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 10273	13	76
288	Predicting Electrocatalytic Properties: Modeling Structure-Activity Relationships of Nitroxyl Radicals. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 16179-86	16.4	75
287	Biofuel cells for biomedical applications: colonizing the animal kingdom. <i>ChemPhysChem</i> , <b>2013</b> , 14, 2045-58	3.58	75
286	Mechanistic study of direct electron transfer in bilirubin oxidase. <i>Electrochimica Acta</i> , <b>2012</b> , 61, 44-49	6.7	73
285	Templated non-PGM cathode catalysts derived from iron and poly(ethyleneimine) precursors. <i>Applied Catalysis B: Environmental</i> , <b>2012</b> , 127, 300-306	21.8	73
284	Hybrid Biofuel Cell: Microbial Fuel Cell with an Enzymatic Air-Breathing Cathode. <i>ACS Catalysis</i> , <b>2011</b> , 1, 994-997	13.1	73

283	Fabrication of macroporous chitosan scaffolds doped with carbon nanotubes and their characterization in microbial fuel cell operation. <i>Enzyme and Microbial Technology</i> , <b>2011</b> , 48, 458-65	3.8	73
282	Enzymatic Biofuel Cells. <i>Electrochemical Society Interface</i> , <b>2007</b> , 16, 28-31	3.6	73
281	Combinatorial discovery of Ni-based binary and ternary catalysts for hydrazine electrooxidation for use in anion exchange membrane fuel cells. <i>Journal of Power Sources</i> , <b>2014</b> , 247, 605-611	8.9	72
280	Novel highly active and selective Fe-N-C oxygen reduction electrocatalysts derived from in-situ polymerization pyrolysis. <i>Nano Energy</i> , <b>2017</b> , 38, 201-209	17.1	71
279	Transition metal-nitrogen-carbon catalysts for oxygen reduction reaction in neutral electrolyte. <i>Electrochemistry Communications</i> , <b>2017</b> , 75, 38-42	5.1	71
278	Surface Modification of Microbial Fuel Cells Anodes: Approaches to Practical Design. <i>Electrochimica Acta</i> , <b>2014</b> , 134, 116-126	6.7	71
277	Double-chamber microbial fuel cell with a non-platinum-group metal Fe-N-C cathode catalyst. <i>ChemSusChem</i> , <b>2015</b> , 8, 828-34	8.3	71
276	Novel PdIn catalysts for alcohols electrooxidation in alkaline media. <i>Electrochemistry Communications</i> , <b>2013</b> , 34, 185-188	5.1	71
275	Miniaturized supercapacitors: key materials and structures towards autonomous and sustainable devices and systems. <i>Journal of Power Sources</i> , <b>2016</b> , 326, 717-725	8.9	71
274	Aerosol-derived Ni(1-x)Zn(x) electrocatalysts for direct hydrazine fuel cells. <i>Physical Chemistry Chemical Physics</i> , <b>2012</b> , 14, 5512-7	3.6	70
273	Influence of anode surface chemistry on microbial fuel cell operation. <i>Bioelectrochemistry</i> , <b>2015</b> , 106, 141-9	5.6	69
272	pH dependence of catalytic activity for ORR of the non-PGM catalyst derived from heat-treated Fe $\beta$ phenanthroline. <i>Electrochimica Acta</i> , <b>2013</b> , 87, 361-365	6.7	68
271	Design parameters for tuning the type 1 Cu multicopper oxidase redox potential: insight from a combination of first principles and empirical molecular dynamics simulations. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 4802-9	16.4	68
270	Performance, methanol tolerance and stability of Fe-aminobenzimidazole derived catalyst for direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2016</b> , 319, 235-246	8.9	67
269	NickelCopper supported on a carbon black hydrogen oxidation catalyst integrated into an anion-exchange membrane fuel cell. <i>Sustainable Energy and Fuels</i> , <b>2018</b> , 2, 2268-2275	5.8	67
268	Design of Carbon Nanotube-Based Gas-Diffusion Cathode for O <sub>2</sub> Reduction by Multicopper Oxidases. <i>Advanced Energy Materials</i> , <b>2012</b> , 2, 162-168	21.8	66
267	Electrooxidation of hydrazine hydrate using NiIIa catalyst for anion exchange membrane fuel cells. <i>Journal of Power Sources</i> , <b>2013</b> , 234, 252-259	8.9	66
266	Development of paper based electrodes: From air-breathing to paintable enzymatic cathodes. <i>Electrochimica Acta</i> , <b>2012</b> , 82, 208-213	6.7	65



265	Enhancement of microbial fuel cell performance by introducing a nano-composite cathode catalyst. <i>Electrochimica Acta</i> , <b>2018</b> , 265, 56-64	6.7	64
264	Role of Nitrogen Moieties in N-Doped 3D-Graphene Nanosheets for Oxygen Electroreduction in Acidic and Alkaline Media. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 11623-11632	9.5	64
263	Original Mechanochemical Synthesis of Non-Platinum Group Metals Oxygen Reduction Reaction Catalysts Assisted by Sacrificial Support Method. <i>Electrochimica Acta</i> , <b>2015</b> , 179, 154-160	6.7	64
262	Tri-metallic transition metal-nitrogen-carbon catalysts derived by sacrificial support method synthesis. <i>Electrochimica Acta</i> , <b>2013</b> , 109, 433-439	6.7	63
261	Methylene green electrodeposited on SWNTs-based "bucky" papers for NADH and l-malate oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2011</b> , 3, 2402-9	9.5	62
260	PGM-free Fe-N-C catalysts for oxygen reduction reaction: Catalyst layer design. <i>Journal of Power Sources</i> , <b>2016</b> , 326, 43-49	8.9	61
259	Power generation in microbial fuel cells using platinum group metal-free cathode catalyst: Effect of the catalyst loading on performance and costs. <i>Journal of Power Sources</i> , <b>2018</b> , 378, 169-175	8.9	60
258	Mechanistic studies of oxygen reduction on Fe-PEI derived non-PGM electrocatalysts. <i>Applied Catalysis B: Environmental</i> , <b>2014</b> , 150-151, 179-186	21.8	60
257	Templated bi-metallic non-PGM catalysts for oxygen reduction. <i>Electrochimica Acta</i> , <b>2012</b> , 80, 213-218	6.7	60
256	Templated PtSn electrocatalysts for ethanol, methanol and CO oxidation in alkaline media. <i>Electrochimica Acta</i> , <b>2009</b> , 54, 989-995	6.7	60
255	Highly methanol-tolerant non-precious metal cathode catalysts for direct methanol fuel cell. <i>Electrochimica Acta</i> , <b>2010</b> , 55, 7615-7621	6.7	59
254	Understanding PGM-free catalysts by linking density functional theory calculations and structural analysis: Perspectives and challenges. <i>Current Opinion in Electrochemistry</i> , <b>2018</b> , 9, 137-144	7.2	58
253	Surface characterization and direct electrochemistry of redox copper centers of bilirubin oxidase from fungi <i>Myrothecium verrucaria</i> . <i>Bioelectrochemistry</i> , <b>2008</b> , 74, 101-110	5.6	58
252	Highly stable precious metal-free cathode catalyst for fuel cell application. <i>Journal of Power Sources</i> , <b>2016</b> , 327, 557-564	8.9	58
251	Improved power and long term performance of microbial fuel cell with Fe-N-C catalyst in air-breathing cathode. <i>Energy</i> , <b>2018</b> , 144, 1073-1079	7.9	58
250	Three-dimensional X-ray microcomputed tomography of carbonates and biofilm on operated cathode in single chamber microbial fuel cell. <i>Biointerphases</i> , <b>2015</b> , 10, 031009	1.8	56
249	Preparation, characterization and single-cell performance of a new class of Pd-carbon nitride electrocatalysts for oxygen reduction reaction in PEMFCs. <i>Applied Catalysis B: Environmental</i> , <b>2012</b> , 111-112, 185-199	21.8	56
248	Design of Iron(II) Phthalocyanine-Derived Oxygen Reduction Electrocatalysts for High-Power-Density Microbial Fuel Cells. <i>ChemSusChem</i> , <b>2017</b> , 10, 3243-3251	8.3	55

- 247 Improved Interfacial Electron Transfer in Modified Bilirubin Oxidase Biocathodes. *ChemElectroChem*, **2014**, 1, 241-248 4.3 55
- 246 Electrochemical Studies of Intramolecular Electron Transfer in Laccase from *Trametes versicolor*. *Electroanalysis*, **2007**, 19, 2307-2313 3 55
- 245 Non-platinum cathode catalyst layer composition for single Membrane Electrode Assembly Proton Exchange Membrane Fuel Cell. *Journal of Power Sources*, **2008**, 183, 557-563 8.9 55
- 244 Laccase Biosensor on Monolayer-Modified Gold Electrode. *Electroanalysis*, **2003**, 15, 1577-1583 3 55
- 243 Nano-structured Pd-Sn catalysts for alcohol electro-oxidation in alkaline medium. *Electrochemistry Communications*, **2015**, 57, 48-51 5.1 54
- 242 Novel KOH-free anion-exchange membrane fuel cell: Performance comparison of alternative anion-exchange ionomers in catalyst ink. *Electrochimica Acta*, **2010**, 55, 3404-3408 6.7 54
- 241 Supercapacitive microbial fuel cell: Characterization and analysis for improved charge storage/delivery performance. *Bioresource Technology*, **2016**, 218, 552-60 11 54
- 240 Fe-carbon nitride Core-shell Electro-catalysts for the oxygen reduction reaction. *Electrochimica Acta*, **2016**, 222, 1778-1791 6.7 54
- 239 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 8.9 53
- 238 Practical electricity generation from a paper based biofuel cell powered by glucose in ubiquitous liquids. *Electrochemistry Communications*, **2014**, 45, 44-47 5.1 53
- 237 Selective Aerobic Oxidation of Alcohols over Atomically-Dispersed Non-Precious Metal Catalysts. *ChemSusChem*, **2017**, 10, 359-362 8.3 53
- 236 Direct bio-electrocatalysis by multi-copper oxidases: Gas-diffusion laccase-catalyzed cathodes for biofuel cells. *Electrochimica Acta*, **2011**, 56, 10767-10771 6.7 53
- 235 Porous Hollow PtNi/C Electrocatalysts: Carbon Support Considerations To Meet Performance and Stability Requirements. *ACS Catalysis*, **2018**, 8, 893-903 13.1 53
- 234 Structure-to-property relationships in fuel cell catalyst supports: Correlation of surface chemistry and morphology with oxidation resistance of carbon blacks. *Journal of Power Sources*, **2012**, 214, 303-313 8.9 52
- 233 Self-feeding paper based biofuel cell/self-powered hybrid Supercapacitor integrated system. *Biosensors and Bioelectronics*, **2016**, 86, 459-465 11.8 52
- 232 Standardized microbial fuel cell anodes of silica-immobilized *Shewanella oneidensis*. *Chemical Communications*, **2010**, 46, 6048-50 5.8 50
- 231 Surface characterization and direct bioelectrocatalysis of multicopper oxidases. *Electrochimica Acta*, **2010**, 55, 7385-7393 6.7 50
- 230 Electroless Deposition of Silver by Galvanic Displacement on Aluminum Alloyed with Copper. *Journal of Physical Chemistry B*, **2004**, 108, 17531-17536 3.4 50



229	Cathode materials for ceramic based microbial fuel cells (MFCs). <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 14706-14715	6.7	49
228	Operando XAFS study of carbon supported Ni, NiZn, and Co catalysts for hydrazine electrooxidation for use in anion exchange membrane fuel cells. <i>Electrochimica Acta</i> , <b>2015</b> , 163, 116-122	6.7	49
227	Highly-active PdCu electrocatalysts for oxidation of ubiquitous oxygenated fuels. <i>Applied Catalysis B: Environmental</i> , <b>2016</b> , 191, 76-85	21.8	49
226	Carbon-Based Air-Breathing Cathodes for Microbial Fuel Cells. <i>Catalysts</i> , <b>2016</b> , 6, 127	4	49
225	Catalytic biofilm formation by <i>Shewanella oneidensis</i> MR-1 and anode characterization by expanded uncertainty. <i>Electrochimica Acta</i> , <b>2014</b> , 126, 3-10	6.7	48
224	Nitrogen-Doped Graphene Oxide Electrocatalysts for the Oxygen Reduction Reaction. <i>ACS Applied Nano Materials</i> , <b>2019</b> , 2, 1675-1682	5.6	47
223	Direct synthesis of platinum group metal-free Fe-N-C catalyst for oxygen reduction reaction in alkaline media. <i>Electrochemistry Communications</i> , <b>2016</b> , 72, 140-143	5.1	47
222	Highly active PdCu catalysts for electrooxidation of 2-propanol. <i>Electrochemistry Communications</i> , <b>2012</b> , 22, 193-196	5.1	47
221	Novel dual templating approach for preparation of highly active Fe-N-C electrocatalyst for oxygen reduction. <i>Electrochimica Acta</i> , <b>2017</b> , 224, 49-55	6.7	46
220	Nano-structured platinum group metal-free catalysts and their integration in fuel cell electrode architectures. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 237, 1139-1147	21.8	46
219	Bilirubin oxidase based enzymatic air-breathing cathode: Operation under pristine and contaminated conditions. <i>Bioelectrochemistry</i> , <b>2016</b> , 108, 1-7	5.6	46
218	Bimetallic platinum group metal-free catalysts for high power generating microbial fuel cells. <i>Journal of Power Sources</i> , <b>2017</b> , 366, 18-26	8.9	46
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203	Relationship between surface chemistry, biofilm structure, and electron transfer in Shewanella anodes. <i>Biointerphases</i> , <b>2015</b> , 10, 019013	1.8	37
202	Electrochemical Evaluation of Porous Non-Platinum Oxygen Reduction Catalysts for Polymer Electrolyte Fuel Cells. <i>Fuel Cells</i> , <b>2009</b> , 9, 547-553	2.9	37
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- 4 Purification and Characterization of Multicopper Oxidases for Enzyme Electrodes 123-145
- 3 Anodic Catalysts for Oxidation of Carbon-Containing Fuels 33-52
- 2 Hierarchical Materials Architectures for Enzymatic Fuel Cells 181-207
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