# Shijun Liao

#### List of Publications by Citations

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| #   | Paper  | IF   | Citations |
|-----|--|------|-----------|
| 276 | High Performance Fe- and N- Doped Carbon Catalyst with Graphene Structure for Oxygen Reduction. <i>Scientific Reports</i> , <b>2013</b> , 3,   | 4.9  | 454       |
| 275 | An Isolated Zinc-Cobalt Atomic Pair for Highly Active and Durable Oxygen Reduction. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 2622-2626   | 16.4 | 292       |
| 274 | Transition Metal Nitride Coated with Atomic Layers of Pt as a Low-Cost, Highly Stable Electrocatalyst for the Oxygen Reduction Reaction. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 1575-83  | 16.4 | 279       |
| 273 | Effect of Transition Metals on the Structure and Performance of the Doped Carbon Catalysts Derived From Polyaniline and Melamine for ORR Application. <i>ACS Catalysis</i> , <b>2014</b> , 4, 3797-3805  | 13.1 | 275       |
| 272 | Controlled-access hollow mechanized silica nanocontainers. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 15136-42   | 16.4 | 263       |
| 271 | High performance PtRuIr catalysts supported on carbon nanotubes for the anodic oxidation of methanol. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 3504-5  | 16.4 | 259       |
| 270 | Current research trends and perspectives on materials-based hydrogen storage solutions: A critical review. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 289-311   | 6.7  | 257       |
| 269 | Base-Free Oxidation of Alcohols to Esters at Room Temperature and Atmospheric Conditions using Nanoscale Co-Based Catalysts. <i>ACS Catalysis</i> , <b>2015</b> , 5, 1850-1856   | 13.1 | 247       |
| 268 | Selective Oxidation of Saturated Hydrocarbons Using Aulld Alloy Nanoparticles Supported on Metal Drganic Frameworks. <i>ACS Catalysis</i> , <b>2013</b> , 3, 647-654   | 13.1 | 185       |
| 267 | High-performance PdAu bimetallic catalyst with mesoporous silica nanoparticles as support and its catalysis of cinnamaldehyde hydrogenation. <i>Journal of Catalysis</i> , <b>2012</b> , 291, 36-43  | 7.3  | 178       |
| 266 | Preparation of nitrogen-doped carbon nanotube arrays and their catalysis towards cathodic oxygen reduction in acidic and alkaline media. <i>Carbon</i> , <b>2012</b> , 50, 2620-2627   | 10.4 | 156       |
| 265 | Preparation and characterization of ZnO/TiO2, SO42/ZnO/TiO2 photocatalyst and their photocatalysis. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2004</b> , 168, 7-13   | 4.7  | 156       |
| 264 | Novel functionalized nano-TiO2 loading electrocatalytic membrane for oily wastewater treatment. <i>Environmental Science &amp; Environmental Science &amp; Envir</i> | 10.3 | 154       |
| 263 | High performance Pd-based catalysts for oxidation of formic acid. <i>Journal of Power Sources</i> , <b>2008</b> , 180, 205-208   | 8.9  | 142       |
| 262 | Atomic Fe-Doped MOF-Derived Carbon Polyhedrons with High Active-Center Density and Ultra-High Performance toward PEM Fuel Cells. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1802856   | 21.8 | 142       |
| 261 | Well-Defined ZIF-Derived Fe-N Codoped Carbon Nanoframes as Efficient Oxygen Reduction Catalysts. <i>ACS Applied Materials &amp; Description</i> (2017), 9, 9699-9709   | 9.5  | 134       |
| 260 | Review on the current practices and efforts towards pilot-scale production of metal-organic frameworks (MOFs). <i>Coordination Chemistry Reviews</i> , <b>2017</b> , 352, 187-219  | 23.2 | 125       |

| 259 | Tuning the Catalytic Activity of [email[protected] CoreBhell Nanoparticles for the Oxygen Reduction Reaction by Varying the Shell Thickness. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 1748-175  | 33.8 | 120 |
|-----|--|------|-----|
| 258 | Formation of a Tubular Assembly by Ultrathin Ti0.8Co0.2N Nanosheets as Efficient Oxygen Reduction Electrocatalysts for Hydrogen Metal Air Fuel Cells. ACS Catalysis, 2018, 8, 8970-8975  | 13.1 | 115 |
| 257 | Metal-organic framework as a host for synthesis of nanoscale Co3O4 as an active catalyst for CO oxidation. <i>Catalysis Communications</i> , <b>2011</b> , 12, 875-879   | 3.2  | 112 |
| 256 | Structural defects in metalBrganic frameworks (MOFs): Formation, detection and control towards practices of interests. <i>Coordination Chemistry Reviews</i> , <b>2017</b> , 349, 169-197  | 23.2 | 109 |
| 255 | g-C3N4 promoted MOF derived hollow carbon nanopolyhedra doped with high density/fraction of single Fe atoms as an ultra-high performance non-precious catalyst towards acidic ORR and PEM fuel cells. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 5020-5030 | 13   | 102 |
| 254 | Binary Fe, Cu-doped bamboo-like carbon nanotubes as efficient catalyst for the oxygen reduction reaction. <i>Nano Energy</i> , <b>2017</b> , 37, 187-194   | 17.1 | 100 |
| 253 | Uniform nitrogen and sulfur co-doped carbon nanospheres as catalysts for the oxygen reduction reaction. <i>Carbon</i> , <b>2014</b> , 69, 294-301  | 10.4 | 98  |
| 252 | Photo- and thermally induced coloration of a crystalline MOF accompanying electron transfer and long-lived charge separation in a stable host-guest system. <i>Chemical Communications</i> , <b>2012</b> , 48, 8114-6  | 5.8  | 98  |
| 251 | Nitrogen-doped graphene prepared by a transfer doping approach for the oxygen reduction reaction application. <i>Journal of Power Sources</i> , <b>2014</b> , 245, 801-807   | 8.9  | 90  |
| 250 | Binary transition metal nitrides with enhanced activity and durability for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 16801-16809   | 13   | 87  |
| 249 | In situ growth of cobalt sulfide hollow nanospheres embedded in nitrogen and sulfur co-doped graphene nanoholes as a highly active electrocatalyst for oxygen reduction and evolution. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 12354-12360              | 13   | 84  |
| 248 | Cobalt and Nitrogen Codoped Graphene with Inserted Carbon Nanospheres as an Efficient Bifunctional Electrocatalyst for Oxygen Reduction and Evolution. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2016</b> , 4, 4131-4136                                       | 8.3  | 84  |
| 247 | Phosphorus and Nitrogen Dual Doped and Simultaneously Reduced Graphene Oxide with High Surface Area as Efficient Metal-Free Electrocatalyst for Oxygen Reduction. <i>Catalysts</i> , <b>2015</b> , 5, 981-991  | 4    | 84  |
| 246 | Single-Atom Catalysts for Electrochemical Hydrogen Evolution Reaction: Recent Advances and Future Perspectives. <i>Nano-Micro Letters</i> , <b>2020</b> , 12, 21   | 19.5 | 83  |
| 245 | Limitations and Improvement Strategies for Early-Transition-Metal Nitrides as Competitive Catalysts toward the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , <b>2016</b> , 6, 6165-6174  | 13.1 | 81  |
| 244 | An Isolated Zinctobalt Atomic Pair for Highly Active and Durable Oxygen Reduction. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 2648-2652   | 3.6  | 78  |
| 243 | Fluorescent and photochromic bifunctional molecular switch based on a stable crystalline metal-viologen complex. <i>Chemical Communications</i> , <b>2012</b> , 48, 11641-3  | 5.8  | 75  |
| 242 | High-Performance Doped Carbon Catalyst Derived from Nori Biomass with Melamine Promoter. <i>Electrochimica Acta</i> , <b>2014</b> , 138, 353-359   | 6.7  | 72  |

| 241 | Assessing the influence of side-chain and main-chain aromatic benzyltrimethyl ammonium on anion exchange membranes. <i>ACS Applied Materials &amp; Explain State S</i> | 9.5              | 71 |
|-----|--|------------------|----|
| 240 | Efficient hydrogen peroxide synthesis by metal-free polyterthiophene via photoelectrocatalytic dioxygen reduction. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 238-245   | 35.4             | 71 |
| 239 | A high-performance composite ORR catalyst based on the synergy between binary transition metal nitride and nitrogen-doped reduced graphene oxide. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 5829-58.  | 3 <del>7</del> 3 | 70 |
| 238 | High-Performance CoreBhell Catalyst with Nitride Nanoparticles as a Core: Well-Defined Titanium Copper Nitride Coated with an Atomic Pt Layer for the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , <b>2017</b> , 7, 3810-3817   | 13.1             | 65 |
| 237 | Correlation between the photoactive character and the structures of two novel metal organic frameworks. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 7895   |                  | 65 |
| 236 | Pd nanoparticles decorating flower-like Co3O4 nanowire clusters to form an efficient, carbon/binder-free cathode for LiD2 batteries. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 15626-15632  | 13               | 63 |
| 235 | Photoassisted Oxygen Reduction Reaction in H -O Fuel Cells. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 14748-14751   | 16.4             | 63 |
| 234 | Pt nanoparticles entrapped in titanate nanotubes (TNT) for phenol hydrogenation: the confinement effect of TNT. <i>Chemical Communications</i> , <b>2014</b> , 50, 2794-6  | 5.8              | 62 |
| 233 | Alkali resistant cross-linked poly(arylene ether sulfone)s membranes containing aromatic side-chain quaternary ammonium groups. <i>Journal of Membrane Science</i> , <b>2015</b> , 474, 187-195  | 9.6              | 59 |
| 232 | CoreBhell-Structured Low-Platinum Electrocatalysts for Fuel Cell Applications. <i>Electrochemical Energy Reviews</i> , <b>2018</b> , 1, 324-387  | 29.3             | 58 |
| 231 | Ruthenium nanoparticles mounted on multielement co-doped graphene: an ultra-high-efficiency cathode catalyst for LiD2 batteries. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 11224-11231  | 13               | 57 |
| 230 | Effects of Pt/C, Pd/C and PdPt/C anode catalysts on the performance and stability of air breathing direct formic acid fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 8518-8524  | 6.7              | 57 |
| 229 | Preparation of anatase F doped TiO2 sol and its performance for photodegradation of formaldehyde. <i>Journal of Materials Science</i> , <b>2007</b> , 42, 8193-8202  | 4.3              | 56 |
| 228 | Anodic oxidation of ethanol on core-shell structured Ru@PtPd/C catalyst in alkaline media. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 6138-6143  | 8.9              | 55 |
| 227 | Hydrogen storage in Zr-fumarate MOF. International Journal of Hydrogen Energy, 2015, 40, 10542-10546   | <b>5</b> 6.7     | 51 |
| 226 | Two-Dimensional Bimetallic Zn/Fe-Metal-Organic Framework (MOF)-Derived Porous Carbon<br>Nanosheets with a High Density of Single/Paired Fe Atoms as High-Performance Oxygen Reduction<br>Catalysts. <i>ACS Applied Materials &amp; Discordance (More)</i> 12, 13878-13887  | 9.5              | 50 |
| 225 | Enhanced Li-O2 battery performance, using graphene-like nori-derived carbon as the cathode and adding LiI in the electrolyte as a promoter. <i>Electrochimica Acta</i> , <b>2016</b> , 200, 231-238  | 6.7              | 50 |
| 224 | Pd nano-particles (NPs) confined in titanate nanotubes (TNTs) for hydrogenation of cinnamaldehyde. <i>Catalysis Communications</i> , <b>2015</b> , 59, 184-188   | 3.2              | 49 |

## (2015-2013)

| 223 | A hybrid metal phosphatephosphite material grafted with electron deficient organic components showing interesting fluorescent and photosensitive properties. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 4945   | 13   | 49 |  |
|-----|--|------|----|--|
| 222 | Conversion of polystyrene foam to a high-performance doped carbon catalyst with ultrahigh surface area and hierarchical porous structures for oxygen reduction. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 12240-12246   | 13   | 48 |  |
| 221 | From Chlorella to Nestlike Framework Constructed with Doped Carbon Nanotubes: A Biomass-Derived, High-Performance, Bifunctional Oxygen Reduction/Evolution Catalyst. <i>ACS Applied Materials &amp; Discourse (Materials &amp; Discourse)</i> 32168-32178                          | 9.5  | 47 |  |
| 220 | An effective Pd-promoted gold catalyst supported on mesoporous silica particles for the oxidation of benzyl alcohol. <i>Applied Catalysis B: Environmental</i> , <b>2013</b> , 140-141, 419-425  | 21.8 | 47 |  |
| 219 | UIO-66-NH -Derived Mesoporous Carbon Catalyst Co-Doped with Fe/N/S as Highly Efficient Cathode Catalyst for PEMFCs. <i>Small</i> , <b>2019</b> , 15, e1803520  | 11   | 47 |  |
| 218 | Simultaneous doping of nitrogen and fluorine into reduced graphene oxide: A highly active metal-free electrocatalyst for oxygen reduction. <i>Carbon</i> , <b>2016</b> , 99, 272-279   | 10.4 | 46 |  |
| 217 | Synthesis and characterization of visible light responsive NIIiO2 mixed crystal by a modified hydrothermal process. <i>Journal of Non-Crystalline Solids</i> , <b>2008</b> , 354, 3965-3972  | 3.9  | 45 |  |
| 216 | Uniform nitrogen and sulphur co-doped hollow carbon nanospheres as efficient metal-free electrocatalysts for oxygen reduction. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 1742-1748  | 13   | 44 |  |
| 215 | Hollow Loofah-Like N, O-Co-Doped Carbon Tube for Electrocatalysis of Oxygen Reduction. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1900015  | 15.6 | 44 |  |
| 214 | Nitrogen, phosphorus and iron doped carbon nanospheres with high surface area and hierarchical porous structure for oxygen reduction. <i>Journal of Power Sources</i> , <b>2015</b> , 288, 253-260   | 8.9  | 44 |  |
| 213 | Highly stable photochromic crystalline material based on a close-packed layered metalliologen coordination polymer. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 17452  |      | 44 |  |
| 212 | High-performance gold-promoted palladium catalyst towards the hydrogenation of phenol with mesoporous hollow spheres as support. <i>Catalysis Communications</i> , <b>2012</b> , 17, 29-33   | 3.2  | 44 |  |
| 211 | Ordered hierarchical mesoporous anatase TiO2 from yeast biotemplates. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2009</b> , 74, 274-8  | 6    | 44 |  |
| 210 | Biomass-derived porous heteroatom-doped carbon spheres as a high-performance catalyst for the oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , <b>2016</b> , 41, 14101-14110   | 6.7  | 44 |  |
| 209 | Ultra-high-performance doped carbon catalyst derived from o-phenylenediamine and the probable roles of Fe and melamine. <i>Applied Catalysis B: Environmental</i> , <b>2014</b> , 158-159, 60-69   | 21.8 | 43 |  |
| 208 | High-performance PdRu bimetallic catalyst supported on mesoporous silica nanoparticles for phenol hydrogenation. <i>Applied Surface Science</i> , <b>2014</b> , 315, 138-143   | 6.7  | 43 |  |
| 207 | High-performance doped carbon electrocatalyst derived from soybean biomass and promoted by zinc chloride. <i>International Journal of Hydrogen Energy</i> , <b>2014</b> , 39, 10128-10134  | 6.7  | 43 |  |
| 206 | High-Performance, Ultralow Platinum Membrane Electrode Assembly Fabricated by In Situ Deposition of a Pt Shell Layer on Carbon-Supported Pd Nanoparticles in the Catalyst Layer Using a Facile Pulse Electrodeposition Approach. <i>ACS Catalysis</i> , <b>2015</b> , 5, 4318-4324 | 13.1 | 42 |  |

| 205 | Cross-linked multiblock copoly(arylene ether sulfone) ionomer/nano-ZrO2 composite anion exchange membranes for alkaline fuel cells. <i>RSC Advances</i> , <b>2014</b> , 4, 41398-41410   | 3.7                               | 41              |
|-----|--|-----------------------------------|-----------------|
| 204 | Self-humidification of a PEM fuel cell using a novel Pt/SiO2/C anode catalyst. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 7874-7880   | 6.7                               | 41              |
| 203 | MOF-Templated sword-like Co3O4@NiCo2O4 sheet arrays on carbon cloth as highly efficient LiD2 battery cathode. <i>Journal of Power Sources</i> , <b>2020</b> , 450, 227725  | 8.9                               | 40              |
| 202 | Heteroatom-doped carbon nanorods with improved electrocatalytic activity toward oxygen reduction in an acidic medium. <i>Carbon</i> , <b>2014</b> , 69, 132-141  | 10.4                              | 40              |
| 201 | In situ construction of Ir@Pt/C nanoparticles in the cathode layer of membrane electrode assemblies with ultra-low Pt loading and high Pt exposure. <i>Journal of Power Sources</i> , <b>2017</b> , 355, 83-89   | 8.9                               | 39              |
| 200 | Molecular packing, crystal to crystal transformation, electron transfer behaviour, and photochromic and fluorescent properties of three hydrogen-bonded supramolecular complexes containing benzenecarboxylate donors and viologen acceptors. <i>RSC Advances</i> , <b>2014</b> , 4, 42983-42990 | 3.7                               | 39              |
| 199 | Design and Fabrication of a Dual-Photoelectrode Fuel Cell towards Cost-Effective Electricity Production from Biomass. <i>ChemSusChem</i> , <b>2017</b> , 10, 99-105  | 8.3                               | 39              |
| 198 | Copper based metal-organic molecular ring with inserted Keggin-type polyoxometalate: a stable photofunctional host-guest molecular system. <i>Chemical Communications</i> , <b>2012</b> , 48, 6154-6   | 5.8                               | 39              |
| 197 | Tin and Silicon Binary Oxide on the Carbon Support of a Pt Electrocatalyst with Enhanced Activity and Durability. <i>ACS Catalysis</i> , <b>2015</b> , 5, 2242-2249  | 13.1                              | 38              |
| 196 | Hierarchically open-porous carbon networks enriched with exclusive Feßix active sites as efficient oxygen reduction catalysts towards acidic H2D2 PEM fuel cell and alkaline ZnBir battery. Chemical Engineering Journal, 2020, 390, 124479  | 14.7                              | 38              |
| 195 | IrO2 nanoparticles highly dispersed on nitrogen-doped carbon nanotubes as an efficient cathode catalyst for high-performance Li-O2 batteries. <i>Ceramics International</i> , <b>2017</b> , 43, 14082-14089  | 5.1                               | 38              |
| 194 | Preparation and characterization of coreBhell structured catalysts using PtxPdy as active shell and nano-sized Ru as core for potential direct formic acid fuel cell application. <i>Electrochimica Acta</i> , <b>2011</b> , 56, 2024-2030   | 6.7                               | 38              |
| 193 | A mesoporous hollow silica sphere (MHSS): Synthesis through a facile emulsion approach and application of support for high performance Pd/MHSS catalyst for phenol hydrogenation. <i>Applied Surface Science</i> , <b>2011</b> , 257, 4472-4477  | 6.7                               | 38              |
| 192 | Antiperovskite Nitrides CuNCoV: Highly Efficient and Durable Electrocatalysts for the Oxygen-Evolution Reaction. <i>Nano Letters</i> , <b>2019</b> , 19, 7457-7463   | 11.5                              | 37              |
| 191 | Highly Selective TiN-Supported Highly Dispersed Pt Catalyst: Ultra Active toward Hydrogen Oxidation and Inactive toward Oxygen Reduction. <i>ACS Applied Materials &amp; Dispersed</i> , 2018, 10, 353   | 30 <sup>2</sup> 3 <sup>5</sup> 53 | 7 <sup>37</sup> |
| 190 | Enhanced water management in the cathode of an air-breathing PEMFC using a dual catalyst layer and optimizing the gas diffusion and microporous layers. <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 3961-3967  | 6.7                               | 36              |
| 189 | Enhanced cyclability of Li-O batteries with cathodes of Ir and MnO supported on well-defined TiN arrays. <i>Nanoscale</i> , <b>2018</b> , 10, 2983-2989  | 7.7                               | 35              |
| 188 | Improving Potassium-Ion Batteries by Optimizing the Composition of Prussian Blue Cathode. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 6528-6535   | 6.1                               | 35              |

## (2010-2012)

| 187 | Synthesis and structure of a mixed crystal containing tris(4-pyridiniumyl)-1,3,5-triazine and benzenetetracarboxylate ions: constructing a new photochromic molecular system viaself-assembly. <i>CrystEngComm</i> , <b>2012</b> , 14, 786-788   | 3.3              | 35 |  |
|-----|--|------------------|----|--|
| 186 | Vesicular nitrogen doped carbon material derived from Fe2O3 templated polyaniline as improved non-platinum fuel cell cathode catalyst. <i>Electrochimica Acta</i> , <b>2013</b> , 99, 30-37  | 6.7              | 35 |  |
| 185 | Coupling hollow FeO nanoparticles with oxygen vacancy on mesoporous carbon as a high-efficiency ORR electrocatalyst for Zn-air battery. <i>Journal of Colloid and Interface Science</i> , <b>2020</b> , 567, 410-418                             | 9.3              | 34 |  |
| 184 | High performance LiFePO4 microsphere composed of nanofibers with an alcohol-thermal approach. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 4546  | 13               | 34 |  |
| 183 | Enhancing the cyclability of LiD 2 batteries using PdM alloy nanoparticles anchored on nitrogen-doped reduced graphene as the cathode catalyst. <i>Journal of Power Sources</i> , <b>2017</b> , 337, 173-179                                     | 9 <sup>8.9</sup> | 34 |  |
| 182 | Design, fabrication and performance evaluation of a miniature air breathing direct formic acid fuel cell based on printed circuit board technology. <i>Journal of Power Sources</i> , <b>2010</b> , 195, 7332-7337                               | 8.9              | 34 |  |
| 181 | Platinum free ternary electrocatalysts prepared via organic colloidal method for oxygen reduction. <i>Electrochemistry Communications</i> , <b>2008</b> , 10, 523-526  | 5.1              | 34 |  |
| 180 | Prussian Blue [K2FeFe(CN)6] Doped with Nickel as a Superior Cathode: An Efficient Strategy To Enhance Potassium Storage Performance. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 16659-16                                | 6637             | 33 |  |
| 179 | Synthesis of a 3D photochromic coordination polymer with an interpenetrating arrangement: crystal engineering for electron transfer between donor and acceptor units. <i>CrystEngComm</i> , <b>2012</b> , 14, 5137                               | 3.3              | 33 |  |
| 178 | Advanced Atomically Dispersed MetalMitrogenCarbon Catalysts Toward Cathodic Oxygen Reduction in PEM Fuel Cells. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2101222   | 21.8             | 33 |  |
| 177 | Template-Free Preparation of 3D Porous Co-Doped VN Nanosheet-Assembled Microflowers with Enhanced Oxygen Reduction Activity. <i>ACS Applied Materials &amp; amp; Interfaces</i> , <b>2018</b> , 10, 11604-11612                                  | 9.5              | 32 |  |
| 176 | A coreBhell Pd1Ru1Ni2@Pt/C catalyst with a ternary alloy core and Pt monolayer: enhanced activity and stability towards the oxygen reduction reaction by the addition of Ni. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 847-855  | 13               | 32 |  |
| 175 | Hybrid PdAg alloy-Au nanorods: Controlled growth, optical properties and electrochemical catalysis. <i>Nano Research</i> , <b>2013</b> , 6, 571-580  | 10               | 32 |  |
| 174 | A Co-doped porous niobium nitride nanogrid as an effective oxygen reduction catalyst. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 14278-14285   | 13               | 31 |  |
| 173 | Fog-like fluffy structured N-doped carbon with a superior oxygen reduction reaction performance to a commercial Pt/C catalyst. <i>Nanoscale</i> , <b>2015</b> , 7, 3780-5  | 7.7              | 31 |  |
| 172 | A biocompatible drug delivery nanovalve system on the surface of mesoporous nanoparticles. <i>Microporous and Mesoporous Materials</i> , <b>2012</b> , 147, 200-204  | 5.3              | 31 |  |
| 171 | Selenium-Functionalized Carbon as a Support for Platinum Nanoparticles with Improved Electrochemical Properties for the Oxygen Reduction Reaction and CO Tolerance. <i>Journal of the Electrochemical Society</i> , <b>2013</b> , 160, H266-H270 | 3.9              | 31 |  |
| 170 | Oxygen reduction reaction operated on magnetically-modified PtFe/C electrocatalyst. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 942-948  | 6.7              | 31 |  |
|     |  |                  |    |  |

| 169 | Design of ultralong-life LiftO2 batteries with IrO2 nanoparticles highly dispersed on nitrogen-doped carbon nanotubes. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 3763-3770  | 13     | 31 |
|-----|--|--------|----|
| 168 | A hollow spherical doped carbon catalyst derived from zeolitic imidazolate framework nanocrystals impregnated/covered with iron phthalocyanines. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 7859-7868  | 13     | 30 |
| 167 | Effects of Metal Ions and Ligand Functionalization on Hydrogen Storage in Metal®rganic Frameworks by Spillover. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 13829-13836  | 3.8    | 29 |
| 166 | High porosity and surface area self-doped carbon derived from polyacrylonitrile as efficient electrocatalyst towards oxygen reduction. <i>Journal of Power Sources</i> , <b>2016</b> , 324, 134-141  | 8.9    | 29 |
| 165 | Mesoporous carbon confined intermetallic nanoparticles as highly durable electrocatalysts for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 15822-15828  | 13     | 28 |
| 164 | Tuning hydrophobic-hydrophilic balance of cathode catalyst layer to improve cell performance of proton exchange membrane fuel cell (PEMFC) by mixing polytetrafluoroethylene (PTFE). <i>Electrochimica Acta</i> , <b>2018</b> , 277, 110-115   | 6.7    | 27 |
| 163 | Series-connected hexacations cross-linked anion exchange membranes for diffusion dialysis in acid recovery. <i>Journal of Membrane Science</i> , <b>2019</b> , 570-571, 120-129  | 9.6    | 27 |
| 162 | Effect of confinement of TiO 2 nanotubes over the Ru nanoparticles on Fischer-Tropsch synthesis. <i>Applied Catalysis A: General</i> , <b>2016</b> , 526, 45-52  | 5.1    | 26 |
| 161 | Two-step oxalate approach for the preparation of high performance LiNi0.5Mn1.5O4 cathode material with high voltage. <i>Journal of Power Sources</i> , <b>2014</b> , 247, 437-443  | 8.9    | 25 |
| 160 | Nitrogen, Sulfur Co-doped Carbon Derived from Naphthalene-Based Covalent Organic Framework as an Efficient Catalyst for Oxygen Reduction. <i>ACS Applied Energy Materials</i> , <b>2018</b> , 1, 161-166   | 6.1    | 25 |
| 159 | Versatile Route To Fabricate Precious-Metal Phosphide Electrocatalyst for Acid-Stable Hydrogen Oxidation and Evolution Reactions. <i>ACS Applied Materials &amp; Description Acid-Stable Hydrogen Materials &amp; Description Acid-Stable Hydrogen Description and Evolution Reactions. ACS Applied Materials &amp; Description Acid-Stable Hydrogen Description and Evolution Reactions. ACS Applied Materials &amp; Description Acid-Stable Hydrogen Description and Evolution Reactions. ACS Applied Materials &amp; Description Acid-Stable Hydrogen Description and Evolution Reactions. ACS Applied Materials &amp; Description Acid-Stable Hydrogen Description Description Acid-Stable Hydrogen Description Description Acid-Stable Hydrogen Description Descri</i>   | 9.5    | 24 |
| 158 | Pulse electrodeposition to prepare coreShell structured AuPt@Pd/C catalyst for formic acid fuel cell application. <i>Journal of Power Sources</i> , <b>2014</b> , 246, 659-666   | 8.9    | 24 |
| 157 | A renewable wood-derived cathode for LiD2 batteries. Journal of Materials Chemistry A, 2018, 6, 14291-   | 143298 | 24 |
| 156 | Synthesis of Core-shell Structured Ru@Pd/C Catalysts for the Electrooxidation of Formic Acid. <i>Electrochimica Acta</i> , <b>2017</b> , 238, 194-201  | 6.7    | 23 |
| 155 | Dendrite-Free Composite Li Anode Assisted by Ag Nanoparticles in a Wood-Derived Carbon Frame. <i>ACS Applied Materials &amp; Description of the ACS Applied Mate</i> | 9.5    | 23 |
| 154 | Facile one-pot approach to the synthesis of spherical mesoporous silica nanoflowers with hierarchical pore structure. <i>Applied Surface Science</i> , <b>2014</b> , 314, 7-14   | 6.7    | 23 |
| 153 | Preparation and characterizations of highly dispersed carbon supported PdxPty/C catalysts by a modified citrate reduction method for formic acid electrooxidation. <i>Journal of Power Sources</i> , <b>2014</b> , 254, 183-189  | 8.9    | 23 |
| 152 | Effect of the structure of Ni nanoparticles on the electrocatalytic activity of Ni@Pd/C for formic acid oxidation. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 13125-13131   | 6.7    | 22 |

| 151 | Methanol tolerant core-shell RuFeSe@Pt/C catalyst for oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 20658-20668   | 6.7    | 22 |  |
|-----|--|--------|----|--|
| 150 | Self-humidifying membrane electrode assembly prepared by adding PVA as hygroscopic agent in anode catalyst layer. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 12860-12867  | 6.7    | 22 |  |
| 149 | Anion exchange membranes by bromination of benzylmethyl-containing poly(arylene ether)s for alkaline membrane fuel cells. <i>RSC Advances</i> , <b>2014</b> , 4, 29682-29693   | 3.7    | 21 |  |
| 148 | A one-pot method to synthesize high performance multielement co-doped reduced graphene oxide catalysts for oxygen reduction. <i>Electrochemistry Communications</i> , <b>2014</b> , 47, 49-53  | 5.1    | 21 |  |
| 147 | A pulse electrochemical deposition method to prepare membrane electrode assemblies with ultra-low anode Pt loadings through in situ construction of active coreBhell nanoparticles on an electrode. <i>Journal of Power Sources</i> , <b>2014</b> , 260, 27-33 | 8.9    | 21 |  |
| 146 | Nitrogen and Fluorine co-doped carbon catalyst with high oxygen reduction performance, prepared by pyrolyzing a mixture of melamine and PTFE. <i>Electrochimica Acta</i> , <b>2015</b> , 182, 963-970  | 6.7    | 21 |  |
| 145 | Electrostatic interaction based hollow Pt and Ru assemblies toward methanol oxidation. <i>RSC Advances</i> , <b>2012</b> , 2, 7479   | 3.7    | 21 |  |
| 144 | The Effect of PtRuir Nanoparticle Crystallinity in Electrocatalytic Methanol Oxidation. <i>Materials</i> , <b>2013</b> , 6, 1621-1631  | 3.5    | 21 |  |
| 143 | Tuning the morphology of mesoporous silica by using various template combinations. <i>Applied Surface Science</i> , <b>2009</b> , 255, 9365-9370   | 6.7    | 21 |  |
| 142 | Platinum decorated Ru/C: Effects of decorated platinum on catalyst structure and performance for the methanol oxidation reaction. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 54-61   | 8.9    | 21 |  |
| 141 | A magnetic-field-assisted solution-phase route to cobalt thin film composed of cobalt nanosheets.<br>Journal of Materials Chemistry, <b>2009</b> , 19, 5207  |        | 21 |  |
| 140 | Photoassisted Oxygen Reduction Reaction in H2D2 Fuel Cells. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 14968-1  | 49.761 | 21 |  |
| 139 | Platinum nanoparticles on carbon-nanotube support prepared by room-temperature reduction with H2 in ethylene glycol/water mixed solvent as catalysts for polymer electrolyte membrane fuel cells. <i>Journal of Power Sources</i> , <b>2016</b> , 306, 448-453 | 8.9    | 20 |  |
| 138 | From Interwoven to Noninterpenetration: Crystal Structural Motifs of Two New Manganese Drganic Frameworks Mediated by the Substituted Group of the Bridging Ligand. European Journal of Inorganic Chemistry, 2008, 2008, 628-634                               | 2.3    | 20 |  |
| 137 | Emerging applications of atomic layer deposition for lithium-sulfur and sodium-sulfur batteries. <i>Energy Storage Materials</i> , <b>2020</b> , 26, 513-533   | 19.4   | 20 |  |
| 136 | Biomass-derived 3D hierarchical N-doped porous carbon anchoring cobalt-iron phosphide nanodots as bifunctional electrocatalysts for Li O2 batteries. <i>Journal of Power Sources</i> , <b>2019</b> , 412, 433-441  | 8.9    | 20 |  |
| 135 | Preparation and characterizations of platinum electrocatalysts supported on thermally treated CeO2L composite support for polymer electrolyte membrane fuel cells. <i>Electrochimica Acta</i> , <b>2014</b> , 139, 308-314                                     | 6.7    | 19 |  |
| 134 | Synthesis of flower-like Co microcrystals composed of Co nanoplates in water/ethanol mixed solvent. <i>Journal Physics D: Applied Physics</i> , <b>2008</b> , 41, 065004   | 3      | 19 |  |

| 133 | DFT study of high performance Pt3Sn alloy catalyst in oxygen reduction reaction. <i>Computational Materials Science</i> , <b>2018</b> , 149, 107-114   | 3.2  | 18 |
|-----|--|------|----|
| 132 | High-performance self-humidifying membrane electrode assembly prepared by imultaneously adding inorganic and organic hygroscopic materials to the anode catalyst layer. <i>Journal of Power Sources</i> , <b>2013</b> , 241, 367-372   | 8.9  | 18 |
| 131 | Highly stable and active Pt electrocatalysts on TiO 2 -Co 3 O 4 -C composite support for polymer exchange membrane fuel cells. <i>Electrochimica Acta</i> , <b>2015</b> , 154, 266-272   | 6.7  | 18 |
| 130 | A 4-cell miniature direct formic acid fuel cell stack with independent fuel reservoir: Design and performance investigation. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 5913-5917  | 8.9  | 18 |
| 129 | Synthesis of Co submicrospheres self-assembled by Co nanosheets via a complexant-assisted hydrothermal approach. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2010</b> , 322, 30-35   | 2.8  | 18 |
| 128 | Three-Dimensional Biocarbon Framework Coupled with Uniformly Distributed FeSe Nanoparticles Derived from Pollen as Bifunctional Electrocatalysts for Oxygen Electrode Reactions. <i>ACS Applied Materials &amp; Distributed Material</i> | 9.5  | 18 |
| 127 | Electrochemical Behavior of Spherical LiFePO 4 /C Nanomaterial in Aqueous Electrolyte, and Novel Aqueous Rechargeable Lithium Battery with LiFePO 4 /C anode. <i>Electrochimica Acta</i> , <b>2015</b> , 177, 277-282  | 6.7  | 17 |
| 126 | Ultra-high-performance core-shell structured Ru@Pt/C catalyst prepared by a facile pulse electrochemical deposition method. <i>Scientific Reports</i> , <b>2015</b> , 5, 11604   | 4.9  | 17 |
| 125 | Pt?Ru/C catalysts synthesized by a two-stage polyol reduction process for methanol oxidation reaction. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 10570-10575  | 8.9  | 17 |
| 124 | Pt/graphene with intercalated carbon nanotube spacers introduced by electrostatic self-assembly for fuel cells. <i>Materials Chemistry and Physics</i> , <b>2019</b> , 225, 371-378  | 4.4  | 17 |
| 123 | A strategy to unlock the potential of CrN as a highly active oxygen reduction reaction catalyst. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 8575-8585  | 13   | 16 |
| 122 | Influence of the ions distribution of anion-exchange membranes on electrodialysis. <i>Desalination</i> , <b>2018</b> , 437, 34-44  | 10.3 | 16 |
| 121 | Doped reduced graphene oxide mounted with IrO2 nanoparticles shows significantly enhanced performance as a cathode catalyst for Li-O2 batteries. <i>Electrochimica Acta</i> , <b>2016</b> , 192, 431-438   | 6.7  | 16 |
| 120 | Aqueous phase synthesis and characterizations of Pt nanoparticles by a modified citrate reduction method assisted by inorganic salt stabilization for PEMFCs. <i>Electrochimica Acta</i> , <b>2014</b> , 134, 187-192  | 6.7  | 16 |
| 119 | Effect of Ni Core Structure on the Electrocatalytic Activity of Pt-Ni/C in Methanol Oxidation. <i>Materials</i> , <b>2013</b> , 6, 2689-2700   | 3.5  | 16 |
| 118 | Enhanced low-humidity performance in a proton exchange membrane fuel cell by the insertion of microcrystalline cellulose between the gas diffusion layer and the anode catalyst layer. <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 15613-15621   | 6.7  | 16 |
| 117 | Highly performed non-humidification membrane electrode assembly prepared with binary RuO2BiO2 oxide supported Pt catalysts as anode. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 13103-13109   | 6.7  | 16 |
| 116 | On the limiting Stokes wave of extreme height in arbitrary water depth. <i>Journal of Fluid Mechanics</i> , <b>2018</b> , 843, 653-679   | 3.7  | 15 |

| 115 | Nitrogen self-doped carbon nanoparticles derived from spiral seaweeds for oxygen reduction reaction. <i>RSC Advances</i> , <b>2016</b> , 6, 27535-27541  | 3.7  | 15 |
|-----|--|------|----|
| 114 | Cobalt and Nitrogen Co-Doped Graphene-Carbon Nanotube Aerogel as an Efficient Bifunctional Electrocatalyst for Oxygen Reduction and Evolution Reactions. <i>Catalysts</i> , <b>2018</b> , 8, 275   | 4    | 15 |
| 113 | Enhancement of capacity at high charge/discharge rate and cyclic stability of LiFePO4/C by nickel doping. <i>Ionics</i> , <b>2013</b> , 19, 445-450  | 2.7  | 15 |
| 112 | Synthesis and Optical Properties of Thiol Functionalized CdSe/ZnS (Core/Shell) Quantum Dots by Ligand Exchange. <i>Journal of Nanomaterials</i> , <b>2014</b> , 2014, 1-14   | 3.2  | 15 |
| 111 | A fast and simple electrochemical impedance spectroscopy measurement technique and its application in portable, low-cost instrument for impedimetric biosensing. <i>Journal of Electroanalytical Chemistry</i> , <b>2011</b> , 657, 158-163    | 4.1  | 15 |
| 110 | A new 3-D microporous Ln(III)fu(I) framework constructed by pyridine-3,5-dicarboxylate. <i>Journal of Coordination Chemistry</i> , <b>2009</b> , 62, 2290-2298   | 1.6  | 15 |
| 109 | Nodal PtNi nanowires with Pt skin and controllable Near-Surface composition for enhanced oxygen reduction electrocatalysis in fuel cells. <i>Chemical Engineering Journal</i> , <b>2021</b> , 418, 129322                                      | 14.7 | 15 |
| 108 | Uniformly dispersed carbon-supported bimetallic ruthenium platinum electrocatalysts for the methanol oxidation reaction. <i>Journal of Materials Science</i> , <b>2017</b> , 52, 3457-3466   | 4.3  | 14 |
| 107 | Mesoporous silica nanoparticle supported PdIr bimetal catalyst for selective hydrogenation, and the significant promotional effect of Ir. <i>Applied Surface Science</i> , <b>2015</b> , 357, 558-563  | 6.7  | 14 |
| 106 | Enhancing membrane electrode assembly performance by improving the porous structure and hydrophobicity of the cathode catalyst layer. <i>Journal of Power Sources</i> , <b>2019</b> , 443, 227284  | 8.9  | 14 |
| 105 | Enhanced performance of proton exchange membrane fuel cell by introducing nitrogen-doped CNTs in both catalyst layer and gas diffusion layer. <i>Electrochimica Acta</i> , <b>2017</b> , 253, 142-150  | 6.7  | 14 |
| 104 | Atomic platinum layer coated titanium copper nitride supported on carbon nanotubes for the methanol oxidation reaction. <i>Electrochimica Acta</i> , <b>2017</b> , 248, 349-355  | 6.7  | 14 |
| 103 | Hydrogen storage of multiwalled carbon nanotubes coated with Pd-Ni nanoparticles under moderate conditions. <i>Science Bulletin</i> , <b>2006</b> , 51, 2959-2963  |      | 14 |
| 102 | Recent advances in nanostructured transition metal nitrides for fuel cells. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 20803-20818   | 13   | 14 |
| 101 | Regenerative fuel cells: Recent progress, challenges, perspectives and their applications for space energy system. <i>Applied Energy</i> , <b>2021</b> , 283, 116376   | 10.7 | 14 |
| 100 | Three dimensional palladium nanoflowers with enhanced electrocatalytic activity towards the anodic oxidation of formic acid. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 973-977  | 13   | 13 |
| 99  | Rationally Designed Three-Dimensional N-Doped Graphene Architecture Mounted with Ru Nanoclusters as a High-Performance Air Cathode for Lithium Dxygen Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 6109-6117 | 8.3  | 13 |
| 98  | Rechargeable Zinc-Air Battery with Ultrahigh Power Density Based on Uniform N, Co Codoped Carbon Nanospheres. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2019</b> , 11, 44153-44160   | 9.5  | 13 |

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|----|--|----------------------|------------------|
| 96 | Alkylation of isobutane with butenes over solid acid catalysts. <i>Applied Catalysis A: General</i> , <b>1994</b> , 107, 239-248   | 5.1                  | 13               |
| 95 | Enhanced low-humidity performance in a proton exchange membrane fuel cell by developing a novel hydrophilic gas diffusion layer. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 937-944   | 6.7                  | 13               |
| 94 | Highly effective and stable doped carbon catalyst with three-dimensional porous structure and well-covered Fe3C nanoparticles prepared with C3N4 and tannic acid as template/precursors. <i>Journal of Power Sources</i> , <b>2019</b> , 417, 117-124  | 8.9                  | 13               |
| 93 | Integration of single Co atoms and Ru nanoclusters boosts the cathodic performance of nitrogen-doped 3D graphene in lithiumBxygen batteries. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 107-   | 4 <del>7</del> -3107 | 5 <del>7</del> 3 |
| 92 | An ultra high performance multi-element doped mesoporous carbon catalyst derived from poly(4-vinylpyridine). <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 23512-23519  | 13                   | 12               |
| 91 | High-performance membrane electrode assembly with multi-functional Pt/SnO2BiO2/C catalyst for proton exchange membrane fuel cell operated under low-humidity conditions. <i>International Journal of Hydrogen Energy</i> , <b>2016</b> , 41, 9197-9203 | 6.7                  | 12               |
| 90 | Preparation and characterization of carbon-supported PtOs electrocatalysts via polyol reduction method for methanol oxidation reaction. <i>Journal of Power Sources</i> , <b>2014</b> , 268, 824-830   | 8.9                  | 12               |
| 89 | Binary oxide-doped Pt/RuO2BiOx/C catalyst with high performance and self-humidification capability: The promotion of ruthenium oxide. <i>Journal of Power Sources</i> , <b>2012</b> , 205, 201-206   | 8.9                  | 12               |
| 88 | Highly ordered and surfactant-free PtxRuy bimetallic nanocomposites synthesized by electrostatic self assembly for methanol oxidation reaction. <i>Electrochimica Acta</i> , <b>2013</b> , 112, 431-438  | 6.7                  | 12               |
| 87 | A novel cesium hydrogen sulfate eolite inorganic composite electrolyte membrane for polymer electrolyte membrane fuel cell application. <i>Journal of Power Sources</i> , <b>2009</b> , 193, 483-487   | 8.9                  | 12               |
| 86 | Theoretical study of proton transfer in triflic acid/water, imidazole and pyrazole clusters. <i>Computational and Theoretical Chemistry</i> , <b>2009</b> , 897, 66-68   |                      | 12               |
| 85 | Organic colloid method to prepare ultrafine cobalt nanoparticles with the size of 2[hm. <i>Solid State Communications</i> , <b>2008</b> , 145, 118-121   | 1.6                  | 12               |
| 84 | Highly conductive and permselective anion exchange membranes for electrodialysis desalination with series-connected dications appending flexible hydrophobic tails. <i>Desalination</i> , <b>2020</b> , 474, 114184                                    | 10.3                 | 12               |
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| 81 | Observation of two coupled Faraday waves in a vertically vibrating Hele-Shaw cell with one of them oscillating horizontally. <i>Physics of Fluids</i> , <b>2018</b> , 30, 012108   | 4.4                  | 11               |
| 80 | Synthesis of three-dimensional Pd nanospheres decorated with a Pt monolayer for the oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , <b>2014</b> , 39, 14018-14026   | 6.7                  | 11               |

| 79 | Platinum catalysts supported on Nafion functionalized carbon black for fuel cell application.<br>Journal of Energy Chemistry, <b>2013</b> , 22, 87-92  | 12     | 11  |
|----|--|--------|-----|
| 78 | Influence of 2,2?,6,6?-tetramethyl biphenol-based anion-exchange membranes on the diffusion dialysis of hydrochloride acid. <i>Journal of Applied Polymer Science</i> , <b>2017</b> , 134, 45333   | 2.9    | 11  |
| 77 | High performance Pd catalyst using silica modified titanate nanotubes (STNT) as support and its catalysis toward hydrogenation of cinnamaldehyde at ambient temperature. <i>RSC Advances</i> , <b>2014</b> , 4, 630                          | 0g2-63 | 049 |
| 76 | Multi-block copolymers with fluorene-containing hydrophilic segments densely functionalized by side-chain quaternary ammonium groups as anion exchange membranes. <i>RSC Advances</i> , <b>2016</b> , 6, 41453-                              | 41464  | 11  |
| 75 | Formic acid as additive for the preparation of high-performance FePO4 materials by spray drying method. <i>Ceramics International</i> , <b>2017</b> , 43, 16652-16658  | 5.1    | 10  |
| 74 | Nanoconfined Nitrogen-Doped Carbon-Coated Hierarchical TiCoN Composites with Enhanced ORR Performance. <i>ChemElectroChem</i> , <b>2018</b> , 5, 2041-2049   | 4.3    | 10  |
| 73 | A layered zinc phosphate decorated with organic fluorophores for selective luminescent sensing of metal cations. <i>Dalton Transactions</i> , <b>2012</b> , 41, 10910-2  | 4.3    | 10  |
| 72 | Enhanced electro-oxidation of formic acid by a PdPt bimetallic catalyst on a CeO2-modified carbon support. <i>Science China Chemistry</i> , <b>2012</b> , 55, 391-397  | 7.9    | 10  |
| 71 | Ultrasonic-assisted ac etching of aluminum foils for electrolytic capacitor electrodes with enhanced capacitance. <i>Materials Chemistry and Physics</i> , <b>2010</b> , 123, 625-628  | 4.4    | 10  |
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| 66 | Highly permselective tadpole-type ionic anion exchange membranes for electrodialysis desalination. <i>Journal of Membrane Science</i> , <b>2020</b> , 600, 117861  | 9.6    | 9   |
| 65 | Platinum-decorated palladium-nanoflowers as high efficient low platinum catalyst towards oxygen reduction. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 22909-22914   | 6.7    | 9   |
| 64 | Enhancement of Oxygen Reduction Performance of Biomass-Derived Carbon through Co-Doping with Early Transition Metal. <i>Journal of the Electrochemical Society</i> , <b>2018</b> , 165, J3148-J3156  | 3.9    | 9   |
| 63 | Synthesis and characterizations of palladium catalysts with high activity and stability for formic acid oxidation by hydrogen reduction in ethylene glycol at room temperature. <i>Journal of Power Sources</i> , <b>2015</b> , 294, 556-561 | 8.9    | 8   |
| 62 | Robust InNCo3MMnx Nitride-Supported Pt Nanoparticles as High-Performance Bifunctional Electrocatalysts for ZnAir Batteries. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 5293-5300   | 6.1    | 8   |

| 61 | Effects of tailoring and dehydrated cross-linking on morphology evolution of ordered mesoporous carbons. <i>RSC Advances</i> , <b>2016</b> , 6, 19515-19521   | 3.7              | 8 |
|----|---|------------------|---|
| 60 | Volume production of high loading Pt/C catalyst with high performance via a microwave-assisted organic colloid route. <i>Journal of Power Sources</i> , <b>2012</b> , 210, 54-59  | 8.9              | 8 |
| 59 | Immobilization of highly active Pd nano-catalysts on functionalized mesoporous silica supports using mercapto groups as anchoring sites and their catalytic performance for phenol hydrogenation. <i>Chinese Journal of Catalysis</i> , <b>2013</b> , 34, 1519-1526 | 11.3             | 8 |
| 58 | Theoretical study on sulfonated and phosphonated poly[(aryloxy)phosphazenes] as proton-conducting membranes for fuel cell applications. <i>European Polymer Journal</i> , <b>2009</b> , 45, 2391-2394   | 4 <sup>5.2</sup> | 8 |
| 57 | Mono-disperse PdO nanoparticles prepared via microwave-assisted thermo-hydrolyzation with unexpectedly high activity for formic acid oxidation. <i>Electrochimica Acta</i> , <b>2020</b> , 329, 135166  | 6.7              | 8 |
| 56 | A bi-functional WO3-based anode enables both energy storage and conversion in an intermediate-temperature fuel cell. <i>Energy Storage Materials</i> , <b>2018</b> , 12, 79-84  | 19.4             | 8 |
| 55 | Glucose-derived carbon supported well-dispersed CrN as competitive oxygen reduction catalysts in acidic medium. <i>Electrochimica Acta</i> , <b>2019</b> , 314, 202-211   | 6.7              | 7 |
| 54 | In-situ formation of N doped hollow graphene Nanospheres/CNTs architecture with encapsulated Fe3C@C nanoparticles as efficient bifunctional oxygen electrocatalysts. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 828, 154238                             | 5.7              | 7 |
| 53 | Self-humidifying membrane electrode assembly prepared by adding microcrystalline cellulose in anode catalyst layer as preserve moisture. <i>International Journal of Hydrogen Energy</i> , <b>2014</b> , 39, 12842-12   | 848              | 7 |
| 52 | Platinum Nanoparticles on Interconnected Ni3P/Carbon Nanotubetarbon Nanofiber Hybrid Supports with Enhanced Catalytic Activity for Fuel Cells. <i>ChemElectroChem</i> , <b>2017</b> , 4, 109-114  | 4.3              | 7 |
| 51 | A Platinum Monolayer Core-Shell Catalyst with a Ternary Alloy Nanoparticle Core and Enhanced Stability for the Oxygen Reduction Reaction. <i>Journal of Nanomaterials</i> , <b>2015</b> , 2015, 1-11  | 3.2              | 7 |
| 50 | A mesoporous carbon derived from 4,4?-dipyridyl iron as an efficient catalyst for oxygen reduction.<br>Journal of Materials Chemistry A, <b>2020</b> , 8, 2439-2444   | 13               | 7 |
| 49 | Highly stable and efficient platinum nanoparticles supported on TiO 2 @Ru-C: investigations on the promoting effects of the interpenetrated TiO 2. <i>Electrochimica Acta</i> , <b>2016</b> , 216, 8-15   | 6.7              | 7 |
| 48 | Faraday waves in a Hele-Shaw cell. <i>Physics of Fluids</i> , <b>2018</b> , 30, 042106  | 4.4              | 6 |
| 47 | In-situ IR monitoring to probe the formation of structural defects in Zr-fumarate metal®rganic framework (MOF). <i>Polyhedron</i> , <b>2018</b> , 153, 205-212  | 2.7              | 6 |
| 46 | Synthesis, characterization, and catalytic behavior of two open-framework zinc phosphites with 2D and 3D structures. <i>Inorganic Chemistry Communication</i> , <b>2011</b> , 14, 150-154   | 3.1              | 6 |
| 45 | High pressure organic colloid method for the preparation of high performance carbon nanotube-supported Pt and PtRu catalysts for fuel cell applications. <i>Science China Technological Sciences</i> , <b>2010</b> , 53, 264-271                                    | 3.5              | 6 |
| 44 | Bis(phenylammonium) tetrachloridozincate(II) monohydrate. <i>Acta Crystallographica Section E:</i> Structure Reports Online, <b>2007</b> , 63, m2571-m2571  |                  | 6 |

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|----|---|------------------|---|
| 42 | Hexyl-modified series-connected bipyridine and DABCO di-cations functionalized anion exchange membranes for electrodialysis desalination. <i>Separation and Purification Technology</i> , <b>2021</b> , 265, 118526                 | 8.3              | 6 |
| 41 | MOF-Derived Carbon Materials Mounted with Highly Dispersed Ru and MoO3 for Rechargeable LiD2 Cathode Yield Enhanced Cyclability. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 2296-230.                      | 3 <sup>8.3</sup> | 6 |
| 40 | High-Performance 3D Pinecone-Like LiNi1/3Co1/3Mn1/3O2 Cathode for Lithium-Ion Batteries. <i>Energy Technology</i> , <b>2019</b> , 7, 1800769  | 3.5              | 6 |
| 39 | High oxygen reduction activity of TM13@Pt134 and TM12N@Pt134 (TM=Ti, V, Mn, Fe, Co, Ni, and Cu) core-shell electrocatalysts studied by first-principles theory. <i>Materials Chemistry and Physics</i> , <b>2018</b> , 212, 378-384 | 4.4              | 5 |
| 38 | Design of a Multispherical Cavity Carbon with In Situ Silica Modifications and Its Self-Humidification Application on Fuel Cell Anode Support. <i>Advanced Materials Interfaces</i> , <b>2018</b> , 5, 1800314                      | 4.6              | 5 |
| 37 | Nitrogen-containing porous cerium trimetaphosphimate as a new efficient base catalyst. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 6144   |                  | 5 |
| 36 | Porous grape-like spherical silica with hydrogen storage capability, synthesized using neutral dual surfactants as templates. <i>International Journal of Hydrogen Energy</i> , <b>2009</b> , 34, 3810-3815                         | 6.7              | 5 |
| 35 | LiFePO4/C Microspheres with Nano-micro Structure, Prepared by Spray Drying Method Assisted with PVA as Template. <i>Current Nanoscience</i> , <b>2012</b> , 8, 208-214  | 1.4              | 5 |
| 34 | Anodic oxidation of ethanol on inorganic membrane-based electrodes. <i>Applied Catalysis A: General</i> , <b>2004</b> , 258, 183-188  | 5.1              | 5 |
| 33 | Electrooxidation of methanol over a membrane-based electrode and effect of tungsten and molybdenum on the activity. <i>Applied Catalysis A: General</i> , <b>2002</b> , 235, 149-155  | 5.1              | 5 |
| 32 | Effects of Co doping sites on the electrochemical performance of LiNi0.5Mn1.5O4 as a cathode material. <i>Ionics</i> , <b>2020</b> , 26, 3777-3783  | 2.7              | 5 |
| 31 | Recent Development of Anode Electrocatalysts for Direct Methanol Fuel Cells. <i>Chinese Journal of Catalysis</i> , <b>2010</b> , 31, 141-149  | 11.3             | 5 |
| 30 | Steady-state multiple near resonances of periodic interfacial waves with rigid boundary. <i>Physics of Fluids</i> , <b>2020</b> , 32, 087104  | 4.4              | 5 |
| 29 | Spinel LiMn2O4 Nanoparticles Grown in Situ on Nitrogen-Doped Reduced Graphene Oxide as an Efficient Cathode for a Li-O2/Li-Ion Twin Battery. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 430-439            | 8.3              | 5 |
| 28 | Synthesis and Properties of Symmetric Side-Chain Quaternized Poly(Arylene Ether Sulfone)s for Anion Exchange Membrane Fuel Cells. <i>Macromolecular Chemistry and Physics</i> , <b>2018</b> , 219, 1700416                          | 2.6              | 4 |
| 27 | Construction of a high-performance air-breathing cathode using platinum catalyst supported by carbon black and carbon nanotubes. <i>International Journal of Hydrogen Energy</i> , <b>2016</b> , 41, 9191-9196                      | 6.7              | 4 |
| 26 | Effect of thermal treatment on structural change of anode electrocatalysts for direct methanol fuel cells. <i>Particuology</i> , <b>2014</b> , 15, 45-50  | 2.8              | 4 |

| 25 | Preparation of large Co nanosheets with enhanced coercivity by a magnetic-field-assisted solvothermal approach free of surfactants, complexants or templates. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2009</b> , 321, 2566-2570 | 2.8   | 4 |
|----|---|-------|---|
| 24 | Methanol-tolerant Se^Pt/C: effects of Se content on the structure and electrocatalytic performance for oxygen reduction reaction. <i>Ionics</i> , <b>2020</b> , 26, 1315-1323   | 2.7   | 4 |
| 23 | Applications of M/N/C analogue catalysts in PEM fuel cells and metal-air/oxygen batteries: Status quo, challenges and perspectives. <i>Progress in Natural Science: Materials International</i> , <b>2020</b> , 30, 807-814                     | 3.6   | 4 |
| 22 | Organic-phase synthesis of LiV(PO)@Carbon nanocrystals and their lithium storage properties <i>RSC Advances</i> , <b>2018</b> , 8, 19335-19340  | 3.7   | 4 |
| 21 | UIO-66-NH-derived mesoporous carbon used as a high-performance anode for the potassium-ion battery <i>RSC Advances</i> , <b>2020</b> , 11, 1039-1049  | 3.7   | 4 |
| 20 | In-situ grown vanadium nitride coated with thin layer of nitrogen-doped carbon as a highly durable binder-free cathode for LiD2 batteries. <i>Journal of Power Sources</i> , <b>2020</b> , 460, 228109  | 8.9   | 3 |
| 19 | Influence of Oxygen Contents on the Microstructure, High Temperature Oxidation and Corrosion Resistance Properties of CrBiDN Coatings. <i>Coatings</i> , <b>2018</b> , 8, 19  | 2.9   | 3 |
| 18 | An efficient basic catalyst based on a new germanium coordination complex. <i>Inorganic Chemistry Communication</i> , <b>2012</b> , 15, 221-224   | 3.1   | 3 |
| 17 | Surfacial carbonized palygorskite as support for high-performance Pt-based electrocatalysts.<br>Journal of Solid State Electrochemistry, <b>2013</b> , 17, 2009-2015  | 2.6   | 3 |
| 16 | Effect of Pt Oxidation State on Methanol Oxidation Activity. Chinese Journal of Catalysis, 2011, 32, 86-9   | 211.3 | 3 |
| 15 | Steady-state harmonic resonance of periodic interfacial waves with free-surface boundary conditions based on the homotopy analysis method. <i>Journal of Fluid Mechanics</i> , <b>2021</b> , 916,   | 3.7   | 3 |
| 14 | Biogelatin-Derived and N,S-Codoped 3D Network Carbon Materials Anchored with RuO2 as an Efficient Cathode for Rechargeable LiD2 Batteries. <i>Journal of Physical Chemistry C</i> ,   | 3.8   | 3 |
| 13 | Facile synthesis of high dispersion Fe2O3Au nanoparticles within mesoporous silica spheres. <i>RSC Advances</i> , <b>2015</b> , 5, 49914-49919  | 3.7   | 2 |
| 12 | Enhanced performance of LiNi0.03Mo0.01Mn1.96O4 cathode materials coated with biomass-derived carbon layer. <i>Ionics</i> , <b>2019</b> , 25, 917-925  | 2.7   | 2 |
| 11 | Accurate predictions of chaotic motion of a free fall disk. <i>Physics of Fluids</i> , <b>2021</b> , 33, 037111   | 4.4   | 2 |
| 10 | Influence of hydrophobic components tuning of poly (aryl ether sulfone)s ionomers based anion exchange membranes on diffusion dialysis for acid recovery. <i>Journal of Membrane Science</i> , <b>2021</b> , 636, 119562                        | 9.6   | 2 |
| 9  | Enhanced durability and self-humidification of platinum catalyst through decoration with SnSi binary oxide. <i>Journal of Applied Electrochemistry</i> , <b>2018</b> , 48, 1163-1173  | 2.6   | 1 |
| 8  | MNi4.8Sn0.2(M=La, Nd)-supported multi-walled carbon nanotube composites as hydrogen storage materials. <i>Science Bulletin</i> , <b>2007</b> , 52, 1616-1622  |       | 1 |

#### LIST OF PUBLICATIONS

| 7 | Yucca-like CoOllon Nanoarray with Abundant Oxygen Vacancies as a High-Performance Cathode for Lithium Dxygen Batteries. ACS Applied Energy Materials, 2020, 3, 12000-12008   | 6.1 | 1 |
|---|--|-----|---|
| 6 | A comparative study on the catalytic activities and stabilities of atomic-layered platinum on dispersed Ti0.9Cu0.1N nanoparticles supported by N-doped carbon nanotubes (N-CNTs) and reduced graphene oxide (N-rGO). <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 1857-1866 | 6.7 | 1 |
| 5 | Heterostructured Pd/Ti/Pd Thin Films as Highly Efficient Catalysts for Methanol and Formic Acid Oxidation. <i>ACS Applied Materials &amp; Discrete Acid</i> (13, 31725-31732)  | 9.5 | 1 |
| 4 | Effects of preparation conditions on the morphology and performance of palladium nanostructures. <i>International Journal of Hydrogen Energy</i> , <b>2019</b> , 44, 1525-1533   | 6.7 | 1 |
| 3 | Metallic cobalt encapsulated in N-doped carbon nanowires: a highly active bifunctional catalyst for oxygen reduction and evolution. <i>Ionics</i> , <b>2021</b> , 27, 3501-3509  | 2.7 | О |
| 2 | Lithium-rich layered nickelthanganese oxides as high-performance cathode materials: the effects of composition and PEG on performance. <i>Ionics</i> , <b>2016</b> , 22, 2067-2073   | 2.7 |   |

Diethylammonium ethyl (4-methylanilino)phosphonate chloroform solvate. *Acta Crystallographica Section E: Structure Reports Online*, **2007**, 63, o3955-o3955