# CITATION REPORT List of articles citing

Catalyst-free synthesis of nitrogen-doped graphene via thermal annealing graphite oxide with melamine and its excellent electrocatalysis

DOI: 10.1021/nn103584t ACS Nano, 2011, 5, 4350-8.

Source: https://exaly.com/paper-pdf/50146842/citation-report.pdf

Version: 2024-04-20

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

| #    | Paper   | IF   | Citations |
|------|---|------|-----------|
| 2215 |   |      |           |
| 2214 | Preparation and Characterization of Magnetic Biochar Nanocomposites via a Modified Solvothermal Method and Their Use as Efficient Heterogeneous Fenton-like Catalysts.      |      |           |
| 2213 | MetalOrganic Framework-Derived Hierarchical (Co,Ni)Se2@NiFe LDH Hollow Nanocages for Enhanced Oxygen Evolution.   |      |           |
| 2212 | Composition-Graded CuPd Nanospheres with Ir-Doped Surfaces on NDoped Porous Graphene for Highly Efficient Ethanol Electro-Oxidation in Alkaline Media.                      |      |           |
| 2211 | Ultra-Sensitive and Selective Detection of Arsenic(III) via Electroanalysis over Cobalt Single-Atom<br>Catalysts.   |      |           |
| 2210 | Three-Dimensional Nitrogen-Doped Carbon Nanotubes/Graphene Structure Used as a Metal-Free Electrocatalyst for the Oxygen Reduction Reaction. <b>2011</b> , 115, 24592-24597 |      | 160       |
| 2209 | Nanoporous graphitic-C3N4@carbon metal-free electrocatalysts for highly efficient oxygen reduction. <b>2011</b> , 133, 20116-9  |      | 869       |
| 2208 | Ab initio study of the interactions between boron and nitrogen dopants in graphene. <b>2012</b> , 112, 03430  | 4    | 40        |
| 2207 | Epitaxial graphene on 4H-SiC(0001) grown under nitrogen flux: evidence of low nitrogen doping and high charge transfer. <i>ACS Nano</i> , <b>2012</b> , 6, 10893-900        | 16.7 | 87        |
| 2206 | Atomistic description of electron beam damage in nitrogen-doped graphene and single-walled carbon nanotubes. <i>ACS Nano</i> , <b>2012</b> , 6, 8837-46                     | 16.7 | 101       |
| 2205 | Graphyne As a Promising Metal-Free Electrocatalyst for Oxygen Reduction Reactions in Acidic Fuel Cells: A DFT Study. <b>2012</b> , 116, 20472-20479                         |      | 97        |
| 2204 | Novel blue light emitting graphene oxide nanosheets fabricated by surface functionalization. <b>2012</b> , 22, 2929-2934  |      | 83        |
| 2203 | Flexible FET-type VEGF aptasensor based on nitrogen-doped graphene converted from conducting polymer. <i>ACS Nano</i> , <b>2012</b> , 6, 1486-93                            | 16.7 | 206       |
| 2202 | Co/CoO nanoparticles assembled on graphene for electrochemical reduction of oxygen. <b>2012</b> , 51, 1177  | 0-3  | 364       |
| 2201 | Co/CoO Nanoparticles Assembled on Graphene for Electrochemical Reduction of Oxygen. <b>2012</b> , 124, 11940-11943  |      | 126       |
| 2200 | Reduced graphene oxide/MWCNT hybrid sandwiched film by self-assembly for high performance supercapacitor electrodes. <b>2012</b> , 108, 701-707                             |      | 24        |
| 2199 | Enhanced solvothermal reduction of graphene oxide in a mixed solution of sulfuric acid and organic solvent. <b>2012</b> , 211-212, 97-103                                   |      | 36        |

#### (2012-2012)

| 219 | Wet chemical synthesis of nitrogen-doped graphene towards oxygen reduction electrocatalysts without high-temperature pyrolysis. <b>2012</b> , 22, 6575                                    | 257 |
|-----|---|-----|
| 219 | Polybenzimidazole mediated N-doping along the inner and outer surfaces of a carbon nanofiber and its oxygen reduction properties. <b>2012</b> , 22, 23668                                 | 13  |
| 219 | Crumpled nitrogen-doped graphene nanosheets with ultrahigh pore volume for high-performance supercapacitor. <b>2012</b> , 24, 5610-6  | 801 |
| 219 | 5 Synthese von <b>B</b> atchworkEGraphen aus Glucose. <b>2012</b> , 124, 9827-9830  | 40  |
| 219 | Synthesis of monolayer-patched graphene from glucose. <b>2012</b> , 51, 9689-92   | 332 |
| 219 | Synthesis of highly n-type graphene by using an ionic liquid. <b>2012</b> , 18, 12207-12  | 37  |
| 219 | Nanostructured metal-free electrochemical catalysts for highly efficient oxygen reduction. <b>2012</b> , 8, 3550-66   | 518 |
| 219 | 1 Graphene based catalysts. <b>2012</b> , 5, 8848   | 642 |
| 219 | Carbonization of ionic liquid polymer-functionalized carbon nanotubes for high dispersion of PtRu nanoparticles and their electrocatalytic oxidation of methanol. <b>2012</b> , 22, 13085 | 26  |
| 218 | 9 Synthesis of boron doped graphene for oxygen reduction reaction in fuel cells. <b>2012</b> , 22, 390-395  | 708 |
| 218 | Graphene enriched with pyrrolic coordination of the doped nitrogen as an efficient metal-free electrocatalyst for oxygen reduction. <b>2012</b> , 22, 23506                               | 143 |
| 218 | B and N doping in graphene ruled by grain boundary defects. <b>2012,</b> 85,  | 42  |
| 218 | Application of thermally reduced graphene oxide modified electrode in simultaneous determination of dihydroxybenzene isomers. <b>2012</b> , 174, 441-448                                  | 81  |
| 218 | Oxygen reduction reactions on pure and nitrogen-doped graphene: a first-principles modeling. <b>2012</b> , 4, 417-20  | 98  |
| 218 | Palladium Nanoparticles/Defective Graphene Composites as Oxygen Reduction Electrocatalysts: A First-Principles Study. <b>2012</b> , 116, 2710-2719  | 82  |
| 218 | N-doped graphene/carbon composite as non-precious metal electrocatalyst for oxygen reduction reaction. <b>2012</b> , 81, 313-320  | 89  |
| 218 | Highly tunable charge transport in layer-by-layer assembled graphene transistors. <i>ACS Nano</i> , <b>2012</b> , 6, 2432-40  | 77  |
| 218 | Easy synthesis of nitrogen-doped grapheneBilver nanoparticle hybrids by thermal treatment of graphite oxide with glycine and silver nitrate. <b>2012</b> , 50, 5148-5155                  | 35  |

| 2180                                 | Metal-free selenium doped carbon nanotube/graphene networks as a synergistically improved cathode catalyst for oxygen reduction reaction. <b>2012</b> , 4, 6455-60   |      | 189                             |
|--------------------------------------|--|------|---------------------------------|
| 2179                                 | Nitrogen-doped graphene and its iron-based composite as efficient electrocatalysts for oxygen reduction reaction. <i>ACS Nano</i> , <b>2012</b> , 6, 9541-50   | 16.7 | 578                             |
| 2178                                 | Nitrogen-doped graphene/ZnSe nanocomposites: hydrothermal synthesis and their enhanced electrochemical and photocatalytic activities. <i>ACS Nano</i> , <b>2012</b> , 6, 712-9   | 16.7 | 240                             |
| 2177                                 | An efficient method of producing stable graphene suspensions with less toxicity using dimethyl ketoxime. <b>2012</b> , 50, 5351-5358   |      | 23                              |
| 2176                                 | Nitrogen-doped carbon nanotubes synthesized by pyrolysis of nitrogen-rich metal phthalocyanine derivatives for oxygen reduction. <b>2012</b> , 22, 18230   |      | 25                              |
| 2175                                 | Metal-free nitrogen-doped hollow carbon spheres synthesized by thermal treatment of poly(o-phenylenediamine) for oxygen reduction reaction in direct methanol fuel cell applications. <b>2012</b> , 22, 10911  |      | 97                              |
| 2174                                 | Converting graphene oxide monolayers into boron carbonitride nanosheets by substitutional doping. <b>2012</b> , 8, 1384-91   |      | 87                              |
| 2173                                 | Review on Recent Progress in Nitrogen-Doped Graphene: Synthesis, Characterization, and Its Potential Applications. <b>2012</b> , 2, 781-794  |      | 2727                            |
| 2172                                 | Nitrogen-Doped Graphene Nanosheets as Metal-Free Catalysts for Aerobic Selective Oxidation of Benzylic Alcohols. <b>2012</b> , 2, 622-631  |      | 327                             |
|                                      |  |      |                                 |
| 2171                                 | Sulfur-doped graphene as an efficient metal-free cathode catalyst for oxygen reduction. <i>ACS Nano</i> , <b>2012</b> , 6, 205-11  | 16.7 | 1580                            |
| 2171                                 |  | 16.7 | 1580<br>236                     |
|                                      | <b>2012</b> , 6, 205-11  Facile preparation of nitrogen-doped graphene as a metal-free catalyst for oxygen reduction   | 16.7 |                                 |
| 2170                                 | 2012, 6, 205-11  Facile preparation of nitrogen-doped graphene as a metal-free catalyst for oxygen reduction reaction. 2012, 14, 3381-7  Significant enhancement of blue emission and electrical conductivity of N-doped graphene. 2012,   | 16.7 | 236                             |
| 2170<br>2169                         | Facile preparation of nitrogen-doped graphene as a metal-free catalyst for oxygen reduction reaction. 2012, 14, 3381-7  Significant enhancement of blue emission and electrical conductivity of N-doped graphene. 2012, 22, 17992  Exploration of the active center structure of nitrogen-doped graphene-based catalysts for oxygen  | 16.7 | 236                             |
| 2170<br>2169<br>2168<br>2167         | Facile preparation of nitrogen-doped graphene as a metal-free catalyst for oxygen reduction reaction. 2012, 14, 3381-7  Significant enhancement of blue emission and electrical conductivity of N-doped graphene. 2012, 22, 17992  Exploration of the active center structure of nitrogen-doped graphene-based catalysts for oxygen reduction reaction. 2012, 5, 7936  Nitrogen-doped graphene with high nitrogen level via a one-step hydrothermal reaction of  | 16.7 | 236<br>159<br>1813              |
| 2170<br>2169<br>2168<br>2167         | Facile preparation of nitrogen-doped graphene as a metal-free catalyst for oxygen reduction reaction. 2012, 14, 3381-7  Significant enhancement of blue emission and electrical conductivity of N-doped graphene. 2012, 22, 17992  Exploration of the active center structure of nitrogen-doped graphene-based catalysts for oxygen reduction reaction. 2012, 5, 7936  Nitrogen-doped graphene with high nitrogen level via a one-step hydrothermal reaction of graphene oxide with urea for superior capacitive energy storage. 2012, 2, 4498  Synthesis of Nitrogen-Doped Graphene via Thermal Annealing Graphene with Urea. 2012, 25, 325-329 | 16.7 | 236<br>159<br>1813<br>604       |
| 2170<br>2169<br>2168<br>2167<br>2166 | Facile preparation of nitrogen-doped graphene as a metal-free catalyst for oxygen reduction reaction. 2012, 14, 3381-7  Significant enhancement of blue emission and electrical conductivity of N-doped graphene. 2012, 22, 17992  Exploration of the active center structure of nitrogen-doped graphene-based catalysts for oxygen reduction reaction. 2012, 5, 7936  Nitrogen-doped graphene with high nitrogen level via a one-step hydrothermal reaction of graphene oxide with urea for superior capacitive energy storage. 2012, 2, 4498  Synthesis of Nitrogen-Doped Graphene via Thermal Annealing Graphene with Urea. 2012, 25, 325-329 | 16.7 | 236<br>159<br>1813<br>604<br>25 |

| 2162 | Graphene-based materials for energy conversion. <b>2012</b> , 24, 4203-10   | 265 |
|------|---|-----|
| 2161 | A Computational Investigation of the Catalytic Properties of Graphene Oxide: Exploring Mechanisms by using DFT Methods. <b>2012</b> , 4, 1844-1849  | 112 |
| 2160 | Can commonly used hydrazine produce n-type graphene?. <b>2012</b> , 18, 7665-70   | 37  |
| 2159 | Metal-free nitrogen-containing carbon nanotubes prepared from triazole and tetrazole derivatives show high electrocatalytic activity towards the oxygen reduction reaction in alkaline media. <b>2012</b> , 5, 647-51 | 51  |
| 2158 | Low temperature growth of highly nitrogen-doped single crystal graphene arrays by chemical vapor deposition. <b>2012</b> , 134, 11060-3   | 262 |
| 2157 | Anodic chlorine/nitrogen co-doping of reduced graphene oxide films at room temperature. <b>2012</b> , 50, 3333-3341   | 38  |
| 2156 | Nitrogen doped multi walled carbon nanotubes produced by CVD-correlating XPS and Raman spectroscopy for the study of nitrogen inclusion. <b>2012</b> , 50, 3535-3541  | 218 |
| 2155 | Influence of N-doping on the structural and photoluminescence properties of graphene oxide films. <b>2012</b> , 50, 3799-3806   | 63  |
| 2154 | Coals as a novel cathode catalyst for polymer electrolyte fuel cell. <b>2012</b> , 94, 204-210  | 16  |
| 2153 | A powerful approach to fabricate nitrogen-doped graphene sheets with high specific surface area. <b>2012</b> , 14, 39-42  | 82  |
| 2152 | Enhanced electrocatalytic activity of nitrogen-doped graphene for the reduction of nitro explosives. <b>2012</b> , 16, 30-33  | 33  |
| 2151 | Electrochemical sensor based on nitrogen doped graphene: simultaneous determination of ascorbic acid, dopamine and uric acid. <b>2012</b> , 34, 125-31  | 584 |
| 2150 | Synthesis and electrochemical applications of nitrogen-doped carbon nanomaterials. <b>2013</b> , 2, 615-635   | 45  |
| 2149 | Nitrogen-doped graphene as low-cost counter electrode for high-efficiency dye-sensitized solar cells. <b>2013</b> , 92, 269-275   | 84  |
| 2148 | Separation of graphene oxide by density gradient centrifugation and study on their morphology-dependent electrochemical properties. <b>2013</b> , 703, 135-145  | 20  |
| 2147 | Preparation and characterization of Pt nanoparticles supported on modified graphite nanoplatelet using solution blending method. <b>2013</b> , 38, 8909-8913  | 10  |
| 2146 | Electrolytic graphene oxide and its electrochemical properties. <b>2013</b> , 704, 233-241  | 26  |
| 2145 | Synthesis and supercapacitor performance studies of N-doped graphene materials using o-phenylenediamine as the double-N precursor. <b>2013</b> , 63, 508-516  | 165 |

| 2144 | Facile synthesis of hybrid graphene and carbon nanotubes as a metal-free electrocatalyst with active dual interfaces for efficient oxygen reduction reaction. <b>2013</b> , 1, 9603 | 37  |
|------|---|-----|
| 2143 | Free-standing nitrogen-doped carbon nanofiber films as highly efficient electrocatalysts for oxygen reduction. <b>2013</b> , 5, 9528-31   | 104 |
| 2142 | Solar light assisted green synthesis of palladium nanoparticle decorated nitrogen doped graphene for hydrogen storage application. <b>2013</b> , 1, 11192                           | 58  |
| 2141 | Energy-level structure of nitrogen-doped graphene quantum dots. <b>2013</b> , 1, 4908   | 222 |
| 2140 | Electrochemical and oxygen reduction properties of pristine and nitrogen-doped few layered graphene nanoflakes (FLGs). <b>2013</b> , 17, 2139-2149                                  | 28  |
| 2139 | Edge-selectively sulfurized graphene nanoplatelets as efficient metal-free electrocatalysts for oxygen reduction reaction: the electron spin effect. <b>2013</b> , 25, 6138-45      | 465 |
| 2138 | Electrocatalysis on shape-controlled titanium nitride nanocrystals for the oxygen reduction reaction. <b>2013</b> , 6, 2016-21  | 81  |
| 2137 | Selective nitrogen doping in graphene for oxygen reduction reactions. <b>2013</b> , 49, 9627-9  | 152 |
| 2136 | KOH-activated nitrogen-doped graphene by means of thermal annealing for supercapacitor. <b>2013</b> , 17, 1809-1814   | 50  |
| 2135 | Constructing 2D porous graphitic C3 N4 nanosheets/nitrogen-doped graphene/layered MoS2 ternary nanojunction with enhanced photoelectrochemical activity. <b>2013</b> , 25, 6291-7   | 683 |
| 2134 | Non-precious Ir <b>I</b> bimetallic nanoclusters assembled on reduced graphene nanosheets as catalysts for the oxygen reduction reaction. <b>2013</b> , 1, 11457                    | 46  |
| 2133 | Mechanochemically driven solid-state DielsAlder reaction of graphite into graphene nanoplatelets. <b>2013</b> , 4, 4273   | 42  |
| 2132 | Doped Graphene: Theory, Synthesis, Characterization, and Applications. 2013, 183-207  | 4   |
| 2131 | Hierarchical interconnected macro-/mesoporous Co-containing N-doped carbon for efficient oxygen reduction reactions. <b>2013</b> , 1, 12074   | 58  |
| 2130 | Modeling electronic properties and quantum transport in doped and defective graphene. <b>2013</b> , 175-176, 90-100   | 30  |
| 2129 | Graphene for energy solutions and its industrialization. <b>2013</b> , 5, 10108-26  | 71  |
| 2128 | Synthesis and properties of an atomically thin carbon nanosheet similar to graphene and its promising use as an organic thin film transistor. <b>2013</b> , 55, 299-304             | 34  |
| 2127 | Effects of N-doping concentration on graphene structures and properties. <b>2013</b> , 581, 74-79   | 7   |

## (2013-2013)

| 2126 | Scalable synthesis of pyrrolic N-doped graphene by atmospheric pressure chemical vapor deposition and its terahertz response. <b>2013</b> , 62, 330-336  | 44          |
|------|--|-------------|
| 2125 | Simultaneous electrochemical detection of ascorbic acid, dopamine and uric acid based on nitrogen doped porous carbon nanopolyhedra. <b>2013</b> , 1, 2742-2749                                  | 143         |
| 2124 | Covalent functionalization based heteroatom doped graphene nanosheet as a metal-free electrocatalyst for oxygen reduction reaction. <b>2013</b> , 5, 12255-60                                    | 61          |
| 2123 | Advanced oxygen reduction electrocatalyst based on nitrogen-doped graphene derived from edible sugar and urea. <b>2013</b> , 5, 11108-14   | 173         |
| 2122 | In situ growth of p and n-type graphene thin films and diodes by pulsed laser deposition. <b>2013</b> , 103, 192109  | 14          |
| 2121 | MgO-catalyzed growth of N-doped wrinkled carbon nanotubes. <b>2013</b> , 56, 38-44   | 40          |
| 2120 | Electrocatalytic Activity of BN Codoped Graphene Oxide Derived from Carbon Dioxide. 2013, 117, 24167-241   | <b>73</b> 8 |
| 2119 | UV-irradiation induced defect formation on graphene on metals. <b>2013</b> , 587, 56-60  | 16          |
| 2118 | Dry Synthesis of Easily Tunable Nano Ruthenium Supported on Graphene: Novel Nanocatalysts for Aerial Oxidation of Alcohols and Transfer Hydrogenation of Ketones. <b>2013</b> , 117, 23582-23596 | 83          |
| 2117 | Facile preparation of nitrogen-doped reduced graphene oxide as a metal-free catalyst for oxygen reduction reaction. <b>2013</b> , 48, 8101-8107  | 30          |
| 2116 | Oxygen Reduction Electrocatalysis Using N-Doped Graphene Quantum-Dots. <b>2013</b> , 4, 4160-4165  | 112         |
| 2115 | Iron- and Nitrogen-Functionalized Graphene Nanosheet and Nanoshell Composites as a Highly Active Electrocatalyst for Oxygen Reduction Reaction. <b>2013</b> , 117, 26501-26508                   | 65          |
| 2114 | The influence of boron dopant on the electrochemical properties of graphene as an electrode material and a support for Pt catalysts. <b>2013</b> , 114, 582-589                                  | 32          |
| 2113 | Synthesis of graphene from asphaltene molecules adsorbed on vermiculite layers. <b>2013</b> , 62, 213-221  | 50          |
| 2112 | Synthesis of a hydrophilic poly-l-lysine/graphene hybrid through multiple non-covalent interactions for biosensors. <b>2013</b> , 1, 1406-1413   | 50          |
| 2111 | Nitrogen-doped graphene for dye-sensitized solar cells and the role of nitrogen states in triiodide reduction. <b>2013</b> , 6, 3356   | 243         |
| 2110 | Synthesis of amino-functionalized graphene as metal-free catalyst and exploration of the roles of various nitrogen states in oxygen reduction reaction. <b>2013</b> , 2, 88-97                   | 377         |
| 2109 | N-heterocycles tethered graphene as efficient metal-free catalysts for an oxygen reduction reaction in fuel cells. <b>2013</b> , 1, 10166  | 13          |

| 2108         | Nitrogen-doped graphenellanadium carbide hybrids as a high-performance oxygen reduction reaction electrocatalyst support in alkaline media. <b>2013</b> , 1, 13404  | 47  |
|--------------|---|-----|
| 2107         | One-pot solvothermal synthesis of ZnSelkN2H4/GS and ZnSe/N-GS and enhanced visible-light photocatalysis. <b>2013</b> , 5, 8414-22   | 32  |
| 2106         | Introduction of nitrogen with controllable configuration into graphene via vacancies and edges. <b>2013</b> , 1, 14927  | 32  |
| 2105         | Effect of carbon nanofiber surface functional groups on oxygen reduction in alkaline solution. <b>2013</b> , 225, 192-199   | 113 |
| 2104         | Synthesis of nitrogen doped graphene with high electrocatalytic activity toward oxygen reduction reaction. <b>2013</b> , 28, 24-26  | 201 |
| 2103         | Electrocatalytic activity of nitrogen-doped graphene synthesized via a one-pot hydrothermal process towards oxygen reduction reaction. <b>2013</b> , 227, 185-190   | 149 |
| 2102         | Simple preparation of nanoporous few-layer nitrogen-doped graphene for use as an efficient electrocatalyst for oxygen reduction and oxygen evolution reactions. <b>2013</b> , 53, 130-136                           | 298 |
| 2101         | Graphene-related nanomaterials: tuning properties by functionalization. <b>2013</b> , 5, 4541-83  | 524 |
| <b>21</b> 00 | Recent progress in nanostructured electrocatalysts for PEM fuel cells. <b>2013</b> , 1, 4631  | 157 |
| 2099         | Graphene-xerogel-based non-precious metal catalyst for oxygen reduction reaction. <b>2013</b> , 28, 5-8   | 22  |
| 2098         | Synthesis and characterization of nitrogen-doped graphene hydrogels by hydrothermal route with urea as reducing-doping agents. <b>2013</b> , 1, 2248-2255   | 313 |
| 2097         | Electrocatalysis of oxygen reduction on nitrogen-containing multi-walled carbon nanotube modified glassy carbon electrodes. <b>2013</b> , 87, 709-716   | 100 |
| 2096         | FeCoNx embedded graphene as high performance catalysts for oxygen reduction reaction. <b>2013</b> , 130-131, 143-151  | 153 |
| 2095         | Insight into the origin of the positive effects of imidazolium salt on electrocatalytic activity: ionic carbon nanotubes as metal-free electrocatalysts for oxygen reduction reaction. <b>2013</b> , 8, 232-7       | 6   |
| 2094         | Synthesis of three-dimensional flowerlike nitrogen-doped carbons by a copyrolysis route and the effect of nitrogen species on the electrocatalytic activity in oxygen reduction reaction. <b>2013</b> , 54, 249-257 | 130 |
| 2093         | Increased magnetization of reduced graphene oxide by nitrogen-doping. <b>2013</b> , 60, 549-551   | 42  |
| 2092         | High-performance lithium storage in nitrogen-enriched carbon nanofiber webs derived from polypyrrole. <b>2013</b> , 106, 320-326  | 146 |
| 2091         | Nitrogen-doped fullerene as a potential catalyst for hydrogen fuel cells. <b>2013</b> , 135, 3315-8   | 134 |

## (2013-2013)

| 2090 | Highly nitrogen-doped carbon capsules: scalable preparation and high-performance applications in fuel cells and lithium ion batteries. <b>2013</b> , 5, 2726-33                         | 158 |
|------|---|-----|
| 2089 | Synthesis of graphitic carbon nitride through pyrolysis of melamine and its electrocatalysis for oxygen reduction reaction. <b>2013</b> , 24, 103-106                                   | 62  |
| 2088 | Synthesis of nitrogen-doped graphene by pyrolysis of ionic-liquid-functionalized graphene. <b>2013</b> , 1, 1713  | 38  |
| 2087 | A simple process to prepare nitrogen-modified few-layer graphene for a supercapacitor electrode. <b>2013</b> , 57, 184-190  | 72  |
| 2086 | Nitrogen-enriched carbon from melamine resins with superior oxygen reduction reaction activity. <b>2013</b> , 6, 807-12   | 71  |
| 2085 | In situ fabrication of porous graphene electrodes for high-performance energy storage. <i>ACS Nano</i> , <b>2013</b> , 7, 2422-30   | 374 |
| 2084 | Palladium nanoparticles supported on nitrogen-doped HOPG: a surface science and electrochemical study. <b>2013</b> , 15, 2923-31  | 38  |
| 2083 | 3D Nitrogen-doped graphene prepared by pyrolysis of graphene oxide with polypyrrole for electrocatalysis of oxygen reduction reaction. <b>2013</b> , 2, 241-248                         | 326 |
| 2082 | Recent progress in doped carbon nanomaterials as effective cathode catalysts for fuel cell oxygen reduction reaction. <b>2013</b> , 236, 238-249  | 408 |
| 2081 | Nitrogen-doped partially reduced graphene oxide rewritable nonvolatile memory. <i>ACS Nano</i> , <b>2013</b> , 7, 3607-15   | 56  |
| 2080 | Simple synthesis of macroporous carbongraphene composites and their use as a support for Pt electrocatalysts. <b>2013</b> , 90, 283-290   | 35  |
| 2079 | FeN doped carbon nanotube/graphene composite: facile synthesis and superior electrocatalytic activity. <b>2013</b> , 1, 3302  | 106 |
| 2078 | Hydrothermal synthesis of macroscopic nitrogen-doped graphene hydrogels for ultrafast supercapacitor. <b>2013</b> , 2, 249-256  | 469 |
| 2077 | Controllable synthesis of nitrogen-doped graphene and its effect on the simultaneous electrochemical determination of ascorbic acid, dopamine, and uric acid. <b>2013</b> , 59, 418-429 | 113 |
| 2076 | Superhigh capacity and rate capability of high-level nitrogen-doped graphene sheets as anode materials for lithium-ion batteries. <b>2013</b> , 90, 492-497                             | 95  |
| 2075 | Electrochemical behavior of N and Ar implanted highly oriented pyrolytic graphite substrates and activity toward oxygen reduction reaction. <b>2013</b> , 88, 477-487                   | 47  |
| 2074 | A green approach to the synthesis of high-quality graphene oxide flakes via electrochemical exfoliation of pencil core. <b>2013</b> , 3, 11745  | 119 |
| 2073 | Graphene quantum dot hybrids as efficient metal-free electrocatalyst for the oxygen reduction reaction. <b>2013</b> , 5, 3362-9   | 110 |

| 2072 | Nitrogen-doped reduced-graphene oxide as an efficient metal-free electrocatalyst for oxygen reduction in fuel cells. <b>2013</b> , 3, 3990   | 92  |
|------|--|-----|
| 2071 | Three dimensional N-doped graphene-CNT networks for supercapacitor. <b>2013</b> , 49, 5016-8   | 302 |
| 2070 | Enhanced electrochemical oxygen reduction reaction by restacking of N-doped single graphene layers. <b>2013</b> , 3, 4246  | 30  |
| 2069 | In situ nitrogen-doped graphene grown from polydimethylsiloxane by plasma enhanced chemical vapor deposition. <b>2013</b> , 5, 600-5   | 98  |
| 2068 | PtAu/nitrogen-doped graphene nanocomposites for enhanced electrochemical activities. <b>2013</b> , 1, 1754-1762  | 105 |
| 2067 | A nitrogen-doped graphene/carbon nanotube nanocomposite with synergistically enhanced electrochemical activity. <b>2013</b> , 25, 3192-6   | 520 |
| 2066 | Nitrogen-doped graphene hollow nanospheres as novel electrode materials for supercapacitor applications. <b>2013</b> , 243, 973-981  | 140 |
| 2065 | Tuning nanoparticle catalysis for the oxygen reduction reaction. <b>2013</b> , 52, 8526-44   | 808 |
| 2064 | The synergetic effect of N-doped graphene and silver nanowires for high electrocatalytic performance in the oxygen reduction reaction. <b>2013</b> , 3, 11552                            | 41  |
| 2063 | Facile synthesis of triangular shaped palladium nanoparticles decorated nitrogen doped graphene and their catalytic study for renewable energy applications. <b>2013</b> , 38, 2240-2250 | 95  |
| 2062 | Microorganism-Derived Heteroatom-Doped Carbon Materials for Oxygen Reduction and Supercapacitors. <b>2013</b> , 23, 1305-1312  | 195 |
| 2061 | Phosphorus-doped graphene nanosheets as efficient metal-free oxygen reduction electrocatalysts. <b>2013</b> , 3, 9978  | 317 |
| 2060 | Selective and sensitive determination of uric acid in the presence of ascorbic acid and dopamine by PDDA functionalized graphene/graphite composite electrode. <b>2013</b> , 112, 31-6   | 53  |
| 2059 | Zeolitic imidazolate framework (ZIF)-derived, hollow-core, nitrogen-doped carbon nanostructures for oxygen-reduction reactions in PEFCs. <b>2013</b> , 19, 9335-42                       | 130 |
| 2058 | Nitrogen-doped graphene nanoplatelets from simple solution edge-functionalization for n-type field-effect transistors. <b>2013</b> , 135, 8981-8   | 102 |
| 2057 | One-step synthesis of graphene via catalyst-free gas-phase hydrocarbon detonation. <b>2013</b> , 24, 245602  | 38  |
| 2056 | Simultaneous reduction and N-doping of graphene oxides by low-energy N2+ ion sputtering. <b>2013</b> , 62, 365-373   | 18  |
| 2055 | Ordered mesoporous boron-doped carbons as metal-free electrocatalysts for the oxygen reduction reaction in alkaline solution. <b>2013</b> , 15, 2459-65                                  | 114 |

| 2054 | N/P-Codoped Thermally Reduced Graphene for High-Performance Supercapacitor Applications. <b>2013</b> , 117, 14912-14919  | 114 |
|------|--|-----|
| 2053 | Identifying the active site in nitrogen-doped graphene for the VO2+/VO2(+) redox reaction. ACS Nano, <b>2013</b> , 7, 4764-73                                      | 206 |
| 2052 | Easy and controlled synthesis of nitrogen-doped carbon. <b>2013</b> , 55, 98-107   | 35  |
| 2051 | Facile, scalable synthesis of edge-halogenated graphene nanoplatelets as efficient metal-free eletrocatalysts for oxygen reduction reaction. <b>2013</b> , 3, 1810 | 278 |
| 2050 | Nitrogen Doping Mechanism in Small Diameter Single-Walled Carbon Nanotubes: Impact on Electronic Properties and Growth Selectivity. <b>2013</b> , 117, 25805-25816 | 40  |
| 2049 | One-pot microbial method to synthesize dual-doped graphene and its use as high-performance electrocatalyst. <b>2013</b> , 3, 3499                                  | 48  |
| 2048 | The Effect of Metal Catalyst on the Electrocatalytic Activity of Nitrogen-Doped Carbon Nanotubes. <b>2013</b> , 117, 25213-25221                                   | 34  |
| 2047 | Graphene and its application in fuel cell catalysis: a review. <b>2013</b> , 8, 218-233  | 58  |
| 2046 | Uniform and Conformal Carbon Nanofilms Produced Based on Molecular Layer Deposition. <b>2013</b> , 6, 5602-561   | 220 |
| 2045 | Carbon Mono and Dioxide Hydrogenation over Pure and Metal Oxide Decorated Graphene Oxide Substrates: Insight from DFT. <b>2013</b> , 02, 109-114                   | 2   |
| 2044 | Study of simultaneous reduction and nitrogen doping of graphene oxide Langmuir-Blodgett monolayer sheets by ammonia plasma treatment. <b>2013</b> , 24, 355704     | 38  |
| 2043 | Nitrogen-doped graphitic carbon synthesized by laser annealing of sumanenemonoone imine as a bowl-shaped Etonjugated molecule. <b>2013</b> , 8, 2569-74            | 16  |
| 2042 | Space-Confinement-Induced Synthesis of Pyridinic- and Pyrrolic-Nitrogen-Doped Graphene for the Catalysis of Oxygen Reduction. <b>2013</b> , 125, 11971-11975       | 174 |
| 2041 | Near-edge x-ray absorption fine structure spectroscopy study of nitrogen incorporation in chemically reduced graphene oxide. <b>2013</b> , 31, 041204              | 30  |
| 2040 | Optimierte Nanopartikel-Katalyse fildie Sauerstoffreduktionsreaktion. <b>2013</b> , 125, 8686-8705   | 105 |
| 2039 | . 2014,  | 15  |
| 2038 | Efficient removal of a typical dye and Cr(VI) reduction using N-doped magnetic porous carbon. <b>2014</b> , 4, 63110-63117   | 47  |
| 2037 | Activation of n -e Transitions in Two-Dimensional Conjugated Polymers for Visible Light Photocatalysis. <b>2014</b> , 118, 29981-29989                             | 244 |

| 2036 | Fabrication of graphene foam supported carbon nanotube/polyaniline hybrids for high-performance supercapacitor applications. <b>2014</b> , 1, 034002   | 16  |
|------|--|-----|
| 2035 | Carbon nanotubes/heteroatom-doped carbon core-sheath nanostructures as highly active, metal-free oxygen reduction electrocatalysts for alkaline fuel cells. <b>2014</b> , 53, 4102-6                         | 148 |
| 2034 | The Electrochemistry of Graphene. <b>2014</b> , 79-126   | 0   |
| 2033 | Nitrogen-doped graphene composites as efficient electrodes with enhanced capacitive deionization performance. <b>2014</b> , 4, 63189-63199   | 36  |
| 2032 | Self-protected nickel@raphene hybrid low density 3D scaffolds. <b>2014</b> , 2, 19488-19494  | 14  |
| 2031 | Facile synthesis of reduced graphene oxide-modified, nitrogen-doped carbon xerogel with enhanced electrochemical capacitance. <b>2014</b> , 148, 1171-1177   | 6   |
| 2030 | Nitrogen-doped porous graphitic carbon as an excellent electrode material for advanced supercapacitors. <b>2014</b> , 20, 564-74   | 333 |
| 2029 | Sumanenemonoone imines bridged by redox-active Econjugated unit: synthesis, stepwise coordination to palladium(II), and laser-induced formation of nitrogen-doped graphitic carbon. <b>2014</b> , 9, 2568-75 | 13  |
| 2028 | Highly nitrogen-doped mesoscopic carbons as efficient metal-free electrocatalysts for oxygen reduction reactions. <b>2014</b> , 2, 20030-20037   | 34  |
| 2027 | Nitrogen-doped graphene supported Pd@PdO core-shell clusters for C-C coupling reactions. <b>2014</b> , 7, 1280-1290  | 59  |
| 2026 | Enhanced thermal oxidation stability of reduced graphene oxide by nitrogen doping. <b>2014</b> , 20, 11999-2003  | 59  |
| 2025 | Co/Co3O4/CN, a novel nanostructure and excellent catalytic system for the oxygen reduction reaction. <b>2014</b> , 8, 118-125  | 97  |
| 2024 | Fabrication and Electrochemical Performance of Nitrogen-Doped Graphene Synthesized by Hydrothermal Method. <b>2014</b> , 804, 35-38  |     |
| 2023 | Synthesis of nitrogen doped graphene from graphene oxide within an ammonia flame for high performance supercapacitors. <b>2014</b> , 4, 55394-55399  | 66  |
| 2022 | ZIF-8 Derived Graphene-Based Nitrogen-Doped Porous Carbon Sheets as Highly Efficient and Durable Oxygen Reduction Electrocatalysts. <b>2014</b> , 126, 14459-14463   | 69  |
| 2021 | Ruthenium nanoparticles supported on nitrogen-doped carbon nanofibers for the catalytic wet air oxidation of phenol. <b>2014</b> , 146, 177-185  | 73  |
| 2020 | Chemically modified graphite felt as an efficient cathode in electro-Fenton for p-nitrophenol degradation. <b>2014</b> , 140, 376-383  | 147 |
| 2019 | A fantastic graphitic carbon nitride (g-C3N4) material: Electronic structure, photocatalytic and photoelectronic properties. <b>2014</b> , 20, 33-50   | 603 |

## (2014-2014)

| 2018 | Tungsten oxide nanowires grown on graphene oxide sheets as high-performance electrochromic material. <b>2014</b> , 129, 40-46   | 32  |
|------|---|-----|
| 2017 | Highly active Vulcan carbon composite for oxygen reduction reaction in alkaline medium. <b>2014</b> , 133, 391-398  | 49  |
| 2016 | Nanostructured Pt supported on cocoon-derived carbon as an efficient electrocatalyst for methanol oxidation. <b>2014</b> , 18, 1503-1512  | 11  |
| 2015 | Electrocatalytic oxygen reduction on nitrogen-doped graphene in alkaline media. <b>2014</b> , 147, 369-376  | 189 |
| 2014 | Carbon Nanotubes/Heteroatom-Doped Carbon CoreBheath Nanostructures as Highly Active, Metal-Free Oxygen Reduction Electrocatalysts for Alkaline Fuel Cells. <b>2014</b> , 126, 4186-4190 | 63  |
| 2013 | Metal-free catalysts for oxygen reduction in alkaline electrolytes: Influence of the presence of Co, Fe, Mn and Ni inclusions. <b>2014</b> , 128, 271-278                               | 110 |
| 2012 | Highly-dispersed boron-doped graphene nanoribbons with enhanced conductibility and photocatalysis. <b>2014</b> , 50, 6637-40  | 80  |
| 2011 | A general quantitative pH sensor developed with dicyandiamide N-doped high quantum yield graphene quantum dots. <b>2014</b> , 6, 3868-74  | 309 |
| 2010 | A composite of Co nanoparticles highly dispersed on N-rich carbon substrates: an efficient electrocatalyst for Li-O(2) battery cathodes. <b>2014</b> , 50, 776-8                        | 81  |
| 2009 | Controllable synthesis of doped graphene and its applications. <b>2014</b> , 10, 2975-91  | 46  |
| 2008 | Doped graphene for metal-free catalysis. <b>2014</b> , 43, 2841-57  | 608 |
| 2007 | Large scale production of biomass-derived N-doped porous carbon spheres for oxygen reduction and supercapacitors. <b>2014</b> , 2, 3317   | 179 |
| 2006 | Beanpod-shaped FeIII composite as promising ORR catalyst for fuel cells operated in neutral media. <b>2014</b> , 2, 2623  | 45  |
| 2005 | Graphene nanoplatelets doped with N at its edges as metal-free cathodes for organic dye-sensitized solar cells. <b>2014</b> , 26, 3055-62   | 132 |
| 2004 | Exploring the active sites of nitrogen-doped graphene as catalysts for the oxygen reduction reaction. <b>2014</b> , 39, 15996-16005   | 133 |
| 2003 | A general approach for fabrication of nitrogen-doped graphene sheets and its application in supercapacitors. <b>2014</b> , 417, 270-7   | 74  |
| 2002 | Silicene as a highly sensitive molecule sensor for NH3, NO and NO2. <b>2014</b> , 16, 6957-62   | 173 |
| 2001 | 25th anniversary article: Chemically modified/doped carbon nanotubes & graphene for optimized nanostructures & nanodevices. <b>2014</b> , 26, 40-66                                     | 432 |

| 2000 | Application of N-doped graphene modified carbon ionic liquid electrode for direct electrochemistry of hemoglobin. <b>2014</b> , 39, 86-91   | 20   |
|------|---|------|
| 1999 | Conversion of pyrazoline to pyrazole in hydrazine treated N-substituted reduced graphene oxide films obtained by ion bombardment and their electrical properties. <b>2014</b> , 74, 32-43 | 21   |
| 1998 | Hydrogen evolution by a metal-free electrocatalyst. <b>2014</b> , 5, 3783   | 1572 |
| 1997 | In situ nitrogen-doped nanoporous carbon nanocables as an efficient metal-free catalyst for oxygen reduction reaction. <b>2014</b> , 2, 10154   | 67   |
| 1996 | A Review of Graphene-Based Nanostructural Materials for Both Catalyst Supports and Metal-Free Catalysts in PEM Fuel Cell Oxygen Reduction Reactions. <b>2014</b> , 4, 1301523             | 365  |
| 1995 | Bicontinuous nanoporous N-doped graphene for the oxygen reduction reaction. <b>2014</b> , 26, 4145-50   | 229  |
| 1994 | Electrochromic Characteristics of Nitrogen-Doped Graphene/TiO2 Nanocomposite Electrodes. <b>2014</b> , 123, 268-277   | 8    |
| 1993 | Ultra-high-performance doped carbon catalyst derived from o-phenylenediamine and the probable roles of Fe and melamine. <b>2014</b> , 158-159, 60-69                                      | 43   |
| 1992 | One-step synthesis of dopamine-derived micro/mesoporous nitrogen-doped carbon materials for highly efficient oxygen-reduction catalysts. <b>2014</b> , 262, 414-420                       | 30   |
| 1991 | Investigation of hydrogen peroxide reduction reaction on graphene and nitrogen doped graphene nanoflakes in neutral solution. <b>2014</b> , 257, 356-363                                  | 39   |
| 1990 | Facile single-step synthesis of nitrogen-doped reduced graphene oxide-Mn(3)O(4) hybrid functional material for the electrocatalytic reduction of oxygen. <b>2014</b> , 6, 2692-9          | 186  |
| 1989 | Co9S8 nanoflakes on graphene (Co9S8/G) nanocomposites for high performance supercapacitors. <b>2014</b> , 4, 21151-21162  | 87   |
| 1988 | Heterogeneous nanocarbon materials for oxygen reduction reaction. <b>2014</b> , 7, 576  | 792  |
| 1987 | High-performance bi-functional electrocatalysts of 3D crumpled graphenellobalt oxide nanohybrids for oxygen reduction and evolution reactions. <b>2014</b> , 7, 609-616                   | 524  |
| 1986 | Hierarchically porous graphene sheets and graphitic carbon nitride intercalated composites for enhanced oxygen reduction reaction. <b>2014</b> , 2, 3209-3215                             | 49   |
| 1985 | Facile synthesis of mesoporous nitrogen-doped graphene: An efficient methanol <b>B</b> olerant cathodic catalyst for oxygen reduction reaction. <b>2014</b> , 3, 55-63                    | 169  |
| 1984 | Improved electrocatalytic activity of carbon materials by nitrogen doping. <b>2014</b> , 147, 633-641   | 92   |
| 1983 | Rapid synthesis of nitrogen-doped graphene for a lithium ion battery anode with excellent rate performance and super-long cyclic stability. <b>2014</b> , 16, 1060-6                      | 127  |

| 1982 | Sulfur-doped graphene as a potential alternative metal-free electrocatalyst and Pt-catalyst supporting material for oxygen reduction reaction. <b>2014</b> , 16, 103-9  | 185 |
|------|---|-----|
| 1981 | Microwave-assisted solvothermal preparation of nitrogen and sulfur co-doped reduced graphene oxide and graphene quantum dots hybrids for highly efficient oxygen reduction. <b>2014</b> , 2, 20605-20611      | 66  |
| 1980 | A two-dimensional hybrid with molybdenum disulfide nanocrystals strongly coupled on nitrogen-enriched graphene via mild temperature pyrolysis for high performance lithium storage. <b>2014</b> , 6, 14679-85 | 59  |
| 1979 | ZIF-8 derived graphene-based nitrogen-doped porous carbon sheets as highly efficient and durable oxygen reduction electrocatalysts. <b>2014</b> , 53, 14235-9   | 724 |
| 1978 | Dyeing bacterial cellulose pellicles for energetic heteroatom doped carbon nanofiber aerogels. <b>2014</b> , 7, 1861-1872   | 84  |
| 1977 | Patterned graphene functionalization via mask-free scanning of micro-plasma jet under ambient condition. <b>2014</b> , 104, 103105  | 60  |
| 1976 | 3 D single-walled carbon nanotube/graphene aerogels as pt-free transparent counter electrodes for high efficiency dye-sensitized solar cells. <b>2014</b> , 7, 3304-11  | 47  |
| 1975 | PtRu nanoparticles supported on nitrogen-doped polyhedral mesoporous carbons as electrocatalyst for methanol oxidation. <b>2014</b> , 25, 135607  | 17  |
| 1974 | Formation of nitrogen-doped mesoporous graphitic carbon with the help of melamine. <b>2014</b> , 6, 20574-8   | 36  |
| 1973 | Mussel-inspired nitrogen-doped graphene nanosheet supported manganese oxide nanowires as highly efficient electrocatalysts for oxygen reduction reaction. <b>2014</b> , 2, 6167                               | 39  |
| 1972 | Nitrogen doped graphene: influence of precursors and conditions of the synthesis. <b>2014</b> , 2, 2887-2893  | 54  |
| 1971 | Nanodiamond/carbon nitride hybrid nanoarchitecture as an efficient metal-free catalyst for oxidant- and steam-free dehydrogenation. <b>2014</b> , 2, 13442-13451  | 59  |
| 1970 | Synthesis of an efficient heteroatom-doped carbon electro-catalyst for oxygen reduction reaction by pyrolysis of protein-rich pulse flour cooked with SiO2 nanoparticles. <b>2014</b> , 16, 4251-9            | 40  |
| 1969 | Design and synthesis of carbonized polypyrrole-coated graphene aerogel acting as an efficient metal-free catalyst for oxygen reduction. <b>2014</b> , 4, 16979-16984  | 23  |
| 1968 | Synthesis of nitrogen-doped reduced graphene oxide directly from nitrogen-doped graphene oxide as a high-performance lithium ion battery anode. <b>2014</b> , 4, 42412-42417                                  | 66  |
| 1967 | Two and three dimensional network polymers for electrocatalysis. <b>2014</b> , 16, 11150-61   | 8   |
| 1966 | Graphene and its composites with nanoparticles for electrochemical energy applications. <b>2014</b> , 9, 668-683  | 204 |
| 1965 | Layered graphene nanostructures functionalized with NH-rich polyelectrolytes through self-assembly: construction and their application in trace Cu(ii) detection. <b>2014</b> , 2, 2212-2219                  | 29  |

| 1964 | Enhancing the Li storage capacity and initial coulombic efficiency for porous carbons by sulfur doping. <b>2014</b> , 6, 15950-8                                   | 74  |
|------|--|-----|
| 1963 | Engineering self-assembled N-doped graphene-carbon nanotube composites towards efficient oxygen reduction electrocatalysts. <b>2014</b> , 16, 13605-9              | 23  |
| 1962 | A three-dimensional multilayered SiOgraphene nanostructure as a superior anode material for lithium-ion batteries. <b>2014</b> , 4, 36502-36506                    | 2   |
| 1961 | Pt-Cu bimetallic electrocatalysts with enhanced catalytic properties for oxygen reduction. <b>2014</b> , 50, 13889-92  | 35  |
| 1960 | Hydrothermal synthesis of nitrogen-doped graphene hydrogels using amino acids with different acidities as doping agents. <b>2014</b> , 2, 8352-8361                | 121 |
| 1959 | Bioinspired copper catalyst effective for both reduction and evolution of oxygen. <b>2014</b> , 5, 5285  | 166 |
| 1958 | Facile preparation of mesoporous graphenes by the sacrificial template approach for direct methanol fuel cell application. <b>2014</b> , 2, 19914-19919            | 7   |
| 1957 | A simple approach towards nitrogen-doped graphene and metal/graphene by solid-state pyrolysis of metal phthalocyanine. <b>2014</b> , 38, 2993-2998                 | 12  |
| 1956 | Submerged liquid plasma flow energy synthesis of nitrogen-doped graphene for electrochemical applications. <b>2014</b> , 2, 3332-3337                              | 45  |
| 1955 | Hexamethylenetetramine mediated simultaneous nitrogen doping and reduction of graphene oxide for a metal-free SERS substrate. <b>2014</b> , 4, 44146-44150         | 11  |
| 1954 | From graphite oxide to nitrogen and sulfur co-doped few-layered graphene by a green reduction route via Chinese medicinal herbs. <b>2014</b> , 4, 17902            | 23  |
| 1953 | Nitrogen-doped reduced graphene oxide for high-performance flexible all-solid-state micro-supercapacitors. <b>2014</b> , 2, 18125-18131                            | 128 |
| 1952 | Facile synthesis of a mesoporous Co3O4 network for Li-storage via thermal decomposition of an amorphous metal complex. <b>2014</b> , 6, 12476-81                   | 50  |
| 1951 | In situ simultaneous reductiondoping route to synthesize hematite/N-doped graphene nanohybrids with excellent photoactivity. <b>2014</b> , 4, 31754-31758          | 15  |
| 1950 | 2D polyacrylonitrile brush derived nitrogen-doped carbon nanosheets for high-performance electrocatalysts in oxygen reduction reaction. <b>2014</b> , 5, 2057-2064 | 49  |
| 1949 | Nitrogen-enriched carbon from bamboo fungus with superior oxygen reduction reaction activity. <b>2014</b> , 2, 18263-18270   | 63  |
| 1948 | Ordered hierarchically porous carbon codoped with iron and nitrogen as electrocatalyst for the oxygen reduction reaction. <b>2014</b> , 7, 3435-41                 | 15  |
| 1947 | Preparation of N-doped graphene by reduction of graphene oxide with mixed microbial system and its haemocompatibility. <b>2014</b> , 6, 4882-8                     | 37  |

| 1946 | Three-dimensional iron, nitrogen-doped carbon foams as efficient electrocatalysts for oxygen reduction reaction in alkaline solution. <b>2014</b> , 142, 317-323             | 28         |
|------|--|------------|
| 1945 | Polypyrrole-derived nitrogen and oxygen co-doped mesoporous carbons as efficient metal-free electrocatalyst for hydrazine oxidation. <b>2014</b> , 26, 6510-6                | 97         |
| 1944 | Nitrogen-doped carbon coated SiO nanoparticles Co-modified with nitrogen-doped graphene as a superior anode material for lithium-ion batteries. <b>2014</b> , 4, 35717-35725 | 5          |
| 1943 | Shape-controlled porous nanocarbons for high performance supercapacitors. <b>2014</b> , 2, 5236  | 47         |
| 1942 | Monodispersed N-doped carbon nanospheres for supercapacitor application. <b>2014</b> , 6, 13968-76   | 179        |
| 1941 | Platinum nanoparticles on porphyrin functionalized graphene nanosheets as a superior catalyst for methanol electrooxidation. <b>2014</b> , 6, 14999-5007                     | 62         |
| 1940 | Pyrolyzed FeNC Composite as an Efficient Non-precious Metal Catalyst for Oxygen Reduction Reaction in Acidic Medium. <b>2014</b> , 4, 3928-3936                              | 251        |
| 1939 | Fe-N-C Electrocatalysts for Oxygen Reduction Reaction Synthesized by Using Aniline Salt and Fe3+/H2O2 Catalytic System. <b>2014</b> , 146, 809-818                           | 24         |
| 1938 | Nitrogen-doped mesoporous graphene as a synergistic electrocatalyst matrix for high-performance oxygen reduction reaction. <b>2014</b> , 6, 17654-60                         | 49         |
| 1937 | Bio-inspired highly active catalysts for oxygen reduction reaction in alkaline electrolyte. <b>2014</b> , 39, 12613-1261   | <b>9</b> 8 |
| 1936 | Nitrogen-doped and simultaneously reduced graphene oxide with superior dispersion as electrocatalysts for oxygen reduction reaction. <b>2014</b> , 59, 145-149               | 7          |
| 1935 | Fabrication of functionalized nitrogen-doped graphene for supercapacitor electrodes. <b>2014</b> , 20, 1489-1494   | 22         |
| 1934 | Liquid crystal size selection of large-size graphene oxide for size-dependent N-doping and oxygen reduction catalysis. <i>ACS Nano</i> , <b>2014</b> , 8, 9073-80            | 99         |
| 1933 | Chemical Structure of Nitrogen-Doped Graphene with Single Platinum Atoms and Atomic Clusters as a Platform for the PEMFC Electrode. <b>2014</b> , 118, 3890-3900             | 105        |
| 1932 | A self-sponsored doping approach for controllable synthesis of S and N co-doped trimodal-porous structured graphitic carbon electrocatalysts. <b>2014</b> , 7, 3720-3726     | 180        |
| 1931 | Metal-free doped carbon materials as electrocatalysts for the oxygen reduction reaction. <b>2014</b> , 2, 4085-4110  | 608        |
|      |  |            |
| 1930 | One-pot synthesis of microporous carbons highly enriched in nitrogen and their electrochemical performance. <b>2014</b> , 2, 14439-14448                                     | 63         |

| 1928 | Nanoporous graphene by quantum dots removal from graphene and its conversion to a potential oxygen reduction electrocatalyst via nitrogen doping. <b>2014</b> , 7, 1059 | 140  |
|------|---|------|
| 1927 | Upcycling Waste Polypropylene into Graphene Flakes on Organically Modified Montmorillonite. <b>2014</b> , 53, 4173-4181   | 57   |
| 1926 | Possible Oxygen Reduction Reactions for Graphene Edges from First Principles. <b>2014</b> , 118, 17616-17625  | 46   |
| 1925 | Advanced oxygen reduction reaction catalyst based on nitrogen and sulfur co-doped graphene in alkaline medium. <b>2014</b> , 16, 23196-205                              | 31   |
| 1924 | Synthesis of boron and nitrogen doped graphene supporting PtRu nanoparticles as catalysts for methanol electrooxidation. <b>2014</b> , 317, 284-293                     | 37   |
| 1923 | Heteroatom-doped graphene materials: syntheses, properties and applications. <b>2014</b> , 43, 7067-98  | 1258 |
| 1922 | MnO nanoparticles interdispersed in 3D porous carbon framework for high performance lithium-ion batteries. <b>2014</b> , 6, 12713-8                                     | 71   |
| 1921 | Phosphorus doped graphene nanosheets for room temperature NH3 sensing. <b>2014</b> , 38, 2269   | 109  |
| 1920 | Enhanced electrode performance of Fe2O3 nanoparticle-decorated nanomesh graphene as anodes for lithium-ion batteries. <b>2014</b> , 6, 7189-97                          | 80   |
| 1919 | Low-loading cobalt coupled with nitrogen-doped porous graphene as excellent electrocatalyst for oxygen reduction reaction. <b>2014</b> , 2, 9079                        | 55   |
| 1918 | Carbon Composite Cathode Catalysts for Alkaline PEM Fuel Cells. <b>2014</b> , 319-356   | 2    |
| 1917 | Recent progress on nitrogen/carbon structures designed for use in energy and sustainability applications. <b>2014</b> , 7, 1212-1249                                    | 487  |
| 1916 | Synthesis of nitrogen doped graphite oxide and its electrochemical properties. <b>2014</b> , 14, 82-86  | 25   |
| 1915 | Flexible nitrogen-doped graphene/carbon nanotube/Co3O4 paper and its oxygen reduction activity. <b>2014</b> , 6, 7534-41  | 72   |
| 1914 | Metal-free B-doped graphene with efficient electrocatalytic activity for hydrogen evolution reaction. <b>2014</b> , 4, 2023-2030  | 217  |
| 1913 | One-pot synthesis of nitrogen and sulfur co-doped graphene as efficient metal-free electrocatalysts for the oxygen reduction reaction. <b>2014</b> , 50, 4839-42        | 266  |
| 1912 | Observation of active sites for oxygen reduction reaction on nitrogen-doped multilayer graphene. <i>ACS Nano</i> , <b>2014</b> , 8, 6856-62                             | 445  |
| 1911 | Identifying atomic sites in N-doped pristine and defective graphene from ab initio core level binding energies. <b>2014</b> , 76, 155-164                               | 13   |

| 1910 | Confined nanospace synthesis of less aggregated and porous nitrogen-doped graphene as metal-free electrocatalysts for oxygen reduction reaction in alkaline solution. <b>2014</b> , 6, 3023-30          | 40  |
|------|---|-----|
| 1909 | A rapid and sensitive method for hydroxyl radical detection on a microfluidic chip using an N-doped porous carbon nanofiber modified pencil graphite electrode. <b>2014</b> , 139, 3416-22              | 28  |
| 1908 | Nitrogen-Doped Graphene:Effects of nitrogen species on the properties of the vanadium redox flow battery. <b>2014</b> , 138, 93-100   | 69  |
| 1907 | Preparation of nitrogen-doped graphene supporting Pt nanoparticles as a catalyst for oxygen reduction and methanol oxidation. <b>2014</b> , 728, 41-50  | 36  |
| 1906 | Nitrogen-doped graphene with enhanced oxygen reduction activity produced by pyrolysis of graphene functionalized with imidazole derivatives. <b>2014</b> , 39, 12749-12756                              | 22  |
| 1905 | Highly active nitrogen-doped few-layer graphene/carbon nanotube composite electrocatalyst for oxygen reduction reaction in alkaline media. <b>2014</b> , 73, 361-370                                    | 226 |
| 1904 | Electroreduction of oxygen on palladium nanoparticles supported on nitrogen-doped graphene nanosheets. <b>2014</b> , 137, 206-212   | 56  |
| 1903 | Integrated Synthesis of Nitrogen-Doped Mesoporous Carbon from Melamine Resins with Superior Performance in Supercapacitors. <b>2014</b> , 118, 2507-2517  | 147 |
| 1902 | Carbon black/sulfur-doped graphene composite prepared by pyrolysis of graphene oxide with sodium polysulfide for oxygen reduction reaction. <b>2014</b> , 142, 51-60                                    | 26  |
| 1901 | Hollow mesoporous carbon nitride nanosphere/three-dimensional graphene composite as high efficient electrocatalyst for oxygen reduction reaction. <b>2014</b> , 272, 696-702                            | 48  |
| 1900 | Palladium nanoparticles supported on graphitic carbon nitride-modified reduced graphene oxide as highly efficient catalysts for formic acid and methanol electrooxidation. <b>2014</b> , 2, 19084-19094 | 113 |
| 1899 | Effect of Transition Metals on the Structure and Performance of the Doped Carbon Catalysts Derived From Polyaniline and Melamine for ORR Application. <b>2014</b> , 4, 3797-3805                        | 275 |
| 1898 | Graphene quantum dots cut from graphene flakes: high electrocatalytic activity for oxygen reduction and low cytotoxicity. <b>2014</b> , 4, 23097-23106  | 51  |
| 1897 | Iron-nitrogen-doped mesoporous tungsten carbide nanostructures as oxygen reduction electrocatalysts. <b>2014</b> , 16, 14644-50   | 25  |
| 1896 | Hierarchical Carbon Mitrogen Architectures with Both Mesopores and Macrochannels as Excellent Cathodes for Rechargeable Li D2 Batteries. <b>2014</b> , 24, 6826-6833                                    | 145 |
| 1895 | N-doped graphene: an alternative carbon-based matrix for highly efficient detection of small molecules by negative ion MALDI-TOF MS. <b>2014</b> , 86, 9122-30  | 94  |
| 1894 | Facile synthesis of hollow FeNIC hybrid nanostructures for oxygen reduction reactions. <b>2014</b> , 422, 3-7   | 9   |
| 1893 | In situ formation of Ni(OH)2 nanoparticle on nitrogen-doped reduced graphene oxide nanosheet for high-performance supercapacitor electrode material. <b>2014</b> , 317, 370-377                         | 35  |

| 1892 | An electrochemical sensor based on the three-dimensional functionalized graphene for simultaneous determination of hydroquinone and catechol. <b>2014</b> , 722-723, 38-45 | 39  |
|------|--|-----|
| 1891 | Plasma-assisted nitrogen doping of graphene-encapsulated Pt nanocrystals as efficient fuel cell catalysts. <b>2014</b> , 2, 472-477  | 40  |
| 1890 | Single step fabrication of N-doped graphene/Si3N4/SiC heterostructures. <b>2014</b> , 7, 835-843   | 14  |
| 1889 | Graphene-supported nanoelectrocatalysts for fuel cells: synthesis, properties, and applications. <b>2014</b> , 114, 5117-60  | 790 |
| 1888 | Highly-Ordered Mesoporous Carbon Nitride with Ultrahigh Surface Area and Pore Volume as a Superior Dehydrogenation Catalyst. <b>2014</b> , 26, 3151-3161                   | 202 |
| 1887 | Efficient oxygen reduction electrocatalyst based on edge-nitrogen-rich graphene nanoplatelets: toward a large-scale synthesis. <b>2014</b> , 6, 3930-6                     | 43  |
| 1886 | Simultaneous reduction, exfoliation, and nitrogen doping of graphene oxide via a hydrothermal reaction for energy storage electrode materials. <b>2014</b> , 69, 66-78     | 139 |
| 1885 | Nitrogen-containing carbon nanostructures: A promising carrier for catalysis of ammonia borane dehydrogenation. <b>2014</b> , 68, 462-472                                  | 24  |
| 1884 | Pd Nanoparticles on Functionalized Graphene for Excellent Detection of Nitro aromatic Compounds. <b>2014</b> , 119, 243-250  | 31  |
| 1883 | Phenylacetylene hydrogenation on Fe@C and Ni@C coreBhell nanoparticles: About intrinsic activity of graphene-like carbon layer in H2 activation. <b>2014</b> , 74, 291-301 | 54  |
| 1882 | First principles study of oxygen reduction reaction mechanisms on N-doped graphene with a transition metal support. <b>2014</b> , 140, 225-231                             | 45  |
| 1881 | Nitrogen-doped graphene for supercapacitor with long-term electrochemical stability. <b>2014</b> , 70, 612-617   | 151 |
| 1880 | Synthesis of nitrogen-doped graphene via solid microwave method. <b>2014</b> , 185, 129-133  | 6   |
| 1879 | Highly efficient cathode catalyst layer based on nitrogen-doped carbon nanotubes for the alkaline direct methanol fuel cell. <b>2014</b> , 156-157, 341-349                | 28  |
| 1878 | Rapid synthesis of nitrogen-doped graphene by microwave heating for oxygen reduction reactions in alkaline electrolyte. <b>2014</b> , 35, 509-513                          | 16  |
| 1877 | Hybrid of Iron Nitride and Nitrogen-Doped Graphene Aerogel as Synergistic Catalyst for Oxygen Reduction Reaction. <b>2014</b> , 24, 2930-2937                              | 348 |
| 1876 | Catalytic Mechanisms of Sulfur-Doped Graphene as Efficient Oxygen Reduction Reaction Catalysts for Fuel Cells. <b>2014</b> , 118, 3545-3553                                | 316 |
| 1875 | Selective and sensitive electrochemical detection of dopamine based on water-soluble porphyrin functionalized graphene nanocomposites. <b>2014</b> , 4, 9261               | 49  |

| 1874 | The Handbook of Graphene Electrochemistry. <b>2014</b> ,  | 123  |
|------|---|------|
| 1873 | A novel Pt/CeO2 catalyst coated with nitrogen-doped carbon with excellent performance for DMFCs. <b>2014</b> , 2, 4038  | 49   |
| 1872 | Preparation of Mn-N-C catalyst and its electrocatalytic activity for the oxygen reduction reaction in alkaline medium. <b>2014</b> , 42, 467-475  | 13   |
| 1871 | Recent advances in zinc-air batteries. <b>2014</b> , 43, 5257-75  | 1484 |
| 1870 | Doping of Graphene by Nitrogen, Boron, and Other Elements. <b>2014</b> , 283-358  | 5    |
| 1869 | N-Doped Hierarchical Hollow Mesoporous Carbon as Metal-Free Cathode for Dye-Sensitized Solar Cells. <b>2014</b> , 118, 16694-16702  | 44   |
| 1868 | Direct synthesis of nitrogen-doped carbon nanosheets with high surface area and excellent oxygen reduction performance. <b>2014</b> , 30, 8238-45   | 111  |
| 1867 | Facile graphene n-doping by wet chemical treatment for electronic applications. <b>2014</b> , 6, 8503-8   | 25   |
| 1866 | The value of mixed conduction for oxygen electroreduction on graphenethitosan composites. <b>2014</b> , 73, 234-243   | 13   |
| 1865 | Electrocatalytic activity of a nitrogen-enriched mesoporous carbon framework and its hybrids with metal nanoparticles fabricated through the pyrolysis of block copolymers. <b>2015</b> , 5, 105760-105773        | 7    |
| 1864 | Structure and Electroanalytical Application of Nitrogen-doped Carbon Thin Film Electrode with Lower Nitrogen Concentration. <b>2015</b> , 31, 651-6   | 10   |
| 1863 | - Different Functionalization Methods of Carbon-Based Nanomaterials. <b>2015</b> , 54-83  |      |
| 1862 | Doped Graphene as Electrocatalysts for Oxygen Reduction Reaction. <b>2015</b> , 17-42   | 1    |
| 1861 | Multifunctional graphene-based nanostructures for efficient electrocatalytic reduction of oxygen. <b>2015</b> , 90, 2132-2151   | 20   |
| 1860 | Intercorrelated Superhybrid of AgBr Supported on Graphitic-C3N4-Decorated Nitrogen-Doped Graphene: High Engineering Photocatalytic Activities for Water Purification and CO2 Reduction. <b>2015</b> , 27, 6906-13 | 249  |
| 1859 | Carbon-Based Nanostructures for Advanced Catalysis. <b>2015</b> , 7, 2806-2815  | 77   |
| 1858 | Efficient tuning of microstructure and surface chemistry of nanocarbon catalysts for ethylbenzene direct dehydrogenation. <b>2015</b> , 61, 2543-2561   | 26   |
| 1857 | Supramolecular Polymerization Promoted In Situ Fabrication of Nitrogen-Doped Porous Graphene Sheets as Anode Materials for Li-Ion Batteries. <b>2015</b> , 5, 1500559   | 112  |

| 1856 | Soft-Templating Synthesis of N-Doped Mesoporous Carbon Nanospheres for Enhanced Oxygen Reduction Reaction. <b>2015</b> , 10, 1546-53                                       | 52  |
|------|--|-----|
| 1855 | Tin Nanodots Encapsulated in Porous Nitrogen-Doped Carbon Nanofibers as a Free-Standing Anode for Advanced Sodium-Ion Batteries. <b>2015</b> , 27, 6702-7                  | 445 |
| 1854 | Homogenous CoreBhell Nitrogen-Doped Carbon Nanotubes for the Oxygen Reduction Reaction. <b>2015</b> , 2, 1892-1896   | 4   |
| 1853 | Order of Activity of Nitrogen, Iron Oxide, and FeNx Complexes towards Oxygen Reduction in Alkaline Medium. <b>2015</b> , 8, 4016-21  | 22  |
| 1852 | One-Pot Synthesis of a Nitrogen-Doped Carbon Composite by Electrospinning as a Metal-Free Catalyst for Oxidation of H2S to Sulfur. <b>2015</b> , 7, 2957-2964              | 39  |
| 1851 | Nitrogen-Doped Multilayer Graphene as Functional Filler for Carbon/Polyamide 12<br>Nanocomposites. <b>2015</b> , 300, 785-792  | 11  |
| 1850 | Bifunctional Electrocatalytic Activity of Boron-Doped Graphene Derived from Boron Carbide. <b>2015</b> , 5, 1500658  | 112 |
| 1849 | On the Role of Metals in Nitrogen-Doped Carbon Electrocatalysts for Oxygen Reduction. <b>2015</b> , 54, 10102-20   | 514 |
| 1848 | . 2015,  | 6   |
| 1847 | Nitrogen-Doped Carbon Nanotube and Graphene Materials for Oxygen Reduction Reactions. <b>2015</b> , 5, 1574-1602   | 145 |
| 1846 | Ru-N-C Hybrid Nanocomposite for Ammonia Dehydrogenation: Influence of N-doping on Catalytic Activity. <b>2015</b> , 8, 3442-3455   | 16  |
| 1845 | Reduction Expansion Synthesis as Strategy to Control Nitrogen Doping Level and Surface Area in Graphene. <b>2015</b> , 8, 7048-7058  | 13  |
| 1844 | X-ray photoelectron spectroscopy of graphitic carbon nanomaterials doped with heteroatoms. <b>2015</b> , 6, 177-92   | 243 |
| 1843 | Facile and gram-scale synthesis of metal-free catalysts: toward realistic applications for fuel cells. <b>2015</b> , 5, 8376   | 44  |
| 1842 | Light reharvesting and enhanced efficiency of dye-sensitized solar cells based 3D-CNT/graphene counter electrodes. <b>2015</b> , 3, 12307-12313                            | 28  |
| 1841 | Self-Assembly Synthesis of N-Doped Carbon Aerogels for Supercapacitor and Electrocatalytic Oxygen Reduction. <b>2015</b> , 7, 12760-6                                      | 92  |
| 1840 | Nitrogen and fluorine co-doped graphite nanofibers as high durable oxygen reduction catalyst in acidic media for polymer electrolyte fuel cells. <b>2015</b> , 93, 130-142 | 101 |
| 1839 | Nitrogen and fluorine dual-doped mesoporous graphene: a high-performance metal-free ORR electrocatalyst with a super-low HO2(-) yield. <b>2015</b> , 7, 10584-9            | 80  |

| 1838 | Multifunctional glucose biosensors from Fe <b>D</b> [hanoparticles modified chitosan/graphene nanocomposites. <b>2015</b> , 5, 11129   | 87 |
|------|--|----|
| 1837 | Single pot electrochemical synthesis of functionalized and phosphorus doped graphene nanosheets for supercapacitor applications. <b>2015</b> , 26, 6319-6328   | 33 |
| 1836 | Nitrogen-doped carbon nanoparticles derived from acrylonitrile plasma for electrochemical oxygen reduction. <b>2015</b> , 17, 6227-32  | 66 |
| 1835 | Electrocatalytic activity of Mn/Cu doped Fe2O3BANIEGO composites for fuel cell applications. <b>2015</b> , 5, 39455-39463  | 6  |
| 1834 | Graphene Oxide. <b>2015</b> ,  | 61 |
| 1833 | GO/rGO as Advanced Materials for Energy Storage and Conversion. <b>2015</b> , 97-127   |    |
| 1832 | Nitrogen doped graphene prepared by hydrothermal and thermal solid state methods as catalyst supports for fuel cell. <b>2015</b> , 40, 4337-4348   | 50 |
| 1831 | Fabrication of nitrogen doped graphene oxide coatings: experimental and theoretical approach for surface protection. <b>2015</b> , 5, 19264-19272  | 79 |
| 1830 | Understanding room-temperature metastability of graphene oxide utilizing hydramines from a synthetic chemistry view. <b>2015</b> , 5, 49688-49695  | 12 |
| 1829 | Influence of Carbon Precursors on the Structure, Composition, and Oxygen Reduction Reaction Performance of Nitrogen-Doped Carbon Materials. <b>2015</b> , 119, 28757-28765                               | 38 |
| 1828 | Doped graphene supercapacitors. <b>2015</b> , 26, 492001   | 67 |
| 1827 | Fe/N co-doped carbon microspheres as a high performance electrocatalyst for the oxygen reduction reaction. <b>2015</b> , 5, 107389-107395  | 8  |
| 1826 | Conversion of polystyrene into porous carbon sheets and hollow carbon shells over different magnesium oxide templates for efficient removal of methylene blue. <b>2015</b> , 5, 105047-105056            | 23 |
| 1825 | Remarkable performance of heavily nitrogenated graphene in the oxygen reduction reaction of fuel cells in alkaline medium. <b>2015</b> , 2, 095503   | 7  |
| 1824 | One-step hydrothermal synthesis of nitrogen and sulfur co-doped graphene for supercapacitors with high electrochemical capacitance performance. <b>2015</b> , 21, 3233-3238                              | 15 |
| 1823 | Study of Configuration Differentia and Highly Efficient, Deep-Blue, Organic Light-Emitting Diodes Based on Novel Naphtho[1,2-d]imidazole Derivatives. <b>2015</b> , 25, 5190-5198                        | 81 |
| 1822 | Carbon Nitride Encapsulated Nanodiamond Hybrid with Improved Catalytic Performance for Clean and Energy-Saving Styrene Production via Direct Dehydrogenation of Ethylbenzene. <b>2015</b> , 3, 3355-3364 | 27 |
| 1821 | Electrochemical detection of ciprofloxacin based on graphene modified glassy carbon electrode. <b>2015</b> , 30, 362-367   | 13 |

| 1820 | Nitrogen-doped graphene aerogels as efficient supercapacitor electrodes and gas adsorbents. <b>2015</b> , 7, 1431-8   | 312 |
|------|---|-----|
| 1819 | N-doped hierarchically macro/mesoporous carbon with excellent electrocatalytic activity and durability for oxygen reduction reaction. <b>2015</b> , 86, 108-117       | 136 |
| 1818 | Nitrogen-doped carbon nanotubes as catalysts for the oxygen reduction reaction in alkaline medium. <b>2015</b> , 279, 28-35   | 33  |
| 1817 | Mesoporous nitrogen-doped carbon derived from carp with high electrocatalytic performance for oxygen reduction reaction. <b>2015</b> , 278, 213-217                   | 22  |
| 1816 | Hydrogenation and dehydrogenation of nitrogen-doped graphene investigated by X-ray photoelectron spectroscopy. <b>2015</b> , 634, 89-94                               | 7   |
| 1815 | One-pot synthesis of diiron phosphide/nitrogen-doped graphene nanocomposite for effective hydrogen generation. <b>2015</b> , 12, 666-674                              | 85  |
| 1814 | Direct synthesis of multi-layer graphene film on various substrates by microwave plasma at low temperature. <b>2015</b> , 587, 8-13                                   | 22  |
| 1813 | Fe 3 C-functionalized 3D nitrogen-doped carbon structures for electrochemical detection of hydrogen peroxide. <b>2015</b> , 60, 522-531                               | 42  |
| 1812 | Nitrogen-rich carbon coupled multifunctional metal oxide/graphene nanohybrids for long-life lithium storage and efficient oxygen reduction. <b>2015</b> , 12, 578-587 | 66  |
| 1811 | Novel band gap-tunable KNa co-doped graphitic carbon nitride prepared by molten salt method. <b>2015</b> , 332, 625-630   | 90  |
| 1810 | Graphene Polymer Nanocomposites for Fuel Cells. <b>2015</b> , 91-130  | 3   |
| 1809 | Pd confined in grass-like graphene layers on monolithic cordierite as the catalyst for hydrogenation of 4-carboxybenzaldehyde. <b>2015</b> , 36, 148-152              | 7   |
| 1808 | Microwave Enabled One-Pot, One-Step Fabrication and Nitrogen Doping of Holey Graphene Oxide for Catalytic Applications. <b>2015</b> , 11, 3358-68                     | 98  |
| 1807 | Thermal Cyclodebromination of Polybromopyrroles to Polymer with High Performance for Supercapacitor. <b>2015</b> , 119, 3881-3891                                     | 18  |
| 1806 | A simple approach to the synthesis of BCN graphene with high capacitance. <b>2015</b> , 26, 045402  | 54  |
| 1805 | High Surface Iron/Cobalt-Containing Nitrogen-Doped Carbon Aerogels as Non-Precious Advanced Electrocatalysts for Oxygen Reduction. <b>2015</b> , 2, 584-591           | 56  |
| 1804 | Nitrogen-doped graphene for generation and evolution of reactive radicals by metal-free catalysis. <b>2015</b> , 7, 4169-78   | 471 |
| 1803 | Polyaniline nanofiber/large mesoporous carbon composites as electrode materials for supercapacitors. <b>2015</b> , 332, 40-46   | 55  |

| 1802 | Co3O4 Hollow Nanoparticles and Co Organic Complexes Highly Dispersed on N-Doped Graphene: An Efficient Cathode Catalyst for Li-O2 Batteries. <b>2015</b> , 32, 680-685                                   | 35   |
|------|--|------|
| 1801 | Rational design of three-dimensional nitrogen-doped carbon nanoleaf networks for high-performance oxygen reduction. <b>2015</b> , 3, 5617-5627   | 28   |
| 1800 | Recent advancements in Pt and Pt-free catalysts for oxygen reduction reaction. <b>2015</b> , 44, 2168-201  | 1524 |
| 1799 | CMK3/graphene-N-Co 🖟 low-cost and high-performance catalytic system. <b>2015</b> , 3, 2978-2984  | 22   |
| 1798 | Recent Advances in Heteroatom-Doped Metal-Free Electrocatalysts for Highly Efficient Oxygen Reduction Reaction. <b>2015</b> , 6, 132-147   | 104  |
| 1797 | Graphene as Sensitizer. <b>2015</b> , 407-430  |      |
| 1796 | Enhanced capacitive deionization performance of graphene by nitrogen doping. 2015, 445, 143-150  | 110  |
| 1795 | Nitrogen-doped graphene films from simple photochemical doping for n-type field-effect transistors. <b>2015</b> , 106, 013110  | 18   |
| 1794 | Controlled Synthesis of Nitrogen-Doped Graphene from a Heteroatom Polymer and Its Mechanism of Formation. <b>2015</b> , 27, 716-725  | 24   |
| 1793 | Nitrogen-doped graphene supported Pt nanoparticles with enhanced performance for methanol oxidation. <b>2015</b> , 40, 2641-2647   | 62   |
| 1792 | Facile synthesis of nitrogen-doped unzipped carbon nanotubes and their electrochemical properties. <b>2015</b> , 5, 8175-8181  | 16   |
| 1791 | Brand new P-doped g-C3N4: enhanced photocatalytic activity for H2 evolution and Rhodamine B degradation under visible light. <b>2015</b> , 3, 3862-3867  | 381  |
| 1790 | Carbon nitride in energy conversion and storage: recent advances and future prospects. <b>2015</b> , 8, 931-46   | 158  |
| 1789 | Nitrogen-doped carbon shell structure derived from natural leaves as a potential catalyst for oxygen reduction reaction. <b>2015</b> , 13, 518-526   | 118  |
| 1788 | Ultrasonic cavitation assisted hydrogen implosion synthesis of Pt nanoparticles/nitrogen-doped graphene nanohybrid scrolls and their electrocatalytic oxidation of methanol. <b>2015</b> , 21, 1287-1294 | 6    |
| 1787 | Pd3Ni nanoparticles combines carbonized 1,10-phenanthroline modified carbon support: Alhighly efficient electrocatalyst for enhanced methanol oxidation. <b>2015</b> , 40, 3892-3899                     | 15   |
| 1786 | One-pot hydrothermal synthesis carbon nanocages-reduced graphene oxide composites for simultaneous electrochemical detection of catechol and hydroquinone. <b>2015</b> , 212, 165-173                    | 115  |
| 1785 | A Pt-free Electrocatalyst Based on Pyrolized Vinazene-Carbon Composite for Oxygen Reduction<br>Reaction. <b>2015</b> , 161, 305-311  | 10   |

| 1784 | Synthesis of Nitrogen Doped Multilayered Graphene Flakes: Selective Non-enzymatic Electrochemical Determination of Dopamine and Uric Acid in presence of Ascorbic Acid <b>2015</b> , 27, 1253-1261 | 11  |
|------|--|-----|
| 1783 | Synthesis of graphene with both high nitrogen content and high surface area by annealing composite of graphene oxide and g-C3N4. <b>2015</b> , 12, 807-814   | 10  |
| 1782 | Low-temperature synthesized nitrogen-doped iron/iron carbide/partly-graphitized carbon as stable cathode catalysts for enhancing bioelectricity generation. <b>2015</b> , 89, 8-19                 | 35  |
| 1781 | Root exudates as natural ligands that alter the properties of graphene oxide and environmental implications thereof. <b>2015</b> , 5, 17615-17622  | 15  |
| 1780 | CHAPTER 6:Doped Nanostructured Carbon Materials as Catalysts. <b>2015</b> , 268-311  | 2   |
| 1779 | High-Performance Electrocatalysts for Oxygen Reduction Based on Nitrogen-Doped Porous Carbon from Hydrothermal Treatment of Glucose and Dicyandiamide. <b>2015</b> , 2, 803-810                    | 56  |
| 1778 | Synthesis and electrochemical properties of tube-like nitrogen-doped graphene/manganese oxide composite for supercapacitors. <b>2015</b> , 10, 282-286   | 2   |
| 1777 | Novel nitrogen doped graphene sponge with ultrahigh capacitive deionization performance. <b>2015</b> , 5, 11225  | 149 |
| 1776 | The sorption of Eu(III) from aqueous solutions by magnetic graphene oxides: A combined experimental and modeling studies. <b>2015</b> , 211, 203-209   | 25  |
| 1775 | Heteroatom-Doped Graphene-Based Materials for Energy-Relevant Electrocatalytic Processes. <b>2015</b> , 5, 5207-5234   | 675 |
| 1774 | Low-temperature synthesis of few-layer graphene. <b>2015</b> , 160, 255-258  | 5   |
| 1773 | Nitrogen-doped carbon nanospheres derived from cocoon silk as metal-free electrocatalyst for glucose sensing. <b>2015</b> , 144, 1245-51   | 12  |
| 1772 | One-step preparation of N-doped graphene/Co nanocomposite as an advanced oxygen reduction electrocatalyst. <b>2015</b> , 176, 280-284  | 27  |
| 1771 | The sequestration of Sr(II) and Cs(I) from aqueous solutions by magnetic graphene oxides. <b>2015</b> , 209, 508-514   | 41  |
| 1770 | Nanodiamond/nitrogen-doped graphene (core/shell) as an effective and stable metal-free electrocatalyst for oxygen reduction reaction. <b>2015</b> , 174, 1017-1022                                 | 16  |
| 1769 | Effect of oxygen and nitrogen functionalization on the physical and electronic structure of graphene. <b>2015</b> , 8, 2620-2635   | 32  |
| 1768 | N-doped carbon nanotubes as cathode material in LiB batteries. <b>2015</b> , 26, 7895-7900   | 25  |
| 1767 | Three dimensional nitrogen-doped graphene aerogels functionalized with melamine for multifunctional applications in supercapacitors and adsorption. <b>2015</b> , 230, 224-232                     | 52  |

| 1766                                 | tri-molecular Eley-Rideal mechanism. <b>2015</b> , 17, 20006-13   | 76                        |
|--------------------------------------|---|---------------------------|
| 1765                                 | Nitrogen-doped carbon nanotubes via a facile two-step approach as an efficient catalyst for the direct dehydrogenation of ethylbenzene. <b>2015</b> , 17, 18895-9   | 16                        |
| 1764                                 | Efficient exfoliation N-doped graphene from N-containing bamboo-like carbon nanotubes for anode materials of Li-ion battery and Na-ion battery. <b>2015</b> , 120, 471-478  | 7                         |
| 1763                                 | Experimental and numerical investigation of the effective electrical conductivity of nitrogen-doped graphene nanofluids. <b>2015</b> , 17, 1  | 39                        |
| 1762                                 | Nitrogen-Doped Graphene with Pyridinic Dominance as a Highly Active and Stable Electrocatalyst for Oxygen Reduction. <b>2015</b> , 7, 14763-9   | 207                       |
| 1761                                 | Nitrogen doped epitaxial graphene on 4H-SiC(0001) Experimental and theoretical study. <b>2015</b> , 94, 214-223   | 6                         |
| 1760                                 | Enhanced electrocatalytic activity of nitrogen-doped multi-walled carbon nanotubes towards the oxygen reduction reaction in alkaline media. <b>2015</b> , 5, 59495-59505  | 56                        |
| 1759                                 | A facile preparation route for highly conductive borate cross-linked reduced graphene oxide paper. <b>2015</b> , 39, 6907-6913  | 16                        |
| 1758                                 | Carbon nanofibers by pyrolysis of self-assembled perylene diimide derivative gels as supercapacitor electrode materials. <b>2015</b> , 3, 15513-15522   | 20                        |
|                                      |   |                           |
| 1757                                 | Tuning the Magnetic Properties of Carbon by Nitrogen Doping of Its Graphene Domains. <b>2015</b> , 137, 7678-85   | 59                        |
| 1757<br>1756                         | Tuning the Magnetic Properties of Carbon by Nitrogen Doping of Its Graphene Domains. 2015, 137, 7678-85  Efficient and durable oxygen reduction and evolution of a hydrothermally synthesized La(Co0.55Mn0.45)0.99O3-Ehanorod/graphene hybrid in alkaline media. 2015, 7, 9046-54   | 59<br>6 <sub>4</sub>      |
| 1756                                 | Efficient and durable oxygen reduction and evolution of a hydrothermally synthesized  |                           |
| 1756                                 | Efficient and durable oxygen reduction and evolution of a hydrothermally synthesized La(Co0.55Mn0.45)0.99O3-Ihanorod/graphene hybrid in alkaline media. <b>2015</b> , 7, 9046-54  | 64                        |
| 1756<br>1755                         | Efficient and durable oxygen reduction and evolution of a hydrothermally synthesized La(Co0.55Mn0.45)0.99O3-Ehanorod/graphene hybrid in alkaline media. <b>2015</b> , 7, 9046-54  Nitrogen-Doped Carbon Nanotube Aerogels for High-Performance ORR Catalysts. <b>2015</b> , 11, 3903-8  Hollow melamine resin-based carbon spheres/graphene composite with excellent performance for  | 64<br>78                  |
| 1756<br>1755<br>1754                 | Efficient and durable oxygen reduction and evolution of a hydrothermally synthesized La(Co0.55Mn0.45)0.99O3-Ehanorod/graphene hybrid in alkaline media. 2015, 7, 9046-54  Nitrogen-Doped Carbon Nanotube Aerogels for High-Performance ORR Catalysts. 2015, 11, 3903-8  Hollow melamine resin-based carbon spheres/graphene composite with excellent performance for supercapacitors. 2015, 166, 310-319  Highly efficient oxygen reduction on porous nitrogen-doped nanocarbons directly synthesized   | 64<br>78<br>78            |
| 1756<br>1755<br>1754<br>1753         | Efficient and durable oxygen reduction and evolution of a hydrothermally synthesized La(Co0.55Mn0.45)0.99O3-Ihanorod/graphene hybrid in alkaline media. 2015, 7, 9046-54  Nitrogen-Doped Carbon Nanotube Aerogels for High-Performance ORR Catalysts. 2015, 11, 3903-8  Hollow melamine resin-based carbon spheres/graphene composite with excellent performance for supercapacitors. 2015, 166, 310-319  Highly efficient oxygen reduction on porous nitrogen-doped nanocarbons directly synthesized from cellulose nanocrystals and urea. 2015, 170, 234-241  Certain nitrogen functionalities on carbon nanofiber support for improving platinum performance.  | 64<br>78<br>78<br>30      |
| 1756<br>1755<br>1754<br>1753<br>1752 | Efficient and durable oxygen reduction and evolution of a hydrothermally synthesized La(Co0.55Mn0.45)0.99O3-Ihanorod/graphene hybrid in alkaline media. 2015, 7, 9046-54  Nitrogen-Doped Carbon Nanotube Aerogels for High-Performance ORR Catalysts. 2015, 11, 3903-8  Hollow melamine resin-based carbon spheres/graphene composite with excellent performance for supercapacitors. 2015, 166, 310-319  Highly efficient oxygen reduction on porous nitrogen-doped nanocarbons directly synthesized from cellulose nanocrystals and urea. 2015, 170, 234-241  Certain nitrogen functionalities on carbon nanofiber support for improving platinum performance. 2015, 256, 193-202  Antimony nanoparticles anchored on interconnected carbon nanofibers networks as advanced | 64<br>78<br>78<br>30<br>7 |

| 1748 | Fabrication of the pyrolyzing carbon-supported cobaltdicyandiamide electrocatalysts and study on the active sites and mechanism for oxygen reduction in alkaline electrolyte. <b>2015</b> , 19, 1695-1707 | 7   |
|------|---|-----|
| 1747 | Hydrothermal synthesis of nitrogen doped graphene nanosheets from carbon nanosheets with enhanced electrocatalytic properties. <b>2015</b> , 5, 39705-39713   | 10  |
| 1746 | Nitrogen-doped porous carbon foams prepared from mesophase pitch through graphitic carbon nitride nanosheet templates. <b>2015</b> , 5, 45718-45724   | 19  |
| 1745 | N-doped mesoporous carbon nanosheets obtained by pyrolysis of a chitosanthelamine mixture for the oxygen reduction reaction in alkaline media. <b>2015</b> , 5, 44969-44977                               | 64  |
| 1744 | Retracted Article: Tuning the chemistry of graphene oxides by a sonochemical approach: application of adsorption properties. <b>2015</b> , 5, 24886-24892   | 46  |
| 1743 | Scalable thermal synthesis of a highly crumpled, highly exfoliated and N-doped graphene/Mn-oxide nanoparticle hybrid for high-performance supercapacitors. <b>2015</b> , 5, 42516-42525                   | 3   |
| 1742 | Effects of structural disorder and nitrogen content on the oxygen reduction activity of polyvinylpyrrolidone-derived multi-doped carbon. <b>2015</b> , 3, 11948-11959                                     | 35  |
| 1741 | Nitrogen and phosphorus co-doped graphene quantum dots: synthesis from adenosine triphosphate, optical properties, and cellular imaging. <b>2015</b> , 7, 8159-65   | 149 |
| 1740 | Ultrafast lithium storage in TiO2Bronze nanowires/N-doped graphene nanocomposites. <b>2015</b> , 3, 4180-4187   | 71  |
| 1739 | High performance of supercapacitor based on nitrogen-doped graphene/p-aminophenol electrodes. <b>2015</b> , 21, 2639-2645   | 7   |
| 1738 | Synthesis of nitrogen-doped monolayer graphene with high transparent and n-type electrical properties. <b>2015</b> , 3, 6172-6177   | 21  |
| 1737 | Nitrogen-doped graphene as a cathode material for dye-sensitized solar cells: effects of hydrothermal reaction and annealing on electrocatalytic performance. <b>2015</b> , 5, 10430-10439                | 56  |
| 1736 | Boron/nitrogen co-doped helically unzipped multiwalled carbon nanotubes as efficient electrocatalyst for oxygen reduction. <b>2015</b> , 7, 7786-94   | 77  |
| 1735 | Adsorption and desorption of U(VI) on functionalized graphene oxides: a combined experimental and theoretical study. <b>2015</b> , 49, 4255-62  | 407 |
| 1734 | Graphene oxide regulates the bacterial community and exhibits property changes in soil. <b>2015</b> , 5, 27009-2701   | 744 |
| 1733 | Efficient approach to iron/nitrogen co-doped graphene materials as efficient electrochemical catalysts for the oxygen reduction reaction. <b>2015</b> , 3, 7767-7772                                      | 70  |
| 1732 | A Facile Approach to Fabricate an N-Doped Mesoporous Graphene/Nanodiamond Hybrid Nanocomposite with Synergistically Enhanced Catalysis. <b>2015</b> , 7, 1070-1077  | 33  |
| 1731 | Sulfur and Nitrogen Co-Doped Graphene for Metal-Free Catalytic Oxidation Reactions. <b>2015</b> , 11, 3036-44   | 412 |

| 1730                 | High-performance dye-sensitized solar cells using edge-halogenated graphene nanoplatelets as counter electrodes. <b>2015</b> , 13, 336-345  | 78             |
|----------------------|---|----------------|
| 1729                 | Carbon for the oxygen reduction reaction: a defect mechanism. <b>2015</b> , 3, 11736-11739  | 184            |
| 1728                 | Activation of Graphenic Carbon Due to Substitutional Doping by Nitrogen: Mechanistic Understanding from First Principles. <b>2015</b> , 6, 1653-60  | 9              |
| 1727                 | Macroscopic and spectroscopic investigations of the adsorption of nitroaromatic compounds on graphene oxide, reduced graphene oxide, and graphene nanosheets. <b>2015</b> , 49, 6181-9  | 255            |
| 1726                 | Heteroatom-doped hierarchical porous carbons as high-performance metal-free oxygen reduction electrocatalysts. <b>2015</b> , 3, 11725-11729   | 67             |
| 1725                 | Metal-free catalysts for oxygen reduction reaction. <b>2015</b> , 115, 4823-92  | 1763           |
| 1724                 | Influence of the surface oxygenated groups of activated carbon on preparation of a nano Cu/AC catalyst and heterogeneous catalysis in the oxidative carbonylation of methanol. <b>2015</b> , 179, 95-105  | 98             |
| 1723                 | The effect of Pt NPs crystallinity and distribution on the photocatalytic activity of Pt-g-C3N4. <b>2015</b> , 17, 13929-36   | 68             |
| 1722                 | Prediction of quantum anomalous Hall effect on graphene nanomesh. <b>2015</b> , 5, 9875-9880  | 24             |
| 1721                 | Multiple roles of graphene in heterogeneous catalysis. <b>2015</b> , 44, 3023-35  | 271            |
| 1720                 | N-doped ordered mesoporous carbons prepared by a two-step nanocasting strategy as highly active and selective electrocatalysts for the reduction of O2 to H2O2. <b>2015</b> , 176-177, 212-224  | 87             |
|                      |   |                |
| 1719                 | Magnesiothermic synthesis of sulfur-doped graphene as an efficient metal-free electrocatalyst for oxygen reduction. <b>2015</b> , 5, 9304   | 85             |
| 1719<br>1718         | Oxygen reduction. 2015, 5, 9304   | 8 <sub>5</sub> |
|                      | oxygen reduction. <b>2015</b> , 5, 9304  Platinum nanoparticles supported on N-doped carbon nanotubes for the selective oxidation of  |                |
| 1718                 | oxygen reduction. <b>2015</b> , 5, 9304  Platinum nanoparticles supported on N-doped carbon nanotubes for the selective oxidation of glycerol to glyceric acid in a base-free aqueous solution. <b>2015</b> , 5, 31566-31574  Cobalt- and iron-containing nitrogen-doped carbon aerogels as non-precious metal catalysts for  | 48             |
| 1718<br>1717         | Platinum nanoparticles supported on N-doped carbon nanotubes for the selective oxidation of glycerol to glyceric acid in a base-free aqueous solution. <b>2015</b> , 5, 31566-31574  Cobalt- and iron-containing nitrogen-doped carbon aerogels as non-precious metal catalysts for electrochemical reduction of oxygen. <b>2015</b> , 746, 9-17  Nitrogen doped graphene via thermal treatment of composite solid precursors as a high   | 48             |
| 1718<br>1717<br>1716 | Platinum nanoparticles supported on N-doped carbon nanotubes for the selective oxidation of glycerol to glyceric acid in a base-free aqueous solution. 2015, 5, 31566-31574  Cobalt- and iron-containing nitrogen-doped carbon aerogels as non-precious metal catalysts for electrochemical reduction of oxygen. 2015, 746, 9-17  Nitrogen doped graphene via thermal treatment of composite solid precursors as a high performance supercapacitor. 2015, 5, 30679-30686  Wet-chemical nitrogen-doping of graphene nanoplatelets as electrocatalysts for the oxygen | 48<br>70<br>53 |

| 1712 | Aminothiazole-derived N,S,Fe-doped graphene nanosheets as high performance electrocatalysts for oxygen reduction. <b>2015</b> , 51, 17092-5   | 68  |
|------|---|-----|
| 1711 | Ultrahigh volumetric capacitance and cyclic stability of fluorine and nitrogen co-doped carbon microspheres. <b>2015</b> , 6, 8503  | 438 |
| 1710 | Electrocatalytic performances of N-doped graphene with anchored iridium species in oxygen reduction reaction. <b>2015</b> , 2, 034019   | 19  |
| 1709 | Nitrogen-Doped Graphene Quantum Dots as a New Catalyst Accelerating the Coordination Reaction between Cadmium(II) and 5,10,15,20-Tetrakis(1-methyl-4-pyridinio)porphyrin for Cadmium(II) Sensing. <b>2015</b> , 87, 10894-901 | 37  |
| 1708 | Effect of annealing temperature and element composition of titanium dioxide/graphene/hemin catalysts for oxygen reduction reaction. <b>2015</b> , 5, 82879-82886  | 15  |
| 1707 | Nitrogen-doped porous hollow carbon sphere-decorated separators for advanced lithiumBulfur batteries. <b>2015</b> , 300, 157-163  | 109 |
| 1706 | Synthesis and characterization of Nitrogen-doped &CaCO3-decorated reduced graphene oxide nanocomposite for electrochemical supercapacitors. <b>2015</b> , 184, 193-202  | 26  |
| 1705 | Synergistic CatalystBupport Interactions in a GrapheneMn3O4 Electrocatalyst for Vanadium Redox Flow Batteries. <b>2015</b> , 5, 7122-7130   | 88  |
| 1704 | Nitrogen-doped graphene/carbon nanotube/Co3O4 hybrids: one-step synthesis and superior electrocatalytic activity for the oxygen reduction reaction. <b>2015</b> , 5, 94615-94622  | 28  |
| 1703 | Ber die Rolle von Metallen in Elektrokatalysatoren auf Basis von stickstoffdotiertem Kohlenstoff fil die Sauerstoffreduktion. <b>2015</b> , 127, 10240-10259  | 69  |
| 1702 | Review <b>R</b> ecent Progress in Electrocatalysts for Oxygen Reduction Suitable for Alkaline Anion Exchange Membrane Fuel Cells. <b>2015</b> , 162, F1504-F1539  | 119 |
| 1701 | Nitrogen-Doped Graphene as Electrode Material with Enhanced Energy Density for Next-Generation Supercapacitor Application. <b>2015</b> , 4, M88-M92   | 12  |
| 1700 | Metal-organic framework derived hierarchically porous nitrogen-doped carbon nanostructures as novel electrocatalyst for oxygen reduction reaction. <b>2015</b> , 178, 287-293   | 48  |
| 1699 | Strong-coupled Co-g-C3N4/SWCNTs composites as high-performance electrocatalysts for oxygen reduction reaction. <b>2015</b> , 5, 65303-65307   | 17  |
| 1698 | Synthesis of boron and nitrogen co-doped carbon nanofiber as efficient metal-free electrocatalyst for the VO 2+ /VO 2 + Redox Reaction. <b>2015</b> , 178, 748-757  | 38  |
| 1697 | Three-Dimensional Macroporous Polypyrrole-Derived Graphene Electrode Prepared by the Hydrogen Bubble Dynamic Template for Supercapacitors and Metal-Free Catalysts. <b>2015</b> , 7, 23731-40                                 | 38  |
| 1696 | An introduction to the chemistry of graphene. <b>2015</b> , 17, 28484-504   | 91  |
| 1695 | Honeycomb-Like Perovskite Oxide Electrocatalyst for a Hybrid Li-Air Battery. <b>2015</b> , 162, A2651-A2655   | 6   |

| 1694 | NiRh nanoparticles supported on nitrogen-doped porous carbon as highly efficient catalysts for dehydrogenation of hydrazine in alkaline solution. <b>2015</b> , 8, 3472-3479                                | 35  |
|------|---|-----|
| 1693 | Carbon-based electrocatalysts for advanced energy conversion and storage. <b>2015</b> , 1, e1500564   | 434 |
| 1692 | Pig bones derived N-doped carbon with multi-level pores as electrocatalyst for oxygen reduction. <b>2015</b> , 297, 295-301   | 61  |
| 1691 | Preparation and Electrochemical Characterization of Pt-Supported Flake-like Graphitic Carbon Nitride on Reduced Graphene Oxide as Fuel Cell Catalysts. <b>2015</b> , 162, F1181-F1190                       | 15  |
| 1690 | Porous nitrogen doped carbon foam with excellent resilience for self-supported oxygen reduction catalyst. <b>2015</b> , 95, 388-395   | 65  |
| 1689 | Effect of pyrolysis conditions on nitrogen-doped ordered mesoporous carbon electrocatalysts. <b>2015</b> , 36, 1197-1204  | 29  |
| 1688 | Heteroatom doped graphene in photocatalysis: A review. <b>2015</b> , 358, 2-14  | 239 |
| 1687 | Synthesis of Multifunctional Carbon Nanostructures. <b>2015</b> , 89-126  | 1   |
| 1686 | Facile Fabrication of N-Doped Graphene as Efficient Electrocatalyst for Oxygen Reduction Reaction. <b>2015</b> , 7, 19619-25  | 55  |
| 1685 | Nitrogen-Doped Carbon Nanotube Spherical Particles for Supercapacitor Applications: Emulsion-Assisted Compact Packing and Capacitance Enhancement. <b>2015</b> , 7, 20083-9                                 | 55  |
| 1684 | Layer-separated MoS2 bearing reduced graphene oxide formed by an in situ intercalation-cum-anchoring route mediated by Co(OH)2 as a Pt-free electrocatalyst for oxygen reduction. <b>2015</b> , 7, 16729-36 | 32  |
| 1683 | Characteristics of nitrogen-doped carbon films grown by sputtering as potential cathode catalysts for oxygen reduction reaction. <b>2015</b> , 54, 085801   | 7   |
| 1682 | Ultrathin Wrinkled N-Doped Carbon Nanotubes for Noble-Metal Loading and Oxygen Reduction Reaction. <b>2015</b> , 7, 20507-12  | 16  |
| 1681 | Metal-free, carbon-based catalysts for oxygen reduction reactions. <b>2015</b> , 9, 280-294   | 15  |
| 1680 | Iodine/nitrogen co-doped graphene as metal free catalyst for oxygen reduction reaction. <b>2015</b> , 95, 930-939   | 87  |
| 1679 | Nonstoichiometric Oxides as Low-Cost and Highly-Efficient Oxygen Reduction/Evolution Catalysts for Low-Temperature Electrochemical Devices. <b>2015</b> , 115, 9869-921                                     | 631 |
| 1678 | A nitrogen-doped unzipped carbon nanotube/sulfur composite as an advanced cathode for lithiumBulfur batteries. <b>2015</b> , 39, 8901-8907  | 15  |
| 1677 | Thermal conductivity and heat transport properties of nitrogen-doped graphene. <b>2015</b> , 62, 74-80  | 27  |
|      |   |     |

| 1676 | Nanosized Pt anchored onto 3D nitrogen-doped graphene nanoribbons towards efficient methanol electrooxidation. <b>2015</b> , 3, 19696-19701   | 49  |
|------|---|-----|
| 1675 | Electrostatic self-assembly of CdS nanowires-nitrogen doped graphene nanocomposites for enhanced visible light photocatalysis. <b>2015</b> , 24, 145-156  | 34  |
| 1674 | Experimental investigation of the important influence of pretreatment process of thermally exfoliated graphene on their microstructure and supercapacitor performance. <b>2015</b> , 180, 187-195     | 8   |
| 1673 | CVD synthesis of nitrogen-doped graphene using urea. <b>2015</b> , 58, 1  | 11  |
| 1672 | A low-cost cementite (Fe3C) nanocrystal@N-doped graphitic carbon electrocatalyst for efficient oxygen reduction. <b>2015</b> , 17, 27527-33   | 22  |
| 1671 | Structure and surface characterization of co-adsorbed layer of oleic acid and octadecylamine on detonation nanodiamond. <b>2015</b> , 60, 50-59   | 9   |
| 1670 | Hybrids based on transition metal phosphide (Mn2P, Co2P, Ni2P) nanoparticles and heteroatom-doped carbon nanotubes for efficient oxygen reduction reaction. <b>2015</b> , 5, 92893-92898              | 32  |
| 1669 | Nitrogen-Doped Reduced Graphene Oxide Prepared by Simultaneous Thermal Reduction and Nitrogen Doping of Graphene Oxide in Air and Its Application as an Electrocatalyst. <b>2015</b> , 7, 26952-8     | 79  |
| 1668 | High catalytic activity of nitrogen and sulfur co-doped nanoporous graphene in the hydrogen evolution reaction. <b>2015</b> , 54, 2131-6  | 641 |
| 1667 | Three-dimensional graphene-based composites for energy applications. <b>2015</b> , 7, 6924-43   | 211 |
| 1666 | N-Doping-Induced Nonradical Reaction on Single-Walled Carbon Nanotubes for Catalytic Phenol Oxidation. <b>2015</b> , 5, 553-559   | 525 |
| 1665 | Searching for magnetism in pyrrolic N-doped graphene synthesized via hydrothermal reaction. <b>2015</b> , 84, 460-468   | 75  |
| 1664 | Fe, Co, N-functionalized carbon nanotubes in situ grown on 3D porous N-doped carbon foams as a noble metal-free catalyst for oxygen reduction. <b>2015</b> , 3, 3559-3567                             | 103 |
| 1663 | Monodisperse Pt atoms anchored on N-doped graphene as efficient catalysts for CO oxidation: a first-principles investigation. <b>2015</b> , 5, 1658-1667  | 69  |
| 1662 | N-doped structures and surface functional groups of reduced graphene oxide and their effect on the electrochemical performance of supercapacitor with organic electrolyte. <b>2015</b> , 278, 218-229 | 106 |
| 1661 | Metal-support interaction in platinum and palladium nanoparticles loaded on nitrogen-doped mesoporous carbon for oxygen reduction reaction. <b>2015</b> , 7, 1170-9                                   | 129 |
| 1660 | Novel hydrated graphene ribbon unexpectedly promotes aged seed germination and root differentiation. <b>2014</b> , 4, 3782  | 62  |
| 1659 | Brick-likeIN-doped graphene/carbon nanotube structure forming three-dimensional films as high performance metal-free counter electrodes in dye-sensitized solar cells. 2015, 273, 1048-1055           | 63  |

| 1658 | electrocatalyst for efficient water oxidation. <b>2015</b> , 7, 442-51   | 95  |
|------|--|-----|
| 1657 | Enhanced electrochemical sensing of thiols based on cobalt phthalocyanine immobilized on nitrogen-doped graphene. <b>2015</b> , 66, 438-44   | 72  |
| 1656 | Transforming chitosan into N-doped graphitic carbon electrocatalysts. <b>2015</b> , 51, 1334-7   | 105 |
| 1655 | High Catalytic Activity of Nitrogen and Sulfur Co-Doped Nanoporous Graphene in the Hydrogen Evolution Reaction. <b>2015</b> , 127, 2159-2164   | 118 |
| 1654 | High N-content holey few-layered graphene electrocatalysts: scalable solvent-less production. <b>2015</b> , 3, 1682-1687   | 35  |
| 1653 | Exceptional electrochemical performance of nitrogen-doped porous carbon for lithium storage. <b>2015</b> , 82, 116-123   | 90  |
| 1652 | Lithographically defined three-dimensional pore-patterned carbon with nitrogen doping for high-performance ultrathin supercapacitor applications. <b>2014</b> , 4, 5392                    | 28  |
| 1651 | Synthesis of nitrogen-doped graphene supported Pt nanoparticles catalysts and their catalytic activity for fuel cells. <b>2015</b> , 153, 566-573  | 44  |
| 1650 | Potential of metal-free graphene alloylas electrocatalysts for oxygen reduction reaction. <b>2015</b> , 3, 1795-1810   | 118 |
| 1649 | Ice crystals growth driving assembly of porous nitrogen-doped graphene for catalyzing oxygen reduction probed by in situ fluorescence electrochemistry. <b>2014</b> , 4, 6723              | 31  |
| 1648 | Facile synthesis of laminated graphene for advanced supercapacitor electrode material via simultaneous reduction and N-doping. <b>2015</b> , 274, 851-861                                  | 43  |
| 1647 | Stable silver nanoclusters electrochemically deposited on nitrogen-doped graphene as efficient electrocatalyst for oxygen reduction reaction. <b>2015</b> , 274, 1173-1179                 | 62  |
| 1646 | Single and Multiple Doping in Graphene Quantum Dots: Unraveling the Origin of Selectivity in the Oxygen Reduction Reaction. <b>2015</b> , 5, 129-144                                       | 142 |
| 1645 | Synthesis of graphene supported graphene-like C3N4 metal-free layered nanosheets for enhanced electrochemical performance and their biosensing for biomolecules. <b>2015</b> , 132, 871-6  | 44  |
| 1644 | Noble metal-free electrocatalysts for the oxygen reduction reaction based on iron and nitrogen-doped porous graphene. <b>2015</b> , 3, 1058-1067   | 35  |
| 1643 | A metalBrganic framework route to in situ encapsulation of Co@Co3O4@C core@bishell nanoparticles into a highly ordered porous carbon matrix for oxygen reduction. <b>2015</b> , 8, 568-576 | 511 |
| 1642 | The room temperature electrochemical synthesis of N-doped graphene and its electrocatalytic activity for oxygen reduction. <b>2015</b> , 51, 1198-201                                      | 48  |
| 1641 | The enhanced electrocatalytic activity of okara-derived N-doped mesoporous carbon for oxygen reduction reaction. <b>2015</b> , 274, 741-747  | 68  |

| 1640 | Alveoli-Inspired Facile Transport Structure of N-Doped Porous Carbon for Electrochemical Energy Applications. <b>2015</b> , 5, 1401309  | 89  |
|------|---|-----|
| 1639 | A novel non-enzyme amperometric platform based on poly(3-methylthiophene)/nitrogen doped graphene modified electrode for determination of trace amounts of pesticide phoxim. <b>2015</b> , 206, 495-501 | 24  |
| 1638 | Dual-doped carbon composite for efficient oxygen reduction via electrospinning and incipient impregnation. <b>2015</b> , 274, 595-603   | 26  |
| 1637 | A Mini Review Over the Applications of Nano-Carbons and Their Composites in Supercapacitors. <b>2016</b> , 9, 4-19  |     |
| 1636 | Electrocatalytic Applications of GrapheneMetal Oxide Nanohybrid Materials. 2016,  | 12  |
| 1635 | An Oxygen Reduction Study of Graphene-Based Nanomaterials of Different Origin. <b>2016</b> , 6, 108   | 43  |
| 1634 | 3D nanostructured inkjet printed graphene via UV-pulsed laser irradiation enables paper-based electronics and electrochemical devices. <b>2016</b> , 8, 15870-9   | 93  |
| 1633 | Nitrogen-Doped Graphene for Photocatalytic Hydrogen Generation. <b>2016</b> , 11, 1125-37   | 49  |
| 1632 | Pure Pyridinic Nitrogen-Doped Single-Layer Graphene Catalyzes Two-Electron Transfer Process of Oxygen Reduction Reaction. <b>2016</b> , 3, 2036-2042  | 23  |
| 1631 | CO Poisoning Effects on FeNC and CNx ORR Catalysts: A Combined ExperimentalComputational Study. <b>2016</b> , 120, 15173-15184  | 40  |
| 1630 | A Hydrogen-Bonded Organic-Framework-Derived Mesoporous N-Doped Carbon for Efficient Electroreduction of Oxygen. <b>2016</b> , 3, 1116-1123  | 21  |
| 1629 | Facile Synthesis of Fe C@Graphene Hybrid Nanorods as an Efficient and Robust Catalyst for Oxygen Reduction Reaction. <b>2016</b> , 81, 646-651  | 9   |
| 1628 | N,P-Codoped Carbon Networks as Efficient Metal-free Bifunctional Catalysts for Oxygen Reduction and Hydrogen Evolution Reactions. <b>2016</b> , 55, 2230-4  | 638 |
| 1627 | Significant Enhancement of Water Splitting Activity of N-Carbon Electrocatalyst by Trace Level Co<br>Doping. <b>2016</b> , 12, 3703-11  | 93  |
| 1626 | Toward enhanced activity of a graphitic carbon nitride-based electrocatalyst in oxygen reduction and hydrogen evolution reactions via atomic sulfur doping. <b>2016</b> , 4, 12205-12211                | 92  |
| 1625 | Partially Hydrogenated Graphene Materials Exhibit High Electrocatalytic Activities Related to Unintentional Doping with Metallic Impurities. <b>2016</b> , 22, 8627-34                                  | 11  |
| 1624 | Freestanding, Hydrophilic Nitrogen-Doped Carbon Foams for Highly Compressible All Solid-State Supercapacitors. <b>2016</b> , 28, 5997-6002  | 233 |
| 1623 | Synthesis and characterization of nitrogen-functionalized graphene oxide in high-temperature and high-pressure ammonia. <b>2016</b> , 6, 113924-113932  | 16  |

## (2016-2016)

| 1622 | Nitrogen-Doped Carbon Foam as a Highly Durable Metal-Free Electrocatalyst for the Oxygen Reduction Reaction in Alkaline Solution. <b>2016</b> , 220, 554-561  | 25  |
|------|---|-----|
| 1621 | Preparation of luminescent graphitic C3N4 NS and their composites with RGO for property controlling. <b>2016</b> , 6, 112581-112588   | 11  |
| 1620 | Graphene Derivative As a Highly Efficient Nitrosonium Source: A Reusable Catalyst for Diazotization and Coupling Reaction. <b>2016</b> , 1, 6933-6940   | 16  |
| 1619 | Pd/RGO modified carbon felt cathode for electro-Fenton removing of EDTA-Ni. <b>2016</b> , 74, 639-46  | 6   |
| 1618 | Dual Electrocatalytic Behavior of Oxovanadium(IV) Salen Immobilized Carbon Materials Towards Cysteine Oxidation and Cystine Reduction: Graphene Versus Single Walled Carbon Nanotubes. <b>2016</b> , 1, 6726-6734 | 8   |
| 1617 | Bottom-Up Fabrication of Single-Layered Nitrogen-Doped Graphene Quantum Dots through Intermolecular Carbonization Arrayed in a 2D Plane. <b>2016</b> , 22, 272-8  | 46  |
| 1616 | A solution-based procedure for synthesis of nitrogen doped graphene as an efficient electrocatalyst for oxygen reduction reactions in acidic and alkaline electrolytes. <b>2016</b> , 192, 26-34                  | 85  |
| 1615 | Enhanced oxygen reduction reaction activity of nitrogen-doped graphene/multi-walled carbon nanotube catalysts in alkaline media. <b>2016</b> , 41, 22510-22519  | 60  |
| 1614 | N-doped hierarchical porous carbon derived from hypercrosslinked diblock copolymer for capacitive deionization. <b>2016</b> , 165, 190-198  | 67  |
| 1613 | Electrocatalytic oxygen reduction on nitrogen-doped carbon nanoparticles derived from cyano-aromatic molecules via a solution plasma approach. <b>2016</b> , 98, 411-420  | 60  |
| 1612 | Effect of nitrogen precursors on the electrochemical performance of nitrogen-doped reduced graphene oxide towards oxygen reduction reaction. <b>2016</b> , 677, 112-120   | 52  |
| 1611 | Silk-derived graphene-like carbon with high electrocatalytic activity for oxygen reduction reaction. <b>2016</b> , 6, 34219-34224   | 21  |
| 1610 | MIL-53(Fe)-graphene nanocomposites: Efficient visible-light photocatalysts for the selective oxidation of alcohols. <b>2016</b> , 198, 112-123  | 160 |
| 1609 | High catalytic activity of Co3O4 nanoparticles encapsulated in a graphene supported carbon matrix for oxygen reduction reaction. <b>2016</b> , 6, 50349-50357   | 11  |
| 1608 | Nitrogen-doped carbon/graphene hybrid anode material for sodium-ion batteries with excellent rate capability. <b>2016</b> , 319, 195-201  | 129 |
| 1607 | Nonplatinum cathodic catalysts for fuel cells with alkaline electrolyte (Review). <b>2016</b> , 52, 193-219   | 16  |
| 1606 | Carbon dots with strong excitation-dependent fluorescence changes towards pH. Application as nanosensors for a broad range of pH. <b>2016</b> , 931, 25-33  | 45  |
| 1605 | Facile synthesis of nitrogen-doped graphene on Ni foam for high-performance supercapacitors. <b>2016</b> , 51, 6348-6356  | 25  |
|      |   |     |

| 1604 | The morphology, structure and electrocatalytic ability of graphene prepared with different drying methods. <b>2016</b> , 6, 28005-28014  | 8           |
|------|--|-------------|
| 1603 | Effect of the Oxidetarbon Heterointerface on the Activity of Co3O4/NRGO Nanocomposites toward ORR and OER. <b>2016</b> , 120, 7949-7958  | 120         |
| 1602 | MnFe2O4@C Nanofibers as High-Performance Anode for Sodium-Ion Batteries. <b>2016</b> , 16, 3321-8  | 283         |
| 1601 | Nitrogen-doped graphenes as efficient electrocatalysts for the selective reduction of carbon dioxide to formate in aqueous solution. <b>2016</b> , 18, 3250-3256                                 | 189         |
| 1600 | Effect of nitrogen-doped graphene nanofluid on the thermal performance of the grooved copper heat pipe. <b>2016</b> , 118, 459-473   | 60          |
| 1599 | CuO nanoparticles/nitrogen-doped carbon nanofibers modified glassy carbon electrodes for non-enzymatic glucose sensors with improved sensitivity. <b>2016</b> , 42, 11285-11293                  | 53          |
| 1598 | Palladium Nanoparticles Supported on Nitrogen and Sulfur Dual-Doped Graphene as Highly Active Electrocatalysts for Formic Acid and Methanol Oxidation. <b>2016</b> , 8, 10858-65                 | 153         |
| 1597 | Nitrogen and boron co-doped hollow carbon catalyst for the oxygen reduction reaction. <b>2016</b> , 105, 1-7   | 48          |
| 1596 | Porosity-engineered carbons for supercapacitive energy storage using conjugated microporous polymer precursors. <b>2016</b> , 4, 7665-7673   | 100         |
| 1595 | Effect of Modification by Polydopamine and Polymeric Carbon Nitride on Methanol Oxidation Ability of Pt Catalysts-Supported on Reduced Graphene Oxide. <b>2016</b> , 163, F668-F676              | 14          |
| 1594 | Modulating the microstructure and surface chemistry of carbocatalysts for oxidative and direct dehydrogenation: A review. <b>2016</b> , 37, 644-670  | 25          |
| 1593 | One-pot synthesis of <code>HMnS/nitrogen-doped</code> reduced graphene oxide hybrid for high-performance asymmetric supercapacitors. <b>2016</b> , 210, 557-566                                  | 96          |
| 1592 | An electrochemical sensor for selective detection of dopamine based on nickel tetrasulfonated phthalocyanine functionalized nitrogen-doped graphene nanocomposites. <b>2016</b> , 779, 92-98     | 53          |
| 1591 | Facile synthesis of nitrogen-doped carbon nanosheets as metal-free catalyst with excellent oxygen reduction performance in alkaline and acidic media. <b>2016</b> , 20, 1469-1479                | 18          |
| 1590 | Edge-nitrogenated graphene nanoplatelets as high-efficiency counter electrodes for dye-sensitized solar cells. <b>2016</b> , 8, 9676-81  | 21          |
| 1589 | Facile One-Step Synthesis of Hybrid Graphitic Carbon Nitride and Carbon Composites as High-Performance Catalysts for CO2 Photocatalytic Conversion. <b>2016</b> , 8, 17212-9                     | 109         |
| 1588 | N-doped zeolite-templated carbon as a metal-free electrocatalyst for oxygen reduction. <b>2016</b> , 6, 43091-43097  | <b>7</b> 15 |
| 1587 | CoO nanoparticles embedded in three-dimensional nitrogen/sulfur co-doped carbon nanofiber networks as a bifunctional catalyst for oxygen reduction/evolution reactions. <b>2016</b> , 106, 84-92 | 112         |

# (2016-2016)

| 1586 | One-step synthesis of nitrogen-doped graphene-like meso-macroporous carbons as highly efficient and selective adsorbents for CO2 capture. <b>2016</b> , 4, 14567-14571                          | 53  |
|------|---|-----|
| 1585 | Tuning graphene for energy and environmental applications: Oxygen reduction reaction and greenhouse gas mitigation. <b>2016</b> , 328, 472-481  | 14  |
| 1584 | Metalloid tellurium-doped graphene nanoplatelets as ultimately stable electrocatalysts for cobalt reduction reaction in dye-sensitized solar cells. <b>2016</b> , 30, 867-876                   | 37  |
| 1583 | Pulsed laser deposition of porous N-carbon supported cobalt (oxide) thin films for highly efficient oxygen evolution. <b>2016</b> , 52, 11947-11950   | 26  |
| 1582 | In Situ Growth of Co3O4 Nanoparticles on Interconnected Nitrogen-Doped Graphene Nanoribbons as Efficient Oxygen Reduction Reaction Catalyst. <b>2016</b> , 2, 972-979                           | 9   |
| 1581 | Direct hydroxylation of benzene to phenol using H2O2 as an oxidant over vanadium-containing nitrogen doped mesoporous carbon catalysts. <b>2016</b> , 6, 87656-87664                            | 19  |
| 1580 | Facile synthesis of 3D silicon/carbon nanotube capsule composites as anodes for high-performance lithium-ion batteries. <b>2016</b> , 329, 422-427  | 35  |
| 1579 | Near-infrared emissive carbon dots for two-photon fluorescence bioimaging. <b>2016</b> , 8, 17350-17356   | 172 |
| 1578 | A graphene-based electrocatalyst co-doped with nitrogen and cobalt for oxygen reduction reaction. <b>2016</b> , 41, 20494-20501   | 17  |
| 1577 | Electronic Coupling of Cobalt Nanoparticles to Nitrogen-Doped Graphene for Oxygen Reduction and Evolution Reactions. <b>2016</b> , 9, 3067-3073   | 17  |
| 1576 | Molecular level distribution of black phosphorus quantum dots on nitrogen-doped graphene nanosheets for superior lithium storage. <b>2016</b> , 30, 347-354                                     | 94  |
| 1575 | Nitrogen, Phosphorus, and Fluorine Tri-doped Graphene as a Multifunctional Catalyst for Self-Powered Electrochemical Water Splitting. <b>2016</b> , 128, 13490-13494                            | 93  |
| 1574 | Enhanced oxygen reduction reaction activity of iron-containing nitrogen-doped carbon nanotubes for alkaline direct methanol fuel cell application. <b>2016</b> , 332, 129-138                   | 73  |
| 1573 | Purely substitutional nitrogen on graphene/Pt(111) unveiled by STM and first principles calculations. <b>2016</b> , 8, 17686-17693  | 12  |
| 1572 | In situ formation of nitrogen-doped carbon nanoparticles on hollow carbon spheres as efficient oxygen reduction electrocatalysts. <b>2016</b> , 8, 18134-18142                                  | 49  |
| 1571 | Preparation of polyaniline/graphene composites with excellent anti-corrosion properties and their application in waterborne polyurethane anticorrosive coatings. <b>2016</b> , 6, 95965-95972   | 83  |
| 1570 | Enhanced performances of Li/polysulfide batteries with 3D reduced graphene oxide/carbon nanotube hybrid aerogel as the polysulfide host. <b>2016</b> , 30, 193-199                              | 47  |
| 1569 | Graphene Oxide Sheathed ZIF-8 Microcrystals: Engineered Precursors of Nitrogen-Doped Porous Carbon for Efficient Oxygen Reduction Reaction (ORR) Electrocatalysis. <b>2016</b> , 8, 29373-29382 | 105 |

 $_{1568}$  Highly active nickel-cobalt/nanocarbon thin films as efficient water splitting electrodes. **2016**, 8, 18507-18515  $_{47}$ 

| 1567 | A nitrogenBulfur co-doped porous graphene matrix as a sulfur immobilizer for high performance lithiumBulfur batteries. <b>2016</b> , 4, 17381-17393  | 101 |
|------|--|-----|
| 1566 | Transparent conducting oxide-free nitrogen-doped graphene/reduced hydroxylated carbon nanotube composite paper as flexible counter electrodes for dye-sensitized solar cells. <b>2016</b> , 334, 44-51 | 23  |
| 1565 | Synthesis of Activated Graphite Felt Using Consecutive Post-Treatments for Vanadium Redox Flow Batteries. <b>2016</b> , 163, A2586-A2591   | 21  |
| 1564 | Influence of oxygen on nitrogen-doped carbon nanofiber growth directly on nichrome foil. <b>2016</b> , 27, 365602  | 6   |
| 1563 | Nitrogen, Phosphorus, and Fluorine Tri-doped Graphene as a Multifunctional Catalyst for Self-Powered Electrochemical Water Splitting. <b>2016</b> , 55, 13296-13300                                    | 406 |
| 1562 | ZIF-67 Derived Nanostructures of Co/CoO and Co@N-doped Graphitic Carbon as Counter Electrode for Highly Efficient Dye-sensitized Solar Cells. <b>2016</b> , 213, 252-259                               | 70  |
| 1561 | 3D graphene-based hybrid materials: synthesis and applications in energy storage and conversion. <b>2016</b> , 8, 15414-47   | 105 |
| 1560 | Highly efficient iron phthalocyanine based porous carbon electrocatalysts for the oxygen reduction reaction. <b>2016</b> , 6, 78737-78742  | 13  |
| 1559 | A self-template and KOH activation co-coupling strategy to synthesize ultrahigh surface area nitrogen-doped porous graphene for oxygen reduction. <b>2016</b> , 6, 73292-73300                         | 24  |
| 1558 | Ultra-fine Pt nanoparticles supported on 3D porous N-doped graphene aerogel as a promising electro-catalyst for methanol electrooxidation. <b>2016</b> , 86, 46-50                                     | 34  |
| 1557 | One-step microwave synthesis of N-doped hydroxyl-functionalized carbon dots with ultra-high fluorescence quantum yields. <b>2016</b> , 8, 15281-7  | 155 |
| 1556 | Fe@N-Graphene Nanoplatelet-Embedded Carbon Nanofibers as Efficient Electrocatalysts for Oxygen Reduction Reaction. <b>2016</b> , 3, 1500205  | 39  |
| 1555 | Recent Progress in Synthesis, Characterization and Evaluation of Non-Precious Metal Catalysts for the Oxygen Reduction Reaction. <b>2016</b> , 16, 4-22  | 93  |
| 1554 | Functional materials from nature: honeycomb-like carbon nanosheets derived from silk cocoon as excellent electrocatalysts for hydrogen evolution reaction. <b>2016</b> , 215, 223-230                  | 49  |
| 1553 | Synergetic effects of edge formation and sulfur doping on the catalytic activity of a graphene-based catalyst for the oxygen reduction reaction. <b>2016</b> , 4, 14400-14407                          | 27  |
| 1552 | One-pot synthesis of nitrogen-rich carbon dots decorated graphene oxide as metal-free electrocatalyst for oxygen reduction reaction. <b>2016</b> , 109, 402-410  | 79  |
| 1551 | Defective-Activated-Carbon-Supported Mn-Co Nanoparticles as a Highly Efficient Electrocatalyst for Oxygen Reduction. <b>2016</b> , 28, 8771-8778   | 139 |
|      |  |     |

| 1550 | Synthesis of nitrogen-doped graphene catalyst by high-energy wet ball milling for electrochemical systems. <b>2016</b> , 40, 2136-2149  | 39  |
|------|---|-----|
| 1549 | Electrocatalytic performances of heteroatom-containing functionalities in N-doped reduced graphene oxides. <b>2016</b> , 42, 149-156  | 19  |
| 1548 | Nitrogen-doped carbon nanotubes as efficient catalysts for isobutane dehydrogenation. <b>2016</b> , 6, 8562-8570  | 13  |
| 1547 | Construction of a Unique Two-Dimensional Hierarchical Carbon Architecture for Superior Lithium-Ion Storage. <b>2016</b> , 8, 33399-33404  | 20  |
| 1546 | An effective poly(p-phenylenevinylene) polymer adhesion route toward three-dimensional nitrogen-doped carbon nanotube/reduced graphene oxide composite for direct electrocatalytic oxygen reduction. <b>2016</b> , 9, 3364-3376 | 15  |
| 1545 | Flour food waste derived activated carbon for high-performance supercapacitors. <b>2016</b> , 6, 89391-89396  | 28  |
| 1544 | Excitation Wavelength Independence: Toward Low-Threshold Amplified Spontaneous Emission from Carbon Nanodots. <b>2016</b> , 8, 25454-60   | 54  |
| 1543 | CobaltNitrogen Co-doped Carbon Nanotube Cathode Catalyst for Alkaline Membrane Fuel Cells. <b>2016</b> , 3, 1455-1465   | 54  |
| 1542 | The Effect of KOH Treatment on the Chemical Structure and Electrocatalytic Activity of Reduced Graphene Oxide Materials. <b>2016</b> , 22, 11435-40   | 5   |
| 1541 | Nitrogen-doped mesoporous carbon nanosheet/carbon nanotube hybrids as metal-free bi-functional electrocatalysts for water oxidation and oxygen reduction. <b>2016</b> , 4, 13133-13141  | 102 |
| 1540 | Pyridinic Nitrogen-Enriched Carbon Nanogears with Thin Teeth for Superior Lithium Storage. <b>2016</b> , 6, 1600917   | 96  |
| 1539 | Non-Pt Nanostructured Catalysts for Oxygen Reduction Reaction: Synthesis, Catalytic Activity and its Key Factors. <b>2016</b> , 6, 1600458  | 125 |
| 1538 | Synthesis and Activity of A Single Active Site N-doped Electro-catalyst for Oxygen Reduction. <b>2016</b> , 213, 927-932  | 14  |
| 1537 | Reactive Multifunctional Template-Induced Preparation of Fe-N-Doped Mesoporous Carbon Microspheres Towards Highly Efficient Electrocatalysts for Oxygen Reduction. <b>2016</b> , 28, 7948-7955                                  | 279 |
| 1536 | CarbonBoron coreBhell microspheres for the oxygen reduction reaction. <b>2016</b> , 4, 12987-12994  | 8   |
| 1535 | Microwave Exfoliation of Graphite Oxides in HS Plasma for the Synthesis of Sulfur-Doped Graphenes as Oxygen Reduction Catalysts. <b>2016</b> , 8, 31849-31855   | 26  |
| 1534 | Microwave-Assisted Synthesis of Highly Dispersed PtCu Nanoparticles on Three-Dimensional Nitrogen-Doped Graphene Networks with Remarkably Enhanced Methanol Electrooxidation. <b>2016</b> , 8, 33673-33680                      | 63  |
| 1533 | Nitrogen-doped mesoporous network-like carbon as an efficient metal-free electrocatalyst for oxygen reduction reaction. <b>2016</b> , 41, 22941-22951   | 29  |

| 1532 | Toward High-Efficient Red Emissive Carbon Dots: Facile Preparation, Unique Properties, and Applications as Multifunctional Theranostic Agents. <b>2016</b> , 28, 8659-8668   | 340 |
|------|--|-----|
| 1531 | 3-D mesoporous nitrogen-doped reduced graphene oxide as an efficient metal-free electrocatalyst for oxygen reduction reaction in alkaline fuel cells: Role of Land lone pair electrons. <b>2016</b> , 222, 608-618 | 40  |
| 1530 | A self-quenching-resistant carbon nanodot powder with multicolored solid-state fluorescence for ultra-fast staining of various representative bacterial species within one minute. <b>2016</b> , 8, 19744-19753    | 25  |
| 1529 | Flexible carbonized cotton covered by graphene/Co-doped SnO2 as free-standing and binder-free anode material for lithium-ions batteries. <b>2016</b> , 222, 518-527  | 24  |
| 1528 | Non-invasive screening for early Alzheimer's disease diagnosis by a sensitively immunomagnetic biosensor. <b>2016</b> , 6, 25155   | 41  |
| 1527 | Magnetic properties of N-doped graphene with high Curie temperature. <b>2016</b> , 6, 21832  | 57  |
| 1526 | Carbon-coated Si micrometer particles binding to reduced graphene oxide for a stable high-capacity lithium-ion battery anode. <b>2016</b> , 4, 17757-17763   | 25  |
| 1525 | Controllably Alloyed, Low Density, Free-standing Ni-Co and Ni-Graphene Sponges for Electrocatalytic Water Splitting. <b>2016</b> , 6, 31202  | 39  |
| 1524 | High-performance oxygen reduction catalyst derived from porous, nitrogen-doped carbon nanosheets. <b>2016</b> , 27, 405401   | 8   |
| 1523 | Tunable magnetism in metal adsorbed fluorinated nanoporous graphene. <b>2016</b> , 6, 31841  | 10  |
| 1522 | Nanoporous Graphene Enriched with Fe/Co-N Active Sites as a Promising Oxygen Reduction Electrocatalyst for Anion Exchange Membrane Fuel Cells. <b>2016</b> , 26, 2150-2162   | 245 |
| 1521 | Nitrogen-Doped Porous Carbon Nanosheets Templated from g-C3 N4 as Metal-Free Electrocatalysts for Efficient Oxygen Reduction Reaction. <b>2016</b> , 28, 5080-6  | 573 |
| 1520 | Design of Advanced MnO/N-Gr 3D Walls through Polymer Cross-Linking for High-Performance Supercapacitor. <b>2016</b> , 22, 1652-7   | 15  |
| 1519 | N-Doped carbon supported Co3O4 nanoparticles as an advanced electrocatalyst for the oxygen reduction reaction in Al∃ir batteries. <b>2016</b> , 6, 55552-5559  | 29  |
| 1518 | Synthesis of silver/nitrogen-doped reduced graphene oxide through a one-step thermal solid-state reaction for oxygen reduction in an alkaline medium. <b>2016</b> , 324, 412-420                                   | 38  |
| 1517 | 3D Hierarchical Pt-Nitrogen-Doped-Graphene-Carbonized Commercially Available Sponge as a Superior Electrocatalyst for Low-Temperature Fuel Cells. <b>2016</b> , 8, 16026-34  | 73  |
| 1516 | Nitrogen-doped graphene/molybdenum disulfide composite as the electrocatalytic film for dye-sensitized solar cells. <b>2016</b> , 211, 164-172   | 17  |
| 1515 | High performance NiO nanosheets anchored on three-dimensional nitrogen-doped carbon nanotubes as a binder-free anode for lithium ion batteries. <b>2016</b> , 4, 10940-10947                                       | 39  |

| 1514 | Nitrogen-doped graphene microtubes with opened inner voids: Highly efficient metal-free electrocatalysts for alkaline hydrogen evolution reaction. <b>2016</b> , 9, 2606-2615                           | 76  |
|------|---|-----|
| 1513 | Nitrogen Doped Graphene as Metal Free Electrocatalyst for Efficient Oxygen Reduction Reaction in Alkaline Media and Its Application in Anion Exchange Membrane Fuel Cells. <b>2016</b> , 163, F848-F855 | 59  |
| 1512 | Chemical Modification of Graphene. <b>2016</b> , 207-224  |     |
| 1511 | Effect of External Electric Fields on the Multifunctional Applications of Graphene. <b>2016</b> , 253-272   |     |
| 1510 | Graphene-Based DNA Sensors. <b>2016</b> , 13-26   | 2   |
| 1509 | One-step synthesis of a novel N-doped microporous biochar derived from crop straws with high dye adsorption capacity. <b>2016</b> , 176, 61-8   | 110 |
| 1508 | A synchrotron-based spectroscopic study of the electronic structure of N-doped HOPG and PdY/N-doped HOPG. <b>2016</b> , 646, 132-139  | 12  |
| 1507 | Direct fabrication of metal-free hollow graphene balls with a self-supporting structure as efficient cathode catalysts of fuel cell. <b>2016</b> , 18, 1  | 8   |
| 1506 | How theory and simulation can drive fuel cell electrocatalysis. <b>2016</b> , 29, 334-361   | 54  |
| 1505 | Catalytic properties of graphitic and pyridinic nitrogen doped on carbon black for oxygen reduction reaction. <b>2016</b> , 37, 1119-1126   | 43  |
| 1504 | Phosphorus and cobalt co-doped reduced graphene oxide bifunctional electrocatalyst for oxygen reduction and evolution reactions. <b>2016</b> , 6, 64155-64164   | 15  |
| 1503 | N,P-Codoped Carbon Networks as Efficient Metal-free Bifunctional Catalysts for Oxygen Reduction and Hydrogen Evolution Reactions. <b>2016</b> , 128, 2270-2274  | 185 |
| 1502 | Nitrogen-Doped Graphene Quantum Dots Anchored on Thermally Reduced Graphene Oxide as an Electrocatalyst for the Oxygen Reduction Reaction. <b>2016</b> , 3, 864-870                                     | 29  |
| 1501 | Controllable nitrogen introduction into porous carbon with porosity retaining for investigating nitrogen doping effect on SO2 adsorption. <b>2016</b> , 290, 116-124                                    | 58  |
| 1500 | Nitrogen-doped graphene nanosheets as metal-free catalysts for dehydrogenation reaction of ethanol. <b>2016</b> , 6, 13450-13455  | 23  |
| 1499 | Nitrogen-doped porous carbons supported Pt nanoparticles for methanol oxidation in alkaline medium. <b>2016</b> , 166, 16-18  | 14  |
| 1498 | Core-shell nano-FeS2@N-doped graphene as an advanced cathode material for rechargeable Li-ion batteries. <b>2016</b> , 52, 986-9  | 78  |
| 1497 | RETRACTED: High sorption of U(VI) on graphene oxides studied by batch experimental and theoretical calculations. <b>2016</b> , 287, 448-455   | 167 |

| 1496 | Facile Synthesis of Nickellron/Nanocarbon Hybrids as Advanced Electrocatalysts for Efficient Water Splitting. <b>2016</b> , 6, 580-588   | 292 |
|------|--|-----|
| 1495 | Towards high-efficiency nanoelectrocatalysts for oxygen reduction through engineering advanced carbon nanomaterials. <b>2016</b> , 45, 1273-307                                    | 510 |
| 1494 | ZnO nanoparticles encapsulated in a 3D hierarchical carbon framework as anode for lithium ion battery. <b>2016</b> , 189, 245-251  | 52  |
| 1493 | Nitrogen-Doped Activated Carbon-Based Ammonia Sensors: Effect of Specific Surface Functional Groups on Carbon Electronic Properties. <b>2016</b> , 1, 591-599                      | 39  |
| 1492 | Transforming waste biomass with an intrinsically porous network structure into porous nitrogen-doped graphene for highly efficient oxygen reduction. <b>2016</b> , 18, 10392-9     | 78  |
| 1491 | Synthesis of hybrid carbon spheres@nitrogen-doped graphene/carbon nanotubes and their oxygen reduction activity performance. <b>2016</b> , 6, 32661-32669                          | 7   |
| 1490 | Nickel coreBalladium shell nanoparticles grown on nitrogen-doped graphene with enhanced electrocatalytic performance for ethanol oxidation. <b>2016</b> , 6, 33231-33239           | 24  |
| 1489 | Three-dimensional nitrogen-doped graphene hydrogels prepared via hydrothermal synthesis as high-performance supercapacitor materials. <b>2016</b> , 194, 136-142                   | 84  |
| 1488 | Preparation of three-dimensional nitrogen-doped graphene layers by gas foaming method and its electrochemical capactive behavior. <b>2016</b> , 193, 293-301                       | 13  |
| 1487 | Magnetically separable nitrogen-doped mesoporous carbon with high adsorption capacity. <b>2016</b> , 51, 3868-3879   | 22  |
| 1486 | Rapid Preparation of Crosslinked N-doped Graphene by Burning Method for High-Performance Electrochemical Capacitors. <b>2016</b> , 192, 243-250                                    | 11  |
| 1485 | Effects of nitrogen-dopants on Ru-supported catalysts for acetylene hydrochlorination. <b>2016</b> , 6, 18026-18032  | 28  |
| 1484 | Ultra-high Rates and Reversible Capacity of Li-S Battery with a Nitrogen-doping Conductive Lewis Base Matrix. <b>2016</b> , 192, 467-474   | 22  |
| 1483 | One-step construction of FeOx modified g-C3N4 for largely enhanced visible-light photocatalytic hydrogen evolution. <b>2016</b> , 101, 62-70                                       | 64  |
| 1482 | Synthetic approach from polypyrrole nanotubes to nitrogen doped pyrolyzed carbon nanotubes for asymmetric supercapacitors. <b>2016</b> , 308, 158-165                              | 142 |
| 1481 | Ionic liquid functionalized carbon nanotubes: metal-free electrocatalyst for hydrogen evolution reaction. <b>2016</b> , 6, 12792-12796   | 15  |
| 1480 | Three-dimensional nitrogen doped holey reduced graphene oxide framework as metal-free counter electrodes for high performance dye-sensitized solar cells. <b>2016</b> , 308, 44-51 | 54  |
| 1479 | Synthesis of hollow carbon nanostructures as a non-precious catalyst for oxygen reduction reaction. <b>2016</b> , 191, 805-812   | 26  |

## (2016-2016)

| 1478 | batteries. <b>2016</b> , 768, 18-26   | 95   |
|------|---|------|
| 1477 | Facile wet chemical method for fabricating p-type BiOBr/n-type nitrogen doped graphene composites: Efficient visible-excited charge separation, and high-performance photoelectrochemical sensing. <b>2016</b> , 102, 10-17 | 71   |
| 1476 | Formation Mechanisms of Graphitic-N: Oxygen Reduction and Nitrogen Doping of Graphene Oxides. <b>2016</b> , 120, 5673-5681  | 25   |
| 1475 | Adsorption mechanisms of lithium oxides (LixO2) on N-doped graphene: a density functional theory study with implications for lithiumBir batteries. <b>2016</b> , 135, 1   | 20   |
| 1474 | One-step synthesis of cobalt, nitrogen-codoped carbon as nonprecious bifunctional electrocatalyst for oxygen reduction and evolution reactions. <b>2016</b> , 61, 68-77   | 46   |
| 1473 | Catalyst-Free Growth of Three-Dimensional Graphene Flakes and Graphene/g-CNIComposite for Hydrocarbon Oxidation. <i>ACS Nano</i> , <b>2016</b> , 10, 3665-73  | 7 93 |
| 1472 | Electrosorption of Lead Ions by Nitrogen-Doped Graphene Aerogels via One-Pot Hydrothermal Route. <b>2016</b> , 55, 1912-1920  | 33   |
| 1471 | Controllable Codoping of Nitrogen and Sulfur in Graphene for Highly Efficient Li-Oxygen Batteries and Direct Methanol Fuel Cells. <b>2016</b> , 28, 1737-1745   | 113  |
| 1470 | Nitrogen-doped porous graphene with surface decorated MnO2 nanowires as a high-performance anode material for lithium-ion batteries. <b>2016</b> , 4, 7251-7256   | 36   |
| 1469 | Ionic liquid-assisted synthesis of dual-doped graphene as efficient electrocatalysts for oxygen reduction. <b>2016</b> , 102, 58-65   | 45   |
| 1468 | Structural changes in graphene oxide thin film by electron-beam irradiation. <b>2016</b> , 379, 171-175   | 12   |
| 1467 | Experimental investigation of thermophysical properties, entropy generation and convective heat transfer for a nitrogen-doped graphene nanofluid in a laminar flow regime. <b>2016</b> , 27, 717-727                        | 33   |
| 1466 | Novel synthesis of N-doped graphene as an efficient electrocatalyst towards oxygen reduction. <b>2016</b> , 9, 808-819  | 72   |
| 1465 | Single non-noble-metal cobalt atom stabilized by pyridinic vacancy graphene: An efficient catalyst for CO oxidation. <b>2016</b> , 417, 28-35   | 60   |
| 1464 | A GRAPHENE/ENZYME-BASED ELECTROCHEMICAL SENSOR FOR SENSITIVE DETECTION OF ORGANOPHOSPHORUS PESTICIDES. <b>2016</b> , 23, 1550103  | 9    |
| 1463 | Polystyrene Microspheres-Templated Nitrogen-Doped Graphene Hollow Spheres as Metal-Free Catalyst for Oxygen Reduction Reaction. <b>2016</b> , 188, 230-239  | 22   |
| 1462 | Simultaneous doping of nitrogen and fluorine into reduced graphene oxide: A highly active metal-free electrocatalyst for oxygen reduction. <b>2016</b> , 99, 272-279  | 46   |
| 1461 | Production of N-graphene by microwave N2-Ar plasma. <b>2016</b> , 49, 055307  | 27   |

| 1460 | Nitrogen/sulfur co-doped helical graphene nanoribbons for efficient oxygen reduction in alkaline and acidic electrolytes. <b>2016</b> , 100, 99-108   | 55  |
|------|---|-----|
| 1459 | Nitrogen-doped graphenepolyvinylpyrrolidone/gold nanoparticles modified electrode as a novel hydrazine sensor. <b>2016</b> , 227, 524-532   | 42  |
| 1458 | N-Doped graphene frameworks with superhigh surface area: excellent electrocatalytic performance for oxygen reduction. <b>2016</b> , 8, 2795-803   | 48  |
| 1457 | Hierarchical Metal-Free Nitrogen-Doped Porous Graphene/Carbon Composites as an Efficient Oxygen Reduction Reaction Catalyst. <b>2016</b> , 8, 1415-23   | 98  |
| 1456 | Cobalt and Nitrogen Co-Doped Tungsten Carbide Catalyst for Oxygen Reduction and Hydrogen Evolution Reactions. <b>2016</b> , 190, 1113-1123  | 49  |
| 1455 | Solvent-free in situ synthesis of g-C 3 N 4 $/\{0\ 0\ 1\}$ TiO 2 composite with enhanced UV- and visible-light photocatalytic activity for NO oxidation. <b>2016</b> , 182, 587-597             | 140 |
| 1454 | Ice-templated three dimensional nitrogen doped graphene for enhanced supercapacitor performance. <b>2016</b> , 303, 372-378   | 107 |
| 1453 | Review on recent advances in nitrogen-doped carbons: preparations and applications in supercapacitors. <b>2016</b> , 4, 1144-1173   | 706 |
| 1452 | TiO2-modified CNx nanowires as a Pt electrocatalyst support with high activity and durability for the oxygen reduction reaction. <b>2016</b> , 18, 1500-6                                       | 14  |
| 1451 | Interfacial nitrogen stabilizes carbon-coated mesoporous silicon particle anodes. <b>2016</b> , 4, 434-442  | 30  |
| 1450 | Synthesis of nitrogen-doped epitaxial graphene via plasma-assisted method: Role of the grapheneBubstrate interaction. <b>2016</b> , 643, 214-221  | 15  |
| 1449 | The application of graphene and its composites in oxygen reduction electrocatalysis: a perspective and review of recent progress. <b>2016</b> , 9, 357-390                                      | 387 |
| 1448 | Easy one-step synthesis of N-doped graphene for supercapacitors. <b>2016</b> , 2, 69-75   | 44  |
| 1447 | Performance study of magnesium-sulfur battery using a graphene based sulfur composite cathode electrode and a non-nucleophilic Mg electrolyte. <b>2016</b> , 8, 3296-306                        | 190 |
| 1446 | Nano Devices and Circuit Techniques for Low-Energy Applications and Energy Harvesting. 2016,  | 3   |
| 1445 | An artificial photosynthesis system based on CeO2 as light harvester and N-doped graphene Cu(II) complex as artificial metalloenzyme for CO2 reduction to methanol fuel. <b>2016</b> , 73, 7-11 | 43  |
| 1444 | Three dimensional nitrogen-doped graphene hydrogels with in situ deposited cobalt phosphate nanoclusters for efficient oxygen evolution in a neutral electrolyte. <b>2016</b> , 1, 41-44        | 46  |
| 1443 | Graphene and Two-Dimensional Transition Metal Dichalcogenide Materials for Energy-Related Applications. <b>2016</b> , 253-291   |     |

| 1442 | Electrocatalysis of oxygen reduction on multi-walled carbon nanotube supported copper and manganese phthalocyanines in alkaline media. <b>2016</b> , 20, 921-929  | 19  |
|------|---|-----|
| 1441 | The effect of varying N/C ratios of nitrogen precursors during non-metal graphene catalyst synthesis. <b>2017</b> , 42, 9069-9076   | 12  |
| 1440 | Nickel Nanoparticles Encapsulated in Few-Layer Nitrogen-Doped Graphene Derived from Metal-Organic Frameworks as Efficient Bifunctional Electrocatalysts for Overall Water Splitting. <b>2017</b> , 29, 1605957                                    | 421 |
| 1439 | Facile synthesis of nitrogen-doped graphene via low-temperature pyrolysis: The effects of precursors and annealing ambience on metal-free catalytic oxidation. <b>2017</b> , 115, 649-658   | 209 |
| 1438 | Fe-Cluster Pushing Electrons to N-Doped Graphitic Layers with FeC(Fe) Hybrid Nanostructure to Enhance O Reduction Catalysis of Zn-Air Batteries. <b>2017</b> , 9, 4587-4596   | 96  |
| 1437 | Fabrication and current-voltage characteristics of Mo $1$ M W x S $2$ /graphene oxide heterojunction diode. <b>2017</b> , 320, 520-526  |     |
| 1436 | Chiral NH-Controlled Supramolecular Metallacycles. <b>2017</b> , 139, 1554-1564   | 94  |
| 1435 | A nitrogen-doped three-dimensional carbon framework for high performance sodium ion batteries. <b>2017</b> , 7, 1588-1592   | 16  |
| 1434 | Nitrogen-Doped Graphene as a Robust Scaffold for the Homogeneous Deposition of Copper Nanostructures: A Nonenzymatic Disposable Glucose Sensor. <b>2017</b> , 5, 1648-1658  | 59  |
| 1433 | A Generic Conversion Strategy: From 2D Metal Carbides (MxCy) to M-Self-Doped Graphene toward High-Efficiency Energy Applications. <b>2017</b> , 27, 1604904   | 59  |
| 1432 | Graphene Electrocatalysts for Fiber Dye-Sensitized Solar Cells. <b>2017</b> , 79-105  |     |
| 1431 | Structure-activity relationship of doped-nitrogen (N)-based metal-free active sites on carbon for oxygen reduction reaction. <b>2017</b> , 115, 763-772   | 79  |
| 1430 | Hierarchical Porous Carbon Materials Derived from Self-Template Bamboo Leaves for LithiumBulfur Batteries. <b>2017</b> , 229, 352-360   | 44  |
| 1429 | An innate quinone functionalized electrochemically exfoliated graphene/Fe 3 O 4 composite electrode for the continuous generation of reactive oxygen species. <b>2017</b> , 316, 964-977  | 45  |
| 1428 | Electrocatalysis of oxygen reduction by iron-containing nitrogen-doped carbon aerogels in alkaline solution. <b>2017</b> , 230, 81-88   | 46  |
| 1427 | Highly porous nitrogen-doped carbon nanoparticles synthesized via simple thermal treatment and their electrocatalytic activity for oxygen reduction reaction. <b>2017</b> , 115, 515-525  | 27  |
| 1426 | Enabling fast electron transfer through both bacterial outer-membrane redox centers and endogenous electron mediators by polyaniline hybridized large-mesoporous carbon anode for high-performance microbial fuel cells. <b>2017</b> , 229, 31-38 | 53  |
| 1425 | Ultrafine Sn nanocrystals in a hierarchically porous N-doped carbon for lithium ion batteries. <b>2017</b> , 10, 1950-1958  | 64  |

| 1424 | Nitrogen-doped graphene supporting PtSn nanoparticles with a tunable microstructure to enhance the activity and stability for ethanol oxidation. <b>2017</b> , 21, 967-974                | 8   |
|------|---|-----|
| 1423 | A versatile biomass derived carbon material for oxygen reduction reaction, supercapacitors and oil/water separation. <b>2017</b> , 33, 334-342  | 288 |
| 1422 | Recent advances of supercapacitors based on two-dimensional materials. <b>2017</b> , 7, 1-12  | 17  |
| 1421 | Simple-Cubic Carbon Frameworks with Atomically Dispersed Iron Dopants toward High-Efficiency Oxygen Reduction. <b>2017</b> , 17, 2003-2009  | 134 |
| 1420 | Freestanding highly defect nitrogen-enriched carbon nanofibers for lithium ion battery thin-film anodes. <b>2017</b> , 5, 5532-5540   | 28  |
| 1419 | Simple and Large-Scale Strategy to Prepare Flexible Graphene Tape Electrode. <b>2017</b> , 9, 9089-9095   | 29  |
| 1418 | Enabling Inkjet Printed Graphene for Ion Selective Electrodes with Postprint Thermal Annealing. <b>2017</b> , 9, 12719-12727  | 47  |
| 1417 | 2,3-diaminopyridine functionalized reduced graphene oxide-supported palladium nanoparticles with high activity for electrocatalytic oxygen reduction reaction. <b>2017</b> , 406, 226-234 | 8   |
| 1416 | The necessity of structural irregularities for the chemical applications of graphene. 2017, 4, 1-16   | 79  |
| 1415 | Preparation of highly porous carbon through activation of NH4Cl induced hydrothermal microsphere derivation of glucose. <b>2017</b> , 7, 6486-6491  | 22  |
| 1414 | Synthesis of honeycomb-like mesoporous nitrogen-doped carbon nanospheres as Pt catalyst supports for methanol oxidation in alkaline media. <b>2017</b> , 407, 64-71                       | 50  |
| 1413 | Large-scale template-free synthesis of N-doped graphene nanotubes and N-doped SiO 2 -coated graphene nanotubes: Growth mechanism and field-emission property. <b>2017</b> , 706, 147-155  | 17  |
| 1412 | Nickel nanoparticles supported on nitrogen-doped honeycomb-like carbon frameworks for effective methanol oxidation. <b>2017</b> , 7, 14152-14158  | 43  |
| 1411 | Facile production of graphene nanosheets comprising nitrogen-doping through in situ cathodic plasma formation during electrochemical exfoliation. <b>2017</b> , 5, 2597-2602              | 25  |
| 1410 | Hollow-structured conjugated porous polymer derived Iron/Nitrogen-codoped hierarchical porous carbons as highly efficient electrocatalysts. <b>2017</b> , 497, 108-116                    | 23  |
| 1409 | Nitrogen-doped graphene-wrapped iron nanofragments for high-performance oxygen reduction electrocatalysts. <b>2017</b> , 19, 1  | 10  |
| 1408 | Melamine-assisted to fabricate pure ⊞e2O3 polyhedron with high-index facet exposed as an effective photoelectrode. <b>2017</b> , 343, 94-102  | 14  |
| 1407 | N-Doped Graphene from Metal®rganic Frameworks for Catalytic Oxidation of p-Hydroxylbenzoic Acid: N-Functionality and Mechanism. <b>2017</b> , 5, 2693-2701                                | 152 |

# (2016-2017)

| 1406 | photocatalytic activity. <b>2017</b> , 7, 10668-10674  | 42  |
|------|--|-----|
| 1405 | Fabrication of monodisperse nitrogen-doped carbon double-shell hollow nanoparticles for supercapacitors. <b>2017</b> , 7, 20694-20699  | 9   |
| 1404 | Fabrication of an all solid Z-scheme photocatalyst g-C3N4/GO/AgBr with enhanced visible light photocatalytic activity. <b>2017</b> , 539, 104-113  | 99  |
| 1403 | Mechanochemical synthesis of nanostructured metal nitrides, carbonitrides and carbon nitride: a combined theoretical and experimental study. <b>2017</b> , 19, 12414-12424                                   | 9   |
| 1402 | Well dispersed Fe2N nanoparticles on surface of nitrogen-doped reduced graphite oxide for highly efficient electrochemical hydrogen evolution. <b>2017</b> , 32, 1770-1776                                   | 17  |
| 1401 | In Situ Growth of Ceria on CeriumNitrogenCarbon as Promoter for Oxygen Evolution Reaction. <b>2017</b> , 4, 1700272  | 13  |
| 1400 | Controlled Synthesis of Nitrogen-Doped Graphene on Ruthenium from Azafullerene. <b>2017</b> , 17, 2887-2894  | 22  |
| 1399 | The active site exploration of Co-based non-precious metal electrocatalysts for oxygen reduction reaction. <b>2017</b> , 23, 1849-1859   | 6   |
| 1398 | Proline-derived in situ synthesis of nitrogen-doped porous carbon nanosheets with encaged Fe2O3@Fe3C nanoparticles for lithium-ion battery anodes. <b>2017</b> , 10, 3164-3177                               | 21  |
| 1397 | CoreBhell N-doped carbon spheres for high-performance supercapacitors. <b>2017</b> , 52, 9673-9682   | 16  |
| 1396 | Atomically thin SiC nanoparticles obtained via ultrasonic treatment to realize enhanced catalytic activity for the oxygen reduction reaction in both alkaline and acidic media. <b>2017</b> , 7, 22875-22881 | 15  |
| 1395 | L -Proline bio-inspired synthesis of AuPt nanocalliandras as sensing platform for label-free electrochemical immunoassay of carbohydrate antigen 19-9. <b>2017</b> , 250, 61-68                              | 23  |
| 1394 | Synthesis and application of electrochemically reduced N-rGO-Co(OH)2 nanocomposite for concurrent detection of biomolecules. <b>2017</b> , 235, 709-719  | 16  |
| 1393 | Work function engineering of graphene oxide via covalent functionalization for organic field-effect transistors. <b>2017</b> , 419, 252-258  | 30  |
| 1392 | Effect of the calcination temperature on the visible light photocatalytic activity of direct contact Z-scheme g-C3N4-TiO2 heterojunction. <b>2017</b> , 212, 106-114   | 143 |
| 1391 | RuCl3 Supported on N-Doped Graphene as a Reusable Catalyst for the One-Step Glucose Oxidation to Succinic Acid. <b>2017</b> , 9, 3314-3321   | 14  |
| 1390 | From biomass chitin to mesoporous nanosheets assembled loofa sponge-like N-doped carbon/g-C 3 N 4 3D network architectures as ultralow-cost bifunctional oxygen catalysts. <b>2017</b> , 240, 216-226        | 42  |
| 1389 | Trapping of gaseous pollutants on defective N-doped graphene. <b>2016</b> , 19, 636-643  | 10  |

| 1388 | Cotton/rGO/carbon-coated SnO2 nanoparticle-composites as superior anode for Lithium ion battery. <b>2017</b> , 114, 234-242  | 29  |
|------|--|-----|
| 1387 | Gram-scale production of nitrogen doped graphene using a 1,3-dipolar organic precursor and its utilisation as a stable, metal free oxygen evolution reaction catalyst. <b>2017</b> , 53, 7748-7751             | 6   |
| 1386 | Conductive Carbon Nitride for Excellent Energy Storage. <b>2017</b> , 29, 1701674  | 112 |
| 1385 | Amperometric nonenzymatic determination of glucose via a glassy carbon electrode modified with nickel hydroxide and N-doped reduced graphene oxide. <b>2017</b> , 184, 3103-3111                               | 28  |
| 1384 | In situ, facile synthesis of La0.8Sr0.2MnO3/nitrogen-doped graphene: a high-performance catalyst for rechargeable Li-O2 batteries. <b>2017</b> , 23, 2241-2250   | 9   |
| 1383 | Nitrogen-doped 3D reduced graphene oxide/polyaniline composite as active material for supercapacitor electrodes. <b>2017</b> , 422, 339-347  | 27  |
| 1382 | Fe3+-Clinoptilolite/graphene oxide and layered MoS2@Nitrogen doped graphene as novel graphene based nanocomposites for DMFC. <b>2017</b> , 42, 16741-16751   | 14  |
| 1381 | Coating procedure for chemical and morphological functionalization of multilayer-graphene foams. <b>2017</b> , 121, 170-180  | 2   |
| 1380 | In Situ Coupling FeM (M = Ni, Co) with Nitrogen-Doped Porous Carbon toward Highly Efficient Trifunctional Electrocatalyst for Overall Water Splitting and Rechargeable ZnAir Battery. <b>2017</b> , 1, 1700020 | 102 |
| 1379 | On-surface synthesis of different borontitrogentarbon heterostructures from dimethylamine borane. <b>2017</b> , 120, 185-193   | 11  |
| 1378 | Tunable Type-I and Type-II Dirac Fermions in Graphene with Nitrogen Line Defects. 2017, 121, 12476-12482   | 6   |
| 1377 | Doping and reduction of graphene oxide using chitosan-derived volatile N-heterocyclic compounds for metal-free oxygen reduction reaction. <b>2017</b> , 120, 419-426   | 34  |
| 1376 | Nitrogen-doped microporous carbon: An efficient oxygen reduction catalyst for Zn-air batteries. <b>2017</b> , 359, 71-79   | 53  |
| 1375 | Recent advances of supercapacitors based on two-dimensional materials. <b>2017</b> , 8, 104-115  | 97  |
| 1374 | A Composite of Pyrrole-Doped Carbon Black Modified with Co3O4 for Efficient Electrochemical Oxygen Reduction Reaction. <b>2017</b> , 4, 2260-2268  | 10  |
| 1373 | Controllable N-Doped CuCo O @C Film as a Self-Supported Anode for Ultrastable Sodium-Ion Batteries. <b>2017</b> , 13, 1700873  | 56  |
| 1372 | N-doped graphene as a potential catalyst for the direct catalytic decomposition of NO. <b>2017</b> , 94, 29-32   | 15  |
| 1371 | Highly Crumpled Hybrids of Nitrogen/Sulfur Dual-Doped Graphene and CoS Nanoplates as Efficient Bifunctional Oxygen Electrocatalysts. <b>2017</b> , 9, 12340-12347  | 87  |

| 1370 | Efficient Electrocatalyst for the Hydrogen Evolution Reaction Derived from Polyoxotungstate/Polypyrrole/Graphene. <b>2017</b> , 10, 2402-2407   | 31   |
|------|---|------|
| 1369 | Isoreticular covalent organic frameworks for hydrocarbon uptake and separation: the important role of monomer planarity. <b>2017</b> , 19, 4899-4904  | 55   |
| 1368 | Pyridinic and graphitic nitrogen-rich graphene for high-performance supercapacitors and metal-free bifunctional electrocatalysts for ORR and OER. <b>2017</b> , 7, 17950-17958                                  | 82   |
| 1367 | Flexible anodes with carbonized cotton covered by graphene/SnO 2 for advanced lithium-ion batteries. <b>2017</b> , 794, 15-22   | 14   |
| 1366 | Triboelectric Nanogenerator Powered Electrochemical Degradation of Organic Pollutant Using Pt-Free Carbon Materials. <i>ACS Nano</i> , <b>2017</b> , 11, 3965-3972  | 67   |
| 1365 | Nitrogen-Doped Hollow Carbon Nanospheres for High-Performance Li-Ion Batteries. <b>2017</b> , 9, 14180-14186  | 80   |
| 1364 | Synthesis of three-dimensional nitrogen-doped graphene/polyaniline hydrogels for high performance supercapacitor applications. <b>2017</b> , 28, 10674-10683  | 25   |
| 1363 | A ternary functional Ag@GO@Au sandwiched hybrid as an ultrasensitive and stable surface enhanced Raman scattering platform. <b>2017</b> , 409, 306-313  | 33   |
| 1362 | Synthesis and characterization of a mesoporous and three dimensional N-doped graphene structure via the Couette-Taylor flow and hydrothermal method. <b>2017</b> , 37, 3673-3680                                | 7    |
| 1361 | Two-dimensional nanosheets for electrocatalysis in energy generation and conversion. <b>2017</b> , 5, 7257-7284   | 186  |
| 1360 | Recent Advances in Ultrathin Two-Dimensional Nanomaterials. 2017, 117, 6225-6331  | 2919 |
| 1359 | Catalysis under shell: Improved CO oxidation reaction confined in Pt@h-BN coreBhell nanoreactors. <b>2017</b> , 10, 1403-1412   | 44   |
| 1358 | Ionic liquid modified N-doped graphene as a potential platform for the electrochemical discrimination of DNA sequences. <b>2017</b> , 247, 556-563  | 15   |
| 1357 | Design and synthesis of porous channel-rich carbon nanofibers for self-standing oxygen reduction reaction and hydrogen evolution reaction bifunctional catalysts in alkaline medium. <b>2017</b> , 5, 7507-7515 | 59   |
| 1356 | Improving biomass-derived carbon by activation with nitrogen and cobalt for supercapacitors and oxygen reduction reaction. <b>2017</b> , 411, 251-260   | 64   |
| 1355 | A Three-Dimensionally Structured Electrocatalyst: Cobalt-Embedded Nitrogen-Doped Carbon<br>Nanotubes/Nitrogen-Doped Reduced Graphene Oxide Hybrid for Efficient Oxygen Reduction. <b>2017</b><br>, 23, 637-643  | 42   |
| 1354 | Cobalt nanoparticles/nitrogen-doped graphene with high nitrogen doping efficiency as noble metal-free electrocatalysts for oxygen reduction reaction. <b>2017</b> , 490, 576-586                                | 25   |
| 1353 | A facile approach to prepare crumpled CoTMPyP/electrochemically reduced graphene oxide nanohybrid as an efficient electrocatalyst for hydrogen evolution reaction. <b>2017</b> , 399, 535-541                   | 19   |

| 1352 | Interaction mechanisms of antibiotic sulfamethoxazole with various graphene-based materials and multiwall carbon nanotubes and the effect of humic acid in water. <b>2017</b> , 114, 671-678                                | 57  |
|------|---|-----|
| 1351 | Toxic gas sensing on nanoporous carbons. <b>2017</b> , 23, 271-280  | 2   |
| 1350 | ZIF-67 incorporated with carbon derived from pomelo peels: A highly efficient bifunctional catalyst for oxygen reduction/evolution reactions. <b>2017</b> , 205, 55-67  | 125 |
| 1349 | Freestanding hollow double-shell Se@CNx nanobelts as large-capacity and high-rate cathodes for Li-Se batteries. <b>2017</b> , 32, 1-9   | 86  |
| 1348 | Nitrogen Dopants in Carbon Nanomaterials: Defects or a New Opportunity?. <b>2017</b> , 1, 1600014   | 114 |
| 1347 | Nitrogen, sulfur and phosphorus-codoped carbon with a tunable nanostructure as an efficient electrocatalyst for the oxygen reduction reaction. <b>2017</b> , 7, 5782-5789   | 15  |
| 1346 | A Foolproof Method to Fabricate Integrated Electrodes with 3D Conductive Networks: A Case Study of MnOx@C-Cu as Li-Ion Battery Anode. <b>2017</b> , 2, 1600221  | 15  |
| 1345 | Novel low temperature (. <b>2017</b> , 41, 671-676  | 10  |
| 1344 | Functionalization of carbon nanomaterials for advanced polymer nanocomposites: A comparison study between CNT and graphene. <b>2017</b> , 67, 1-47  | 380 |
| 1343 | Scalable preparation of sized-controlled Co-N-C electrocatalyst for efficient oxygen reduction reaction. <b>2017</b> , 368, 46-56   | 50  |
| 1342 | Enhanced electrochemical performance of sulfur on Y2O3-modified porous carbon aerogels for high performance lithiumBulfur batteries. <b>2017</b> , 41, 12726-12735  | 12  |
| 1341 | Dual-doped graphene/perovskite bifunctional catalysts and the oxygen reduction reaction. <b>2017</b> , 84, 65-70  | 8   |
| 1340 | Significantly enhanced electrocatalytic properties of three-dimensional graphene foam via Ar plasma pretreatment and N, S co-doping. <b>2017</b> , 42, 27004-27012  | 24  |
| 1339 | Smart Combination of Cyclodextrin Polymer Host-Guest Recognition and Mg-Assistant Cyclic Cleavage Reaction for Sensitive Electrochemical Assay of Nucleic Acids. <b>2017</b> , 9, 36688-36694                               | 39  |
| 1338 | Straightforward Synthesis of Hierarchically Porous Nitrogen-Doped Carbon via Pyrolysis of Chitosan/Urea/KOH Mixtures and Its Application as a Support for Formic Acid Dehydrogenation Catalysts. <b>2017</b> , 5, 9935-9944 | 38  |
| 1337 | Tailoring platelet carbon nanofibers for high-purity Pyridinic-N doping: A novel method for synthesizing oxygen reduction reaction catalysts. <b>2017</b> , 125, 401-408  | 38  |
| 1336 | Phenolic resin/chitosan composite derived nitrogen-doped carbon as highly durable and anti-poisoning electrocatalyst for oxygen reduction reaction. <b>2017</b> , 42, 26704-26712   | 6   |
| 1335 | Heat treated Tethered Iron Phthalocyanine Carbon Nanotube-based Catalysts for Oxygen Reduction Reaction in Hybrid Fuel Cells. <b>2017</b> , 257, 224-232  | 15  |

| 1334 | Enhancing the pyridinic N content of Nitrogen-doped graphene and improving its catalytic activity for oxygen reduction reaction. <b>2017</b> , 42, 28298-28308   | 91              |
|------|--|-----------------|
| 1333 | Z-scheme electronic transfer of quantum-sized Fe2O3 modified g-C3N4 hybrids for enhanced photocatalytic hydrogen production. <b>2017</b> , 42, 28327-28336   | 55              |
| 1332 | Salt-templated synthesis of defect-rich MoN nanosheets for boosted hydrogen evolution reaction. <b>2017</b> , 5, 24193-24198   | 110             |
| 1331 | Composition-tunable synthesis of EleanIsyngas via a one-step synthesis of metal-free pyridinic-N-enriched self-supported CNTs: the synergy of electrocatalyst pyrolysis temperature and potential. <b>2017</b> , 19, 4284-4288 | 44              |
| 1330 | Rhodium Nanoparticles Loaded on Carbon-Wrapped Fe3O4 Sphere: an Efficient, Stable and Magnetically Recoverable Catalyst for the Catalytic Transfer Hydrogenation of Nitroarenes in Water. <b>2017</b> , 2, 6762-6766           | 5               |
| 1329 | Porous Hollow-Structured LaNiO Stabilized N,S-Codoped Graphene as an Active Electrocatalyst for Oxygen Reduction Reaction. <b>2017</b> , 13, 1701884   | 48              |
| 1328 | Efficient and Durable Oxygen Reduction Electrocatalyst Based on CoMn Alloy Oxide Nanoparticles Supported Over N-Doped Porous Graphene. <b>2017</b> , 7, 6700-6710  | 70              |
| 1327 | From Chlorella to Nestlike Framework Constructed with Doped Carbon Nanotubes: A Biomass-Derived, High-Performance, Bifunctional Oxygen Reduction/Evolution Catalyst. <b>2017</b> , 9, 32168-3217                               | 8 <sup>47</sup> |
| 1326 | N implantation induce cytocompatibility of shape-controlled three-dimensional self-assembly graphene. <b>2017</b> , 12, 2245-2255  | 4               |
| 1325 | Ball-Milled Carbon Nanomaterials for Energy and Environmental Applications. <b>2017</b> , 5, 9568-9585   | 118             |
| 1324 | Selectively doping pyridinic and pyrrolic nitrogen into a 3D porous carbon matrix through template-induced edge engineering: enhanced catalytic activity towards the oxygen reduction reaction. <b>2017</b> , 5, 21709-21714   | 43              |
| 1323 | Nitrogen and Fluorine-Codoped Porous Carbons as Efficient Metal-Free Electrocatalysts for Oxygen Reduction Reaction in Fuel Cells. <b>2017</b> , 9, 32859-32867  | 66              |
| 1322 | A promising mechanical ball-milling method to synthesize carbon-coated Co9S8 nanoparticles as high-performance electrode for supercapacitor. <b>2017</b> , 52, 13552-13560   | 7               |
| 1321 | Nano-structure tin/nitrogen-doped reduced graphene oxide composites as high capacity lithium-ion batteries anodes. <b>2017</b> , 28, 18994-19002   | 17              |
| 1320 | Tuning the Electronic Properties of Single-Atom Pt Catalysts by Functionalization of the Carbon Support Material. <b>2017</b> , 121, 20802-20812   | 17              |
| 1319 | One-Step Synthesis of Fluorescent Boron Nitride Quantum Dots via a Hydrothermal Strategy Using Melamine as Nitrogen Source for the Detection of Ferric Ions. <b>2017</b> , 33, 10673-10678                                     | 67              |
| 1318 | Highly porous nitrogen-doped carbon for superior electric double-layer capacitors. <b>2017</b> , 7, 44735-44742  | 13              |
| 1317 | Poly(2,5-benzimidazole)-Grafted Graphene Oxide as an Effective Proton Conductor for Construction of Nanocomposite Proton Exchange Membrane. <b>2017</b> , 9, 33049-33058   | 42              |

| 1316 | Structural modification of ammonium polyphosphate by DOPO to achieve high water resistance and hydrophobicity. <b>2017</b> , 320, 14-21  | 8  |
|------|--|----|
| 1315 | A sensitive and selective amperometric hydrazine sensor based on palladium nanoparticles loaded on cobalt-wrapped nitrogen-doped carbon nanotubes. <b>2017</b> , 801, 215-223                    | 21 |
| 1314 | Nitrogen-Doped Graphene with a Three-Dimensional Architecture Assisted by Carbon Nitride Tetrapods as an Efficient Metal-Free Electrocatalyst for Hydrogen Evolution. <b>2017</b> , 4, 2643-2652 | 23 |
| 1313 | Defects-rich graphene/carbon quantum dot composites as highly efficient electrocatalysts for aqueous zinc/air batteries. <b>2017</b> , 42, 21305-21310   | 24 |
| 1312 | Pre-surface functionalization of commercial conductive carbon for effective N doping as a highly efficient electrocatalyst. <b>2017</b> , 207, 33-36   | 2  |
| 1311 | Facile preparation of nitrogen-doped graphene as an efficient oxygen reduction electrocatalyst. <b>2017</b> , 4, 1582-1590   | 20 |
| 1310 | Synthesis and high-performance of carbonaceous polypyrrole nanotubes coated with SnS2 nanosheets anode materials for lithium ion batteries. <b>2017</b> , 330, 470-479                           | 88 |
| 1309 | Collaborative design of LiB batteries using 3D N-doped graphene aerogel as a sulfur host and graphitic carbon nitride paper as an interlayer. <b>2017</b> , 1, 1759-1765                         | 28 |
| 1308 | Facile synthesis, structure and first investigation of promising lithium storage ability for Fe2SiS4/porous carbon composite. <b>2017</b> , 10, 1750054  | 5  |
| 1307 | Advances in research on 2D and 3D graphene-based supercapacitors. <b>2017</b> , 8, 033001  | 5  |
| 1306 | Preparation and Properties of NrGO-CNT Composite for Lithium-Ion Capacitors. 2017, 164, A3657-A3665  | 9  |
| 1305 | Ni-O4 species anchored on N-doped graphene-based materials as molecular entities and electrocatalytic performances for oxygen reduction reaction. <b>2017</b> , 74, 56-61                        | 3  |
| 1304 | A general method for boosting the supercapacitor performance of graphitic carbon nitride/graphene hybrids. <b>2017</b> , 5, 25545-25554  | 49 |
| 1303 | Boron Doped ZIF-67@Graphene Derived Carbon Electrocatalyst for Highly Efficient Enzyme-Free Hydrogen Peroxide Biosensor. <b>2017</b> , 2, 1700224  | 15 |
| 1302 | Magnetron Sputtering Deposition Cu@Onion-like N-C as High-Performance Electrocatalysts for Oxygen Reduction Reaction. <b>2017</b> , 9, 41945-41954   | 17 |
| 1301 | Generalized Synthesis of a Family of Highly Heteroatom-Doped Ordered Mesoporous Carbons. <b>2017</b> , 29, 10178-10186   | 46 |
| 1300 | Low-level doping of nitrogen to multilayered graphene by chemical vapor deposition of methane including melamine vapor. <b>2017</b> , 123, 1   | 1  |
| 1299 | Transition-Metal Phosphide-Carbon Nanosheet Composites Derived from Two-Dimensional Metal-Organic Frameworks for Highly Efficient Electrocatalytic Water-Splitting. <b>2017</b> , 9, 40171-40179 | 57 |

| 1298 | An innovative electro-fenton degradation system self-powered by triboelectric nanogenerator using biomass-derived carbon materials as cathode catalyst. <b>2017</b> , 42, 314-321   | 53  |
|------|---|-----|
| 1297 | Nitrogen-Doped Graphitized Carbon Electrodes for Biorefractory Pollutant Removal. <b>2017</b> , 121, 15188-15197  | 31  |
| 1296 | Fluffy and Ordered Graphene Multilayer Films with Improved Electromagnetic Interference Shielding over X-Band. <b>2017</b> , 9, 22408-22419   | 50  |
| 1295 | Interlayer interaction in ultrathin nanosheets of graphitic carbon nitride for efficient photocatalytic hydrogen evolution. <b>2017</b> , 352, 491-497  | 57  |
| 1294 | Co9S8 activated N/S co-doped carbon tubes in situ grown on carbon nanofibers for efficient oxygen reduction. <b>2017</b> , 7, 34763-34769   | 9   |
| 1293 | Cathode Modification to Improve Electro-Fenton Performance. <b>2017</b> , 175-203   | 0   |
| 1292 | Highly Efficient Oxygen Reduction Reaction Electrocatalysts Synthesized under Nanospace Confinement of Metal-Organic Framework. <i>ACS Nano</i> , <b>2017</b> , 11, 8379-8386   | 80  |
| 1291 | Hierarchical NiO Cube/Nitrogen-Doped Reduced Graphene Oxide Composite with Enhanced HS Sensing Properties at Low Temperature. <b>2017</b> , 9, 26293-26303  | 80  |
| 1290 | Biomass-derived heteroatoms-doped mesoporous carbon for efficient oxygen reduction in microbial fuel cells. <b>2017</b> , 98, 350-356   | 75  |
| 1289 | Preparation of nitrogen-doped graphene by high-gravity technology and its application in oxygen reduction. <b>2017</b> , 34, 110-117  | 9   |
| 1288 | A novel, simple and rapid route to the synthesis of boron cabonitride nanosheets: combustive gaseous unfolding. <b>2017</b> , 7, 3453   | 28  |
| 1287 | Graphene-based materials for capacitive deionization. <b>2017</b> , 5, 13907-13943  | 189 |
| 1286 | Nitrogen-Doped Hollow Mesoporous Carbon Spheres for Efficient Water Desalination by Capacitive Deionization. <b>2017</b> , 5, 6635-6644   | 111 |
| 1285 | Nitrogen-doped graphene anchored with mixed growth patterns of CuPt alloy nanoparticles as a highly efficient and durable electrocatalyst for the oxygen reduction reaction in an alkaline medium. <b>2017</b> , 9, 9009-9017 | 21  |
| 1284 | A facile method to prepare FeS/porous carbon composite as advanced anode material for lithium-ion batteries. <b>2017</b> , 52, 2345-2355  | 50  |
| 1283 | Identifying the Active Sites on N-doped Graphene toward Oxygen Evolution Reaction. <b>2017</b> , 9, 846-852   | 37  |
| 1282 | FeNi alloy supported on nitrogen-doped graphene catalysts by polyol process for oxygen reduction reaction (ORR) in proton exchange membrane fuel cell (PEMFC) cathode. <b>2017</b> , 43, 2905-2919                            | 11  |
| 1281 | Cobalt-Embedded Nitrogen-Doped Carbon Nanotubes as High-Performance Bifunctional Oxygen Catalysts. <b>2017</b> , 5, 1265-1271   | 23  |

| 1280 | Highly efficient nitrogen-doped carbide-derived carbon materials for oxygen reduction reaction in alkaline media. <b>2017</b> , 113, 159-169   | 76  |
|------|--|-----|
| 1279 | Facile synthesis of porous nitrogen-doped holey graphene as an efficient metal-free catalyst for the oxygen reduction reaction. <b>2017</b> , 10, 305-319  | 51  |
| 1278 | Heteroatom-doped graphene as electrocatalysts for air cathodes. <b>2017</b> , 4, 7-19  | 119 |
| 1277 | Interaction of sulfonated graphene oxide with U(VI) studied by spectroscopic analysis and theoretical calculations. <b>2017</b> , 310, 292-299   | 113 |
| 1276 | A comparison of graphitic carbon nitrides synthesized from different precursors through pyrolysis. <b>2017</b> , 332, 32-44  | 84  |
| 1275 | Hollow polypyrrole nanosphere embedded in nitrogen-doped graphene layers to obtain a three-dimensional nanostructure as electrode material for electrochemical supercapacitor. <b>2017</b> , 23, 147-156 | 14  |
| 1274 | Enhanced visible light activity on direct contact Z-scheme g-C 3 N 4 -TiO 2 photocatalyst. <b>2017</b> , 391, 184-193  | 211 |
| 1273 | Macroscopically shaped monolith of nanodiamonds @ nitrogen-enriched mesoporous carbon decorated SiC as a superior metal-free catalyst for the styrene production. <b>2017</b> , 200, 343-350             | 44  |
| 1272 | Simple solution-based synthesis of pyridinic-rich nitrogen-doped graphene nanoplatelets for supercapacitors. <b>2017</b> , 195, 1071-1078  | 46  |
| 1271 | Efficient streptavidin-functionalized nitrogen-doped graphene for the development of highly sensitive electrochemical immunosensor. <b>2017</b> , 89, 312-318  | 52  |
| 1270 | In-situ growth of highly uniform and single crystalline Co3O4 nanocubes on graphene for efficient oxygen evolution. <b>2017</b> , 88, 81-84  | 21  |
| 1269 | Controlling speciation of nitrogen in nitrogen-doped carbon dots by ferric ion catalysis for enhancing fluorescence. <b>2017</b> , 111, 133-141  | 71  |
| 1268 | Capacitive vs Faradaic Energy Storage in a Hybrid Cell with LiFePO4/RGO Positive Electrode and Nanocarbon Negative Electrode. <b>2017</b> , 164, A6140-A6146   | 3   |
| 1267 | Porous N,P-doped carbon from coconut shells with high electrocatalytic activity for oxygen reduction: Alternative to Pt-C for alkaline fuel cells. <b>2017</b> , 204, 394-402                            | 239 |
| 1266 | Preparation of conductive film via a low temperature synthesis that enables simultaneous nitrogen doping and reduction of graphene oxide. <b>2017</b> , 4, 085607  | 2   |
| 1265 | Exploring dissociative water adsorption on isoelectronically BN doped graphene using alchemical derivatives. <b>2017</b> , 147, 164113   | 19  |
| 1264 | A Unique 3D Nitrogen-Doped Carbon Composite as High-Performance Oxygen Reduction Catalyst. <b>2017</b> , 10,   | 13  |
| 1263 | Harvesting a 3D N-Doped Carbon Network from Waste Bean Dregs by Ionothermal Carbonization as an Electrocatalyst for an Oxygen Reduction Reaction. <b>2017</b> , 10,                                      | 20  |

# (2018-2018)

| 1262 | Nitrogen-doped graphene wrapped around silver nanowires for enhanced catalysis in oxygen reduction reaction. <b>2018</b> , 22, 2287-2296                                  | 15  |
|------|---|-----|
| 1261 | Eliminating delamination of graphite sliding on diamond-like carbon. <b>2018</b> , 132, 444-450   | 14  |
| 1260 | Bifunctional N-doped graphene Ti and Co nanocomposites for the oxygen reduction and evolution reactions. <b>2018</b> , 125, 182-192                                       | 36  |
| 1259 | Nanocarbon-Based Electrocatalysts for Rechargeable Aqueous Li/Zn-Air Batteries. 2018, 5, 1745-1763  | 20  |
| 1258 | One-Step Hydrothermal Synthesis of Nitrogen-Doped Conjugated Carbonized Polymer Dots with 31% Efficient Red Emission for In Vivo Imaging. <b>2018</b> , 14, e1703919      | 202 |
| 1257 | Iron Phthalocyanine Decorated Nitrogen-Doped Graphene Biosensing Platform for Real-Time Detection of Nitric Oxide Released from Living Cells. <b>2018</b> , 90, 4438-4444 | 53  |
| 1256 | CNT Applications in Drug and Biomolecule Delivery. <b>2018</b> , 61-64  | 9   |
| 1255 | Synthesis and Chemical Modification of Graphene. <b>2018</b> , 107-119  |     |
| 1254 | Graphene Applications in Sensors. <b>2018</b> , 125-132   |     |
| 1253 | Graphene Applications in Batteries and Energy Devices. <b>2018</b> , 133-139  | 2   |
| 1252 | Medical and Pharmaceutical Applications of Graphene. <b>2018</b> , 149-150  | 1   |
| 1251 | Graphene Applications in Specialized Materials. <b>2018</b> , 151-154   |     |
| 1250 | Miscellaneous Applications of Graphene. <b>2018</b> , 155-155   |     |
| 1249 | Basic Electrochromics of CPs. <b>2018</b> , 251-282   |     |
| 1248 | Batteries and Energy Devices. <b>2018</b> , 575-600   |     |
| 1247 | Brief, General Overview of Applications. <b>2018</b> , 43-44  |     |
| 1246 | CNT Applications in Batteries and Energy Devices. <b>2018</b> , 49-52   | 1   |
| 1245 | Crystalline carbon nitride semiconductors prepared at different temperatures for photocatalytic hydrogen production. <b>2018</b> , 231, 234-241                           | 152 |
|      |   |     |

| 1244 | Supramolecular assembly promoted synthesis of three-dimensional nitrogen doped graphene frameworks as efficient electrocatalyst for oxygen reduction reaction and methanol electrooxidation. <b>2018</b> , 231, 224-233 | 102 |
|------|---|-----|
| 1243 | Three-dimensional nitrogen-doped carbon nanotubes/carbon nanofragments complexes for efficient metal-free electrocatalyst towards oxygen reduction reaction. <b>2018</b> , 43, 6158-6166                                | 13  |
| 1242 | Defective Carbons Derived from Macadamia Nut Shell Biomass for Efficient Oxygen Reduction and Supercapacitors. <b>2018</b> , 5, 1874-1879   | 29  |
| 1241 | Effects of chemical bonds between nitrogen and its neighbor carbon atoms on fluorescence properties of carbon quantum dots. <b>2018</b> , 197, 285-290  | 14  |
| 1240 | Polydopamine-Derived, In Situ N-Doped 3D Mesoporous Carbons for Highly Efficient Oxygen Reduction. <b>2018</b> , 4, 417-422   | 15  |
| 1239 | Deciphering acetaminophen electrical catalytic degradation using single-form S doped graphene/Pt/TiO2. <b>2018</b> , 343, 662-675   | 38  |
| 1238 | Fabrication of Metal®rganic Framework Derived Nanomaterials and Their Electrochemical Applications. <b>2018</b> ,   | 2   |
| 1237 | Bioassembly of fungal hypha/graphene oxide aerogel as high performance adsorbents for U(VI) removal. <b>2018</b> , 347, 407-414   | 65  |
| 1236 | Effects of nanoparticle-enhanced phase change material (NPCM) on solar still productivity. <b>2018</b> , 192, 9-29  | 119 |
| 1235 | Folic acid encapsulated graphene quantum dots for ratiometric pH sensing and specific multicolor imaging in living cells. <b>2018</b> , 268, 61-69  | 40  |
| 1234 | LiMnFePO/Carbon Nanospheres@Graphene Nanoribbons Prepared by the Biomineralization Process as the Cathode for Lithium-Ion Batteries. <b>2018</b> , 10, 16500-16510  | 26  |
| 1233 | High Mass and Specific Activity for Ammonia Electro-oxidation through Optimization of Dispersion Degree and Particle Size of Pt-Ir Nanoparticles over N-Doped Reductive Graphene Oxide. <b>2018</b> , 3, 3433-3443      | 10  |
| 1232 | Carbon Nanostructured Catalysts as High Efficient Materials for Low Temperature Fuel Cells. <b>2018</b> , 1-29  |     |
| 1231 | Formation of Core-Shell Metal Oxide Nanoparticles for Oxygen Reduction. 2018, 81-101  |     |
| 1230 | Hierarchical FeO@C@MnO@C Multishell Nanocomposites for High Performance Lithium Ion Batteries and Catalysts. <b>2018</b> , 34, 5225-5233  | 18  |
| 1229 | Defect electrocatalytic mechanism: concept, topological structure and perspective. <b>2018</b> , 2, 1250-1268   | 90  |
| 1228 | Multiple Metal (Cu, Mn, Fe) Centered Species Simultaneously Combined Nitrogen-doped Graphene as an Electrocatalyst for Oxygen Reduction in Alkaline and Neutral Solutions. <b>2018</b> , 10, 2471-2480                  | 7   |
| 1227 | Pyridine-enriched graphene sheets for high volumetric performance supercapacitors. <b>2018</b> , 22, 1921-1931  | 6   |

| 1226         | Nanoscale p-n heterojunctions of BiOI/nitrogen-doped reduced graphene oxide as a high performance photocatalyst. <b>2018</b> , 132, 191-198   | 40 |
|--------------|---|----|
| 1225         | Adsorption and catalytic oxidation of pharmaceuticals by nitrogen-doped reduced graphene oxide/Fe3O4 nanocomposite. <b>2018</b> , 341, 361-370  | 73 |
| 1224         | Nitrogen-doped carbon nanoflower with superior ORR performance in both alkaline and acidic electrolyte and enhanced durability. <b>2018</b> , 43, 4311-4320   | 24 |
| 1223         | Nitrogen-incorporated carbon nanotube derived from polystyrene and polypyrrole as hydrogen storage material. <b>2018</b> , 43, 5077-5088  | 52 |
| 1222         | Facile fabricate stable rare-earth bimetallic carbide as electrocatalyst for active oxygen reduction reaction. <b>2018</b> , 84, 93-100   | 4  |
| 1221         | Preparation of a novel polysiloxane and its synergistic effect with ammonium polyphosphate on the flame retardancy of polypropylene. <b>2018</b> , 150, 73-85   | 31 |
| 1220         | Photoluminescent F-doped carbon dots prepared by ring-opening reaction for gene delivery and cell imaging <b>2018</b> , 8, 6053-6062  | 29 |
| 1219         | Coral-like CoO Decorated N-doped Carbon Particles as active Materials for Oxygen Reduction Reaction and Supercapacitor. <b>2018</b> , 8, 1802   | 35 |
| 1218         | Nitrogen-doped graphene approach to enhance the performance of a membraneless enzymatic biofuel cell. <b>2018</b> , 12, 233-238   | 10 |
| 1217         | Well-Coupled Nanohybrids Obtained by Component-Controlled Synthesis and in Situ Integration of Mn Pd Nanocrystals on Vulcan Carbon for Electrocatalytic Oxygen Reduction. <b>2018</b> , 10, 8155-8164       | 19 |
| 1216         | Nitrogen-Doped Carbon Xerogels Supporting Palladium Nanoparticles for Selective Hydrogenation Reactions: The Role of Pyridine Nitrogen Species. <b>2018</b> , 10, 1291-1299                                 | 16 |
| 1215         | NixSy Nanowalls/Nitrogen-Doped Graphene Foam Is an Efficient Trifunctional Catalyst for Unassisted Artificial Photosynthesis. <b>2018</b> , 28, 1706917   | 61 |
| 1214         | Highly Dispersed Metal Carbide on ZIF-Derived Pyridinic-N-Doped Carbon for CO Enrichment and Selective Hydrogenation. <b>2018</b> , 11, 1040-1047   | 41 |
| 1213         | Simultaneous determination of ascorbic acid, dopamine and uric acid by a novel electrochemical sensor based on N/Ar RF plasma assisted graphene nanosheets/graphene nanoribbons. <b>2018</b> , 105, 236-242 | 44 |
| 1212         | Computational investigation of double nitrogen doping on graphene. <b>2017</b> , 24, 26   | 7  |
| 1211         | Metal-freelelectrocatalysis: Quaternary-doped graphene and the alkaline oxygen reduction reaction. <b>2018</b> , 553, 107-116   | 33 |
| <b>12</b> 10 | Silver@Nitrogen-Doped Carbon Nanorods as a Highly Efficient Electrocatalyst for the Oxygen Reduction Reaction in Alkaline Media. <b>2018</b> , 24, 3283-3288  | 8  |
| 1209         | Graphene-Directed Formation of a Nitrogen-Doped Porous Carbon Sheet with High Catalytic Performance for the Oxygen Reduction Reaction. <b>2018</b> , 122, 13508-13514                                       | 15 |

| 1208 | Innovations upon antioxidant capacity evaluation for cosmetics: A photoelectrochemical sensor exploitation based on N-doped graphene/TiO2 nanocomposite. <b>2018</b> , 259, 963-971               | 23  |
|------|---|-----|
| 1207 | Engineering Catalytic Active Sites on Cobalt Oxide Surface for Enhanced Oxygen Electrocatalysis. <b>2018</b> , 8, 1702222   | 182 |
| 1206 | In Situ Prepared Flexible 3D Polymer Film Photocatalyst for Highly Selective Solar Fuel Production from CO2. <b>2018</b> , 10, 2024-2029  | 9   |
| 1205 | Synthesis of an intensive blue pigment with low cobalt content. <b>2018</b> , 44, 4381-4384   | 3   |
| 1204 | Hierarchically Designed 3D Holey CN Aerogels as Bifunctional Oxygen Electrodes for Flexible and Rechargeable Zn-Air Batteries. <i>ACS Nano</i> , <b>2018</b> , 12, 596-608                        | 125 |
| 1203 | Nitrogenated-Graphite-Encapsulated Carbon Black as a Metal-Free Electrocatalyst for the Oxygen Evolution Reaction in Acid. <b>2018</b> , 5, 583-588   | 10  |
| 1202 | Fabrication of 3D heteroatom-doped porous carbons from self-assembly of chelate foams via a solid state method. <b>2018</b> , 5, 656-664  | 11  |
| 1201 | Vanadium-zirconium catalyst on different support for hydroxylation of benzene to phenol with O2 as the oxidant. <b>2018</b> , 553, 117-125  | 16  |
| 1200 | Identification of cathode stability in LiIIO2 batteries with Cu nanoparticles highly dispersed on N-doped graphene. <b>2018</b> , 6, 3218-3223  | 94  |
| 1199 | Nitrogen-doped graphene supported Cu-Ag2.9 nanoparticles as efficient methanol tolerant cathode for oxygen reduction. <b>2018</b> , 43, 1781-1789   | 4   |
| 1198 | The in situ grown of activated Fe-N-C nanofibers derived from polypyrrole on carbon paper and its electro-catalytic activity for oxygen reduction reaction. <b>2018</b> , 22, 1217-1226           | 8   |
| 1197 | Polymer nanosheets derived porous carbon nanosheets as high efficient electrocatalysts for oxygen reduction reaction. <b>2018</b> , 516, 9-15   | 10  |
| 1196 | High performance Li©O2 batteries with NiO©NT cathodes. <b>2018</b> , 6, 2792-2796   | 116 |
| 1195 | Iron carbide encapsulated by porous carbon nitride as bifunctional electrocatalysts for oxygen reduction and evolution reactions. <b>2018</b> , 439, 439-446                                      | 27  |
| 1194 | Si/Ag/C Nanohybrids with in Situ Incorporation of Super-Small Silver Nanoparticles: Tiny Amount, Huge Impact. <i>ACS Nano</i> , <b>2018</b> , 12, 861-875   | 49  |
| 1193 | An ultra-small NiFeO hollow particle/graphene hybrid: fabrication and electromagnetic wave absorption property. <b>2018</b> , 10, 2697-2703   | 133 |
| 1192 | Identification of champion transition metals centers in metal and nitrogen-codoped carbon catalysts for CO2 reduction. <b>2018</b> , 226, 463-472   | 177 |
| 1191 | Identification of electrocatalytic oxygen reduction (ORR) activity offboron in graphene oxide; incorporated as a charge-adsorbate and/or substitutional p-type dopant. <b>2018</b> , 207, 380-388 | 7   |

## (2018-2018)

| 1190 | Highly doped graphene with multi-dopants for high-capacity and ultrastable sodium-ion batteries. <b>2018</b> , 13, 134-141  | 78   |
|------|---|------|
| 1189 | Spatially Resolved Photoelectron Spectroscopy from Ultra-high Vacuum to Near Ambient Pressure Sample Environments. <b>2018</b> , 61, 1274-1282  | 7    |
| 1188 | Iodine and Nitrogen-Codoped Carbon Microspheres for Ultrahigh Volumetric Capacity of Li-Ion Batteries. <b>2018</b> , 6, 7339-7345   | 13   |
| 1187 | Activity Origins in Nanocarbons for the Electrocatalytic Hydrogen Evolution Reaction. <b>2018</b> , 14, e1800235  | 42   |
| 1186 | Polydopamine-coated graphene nanosheets as efficient electrocatalysts for oxygen reduction reaction <b>2018</b> , 8, 16044-16051  | 7    |
| 1185 | Heteroatom-doped carbonaceous electrode materials for high performance energy storage devices. <b>2018</b> , 2, 1398-1429   | 48   |
| 1184 | Nanostructured Bi2S3 encapsulated within three-dimensional N-doped graphene as active and flexible anodes for sodium-ion batteries. <b>2018</b> , 11, 4614-4626   | 65   |
| 1183 | Highly thermally conductive and mechanically robust polyamide/graphite nanoplatelet composites via mechanochemical bonding techniques with plasma treatment. <b>2018</b> , 160, 245-254                 | 29   |
| 1182 | Carbon and non-carbon support materials for platinum-based catalysts in fuel cells. <b>2018</b> , 43, 7823-7854   | 134  |
| 1181 | Superelastic 3D few-layer MoS2/carbon framework heterogeneous electrodes for highly reversible sodium-ion batteries. <b>2018</b> , 48, 526-535  | 78   |
| 1180 | Efficient oxygen evolution electrocatalyzed by a Cu nanoparticle-embedded N-doped carbon nanowire array. <b>2018</b> , 5, 1188-1192   | 52   |
| 1179 | High electrochemical capacitor performance of oxygen and nitrogen enriched activated carbon derived from the pyrolysis and activation of squid gladius chitin. <b>2018</b> , 386, 66-76                 | 79   |
| 1178 | Heterogeneous liquid phase oxidation of ethylbenzene to acetophenone with graphene carbon-based catalyst. <b>2018</b> , 72, 2203-2214   | 3    |
| 1177 | Hydrothermal Synthesis of a New Kind of N-Doped Graphene Gel-like Hybrid As an Enhanced ORR Electrocatalyst. <b>2018</b> , 10, 10842-10850  | 64   |
| 1176 | Highly dispersed Co nanoparticles inlayed in S, N-doped hierarchical carbon nanoprisms derived from Co-MOFs as efficient electrocatalysts for oxygen reduction reaction. <b>2018</b> , 318, 126-131     | 22   |
| 1175 | Emerging Two-Dimensional Nanomaterials for Electrocatalysis. <b>2018</b> , 118, 6337-6408   | 1057 |
| 1174 | Effects of ammonolysis and of solgel titanium oxide nitride coating on carbon fibres for use in flexible supercapacitors. <b>2018</b> , 6, 5208-5216  | 10   |
| 1173 | 1D N-doped hierarchically porous hollow carbon tubes derived from a supramolecular template as metal-free electrocatalysts for a highly efficient oxygen reduction reaction. <b>2018</b> , 6, 6212-6219 | 55   |

| 1172 | Facile hydrothermal method for synthesizing nitrogen-doped graphene nanoplatelets using aqueous ammonia: dispersion, stability in solvents and thermophysical performances. <b>2018</b> , 5, 035042 | 4   |
|------|---|-----|
| 1171 | Structure-performance relationship of nanodiamonds @ nitrogen-doped mesoporous carbon in the direct dehydrogenation of ethylbenzene. <b>2018</b> , 301, 38-47                                       | 22  |
| 1170 | Photoluminescence properties of N-doped carbon dots prepared in different solvents and applications in pH sensing. <b>2018</b> , 53, 2424-2433  | 38  |
| 1169 | Highly selective and sensitive detection of cysteine with a graphene quantum dots-gold nanoparticles based core-shell nanosensor. <b>2018</b> , 257, 228-236  | 39  |
| 1168 | Size contrast of Pt nanoparticles formed on neighboring domains within suspended and supported graphene. <b>2018</b> , 11, 1589-1598  | 3   |
| 1167 | Influence of oxygen-containing groups of activated carbon aerogels on copper/activated carbon aerogels catalyst and synthesis of dimethyl carbonate. <b>2018</b> , 53, 1833-1850                    | 9   |
| 1166 | Facile synthesis of NiS anchored carbon nanofibers for high-performance supercapacitors. <b>2018</b> , 434, 112-119   | 62  |
| 1165 | Incorporating transition metals (Ta/Co) into nitrogen-doped carbon as counter electrode catalysts for dye-sensitized solar cells. <b>2018</b> , 126, 145-155  | 66  |
| 1164 | A review of nitrogen-doped graphene catalysts for proton exchange membrane fuel cells-synthesis, characterization, and improvement. <b>2018</b> , 15, 140-152                                       | 28  |
| 1163 | Encapsulating Co P@C Core-Shell Nanoparticles in a Porous Carbon Sandwich as Dual-Doped Electrocatalyst for Hydrogen Evolution. <b>2018</b> , 11, 376-388   | 40  |
| 1162 | Nitrogen doped graphene ßilver nanowire hybrids: An excellent anode material for lithium ion batteries. <b>2018</b> , 428, 1119-1129  | 20  |
| 1161 | Cobalt oxide nanosheets anchored onto nitrogen-doped carbon nanotubes as dual purpose electrodes for lithium-ion batteries and oxygen evolution reaction. <b>2018</b> , 42, 853-862                 | 26  |
| 1160 | Ultrasmall Fe2GeO4 nanodots anchored on interconnected carbon nanosheets as high-performance anode materials for lithium and sodium ion batteries. <b>2018</b> , 427, 670-679                       | 31  |
| 1159 | Nitrogen-doped bamboo-like carbon nanotubes with Ni encapsulation for persulfate activation to remove emerging contaminants with excellent catalytic stability. <b>2018</b> , 332, 398-408          | 141 |
| 1158 | V2O5 / nitrogen enriched mesoporous carbon spheres nanocomposite as supercapacitor electrode. <b>2018</b> , 258, 83-94  | 32  |
| 1157 | 3D spongy CoS2 nanoparticles/carbon composite as high-performance anode material for lithium/sodium ion batteries. <b>2018</b> , 332, 370-376   | 125 |
| 1156 | Nitrogen-doped porous carbon derived from imidazole-functionalized polyhedral oligomeric silsesquioxane. <b>2018</b> , 53, 456-465  | 5   |
| 1155 | Formation of multiporous MnO/N-doped carbon configuration via carbonthermal reduction for superior electrochemical properties. <b>2018</b> , 331, 570-577   | 43  |

# (2018-2018)

| 1154 | Chestnut shell-like Li4Ti5O12 hollow spheres for high-performance aqueous asymmetric supercapacitors. <b>2018</b> , 332, 253-259   | 68  |
|------|--|-----|
| 1153 | Sodium storage mechanism of N, S co-doped nanoporous carbon: Experimental design and theoretical evaluation. <b>2018</b> , 11, 274-281   | 83  |
| 1152 | Electrospun three dimensional Co/CoP@nitrogen-doped carbon nanofibers network for efficient hydrogen evolution. <b>2018</b> , 12, 44-53  | 115 |
| 1151 | Polyphosphazene-derived heteroatoms-doped carbon materials for supercapacitor electrodes. <b>2018</b> , 129, 420-427   | 46  |
| 1150 | Dentritic platinum-palladium/palladium core-shell nanocrystals/reduced graphene oxide: One-pot synthesis and excellent electrocatalytic performances. <b>2018</b> , 514, 93-101                              | 16  |
| 1149 | Amino acid-mediated N-doped graphene aerogels and its electrochemical properties. <b>2018</b> , 228, 198-205   | 21  |
| 1148 | Restacking-inhibited nitrogen-incorporated mesoporous reduced graphene oxides for high energy supercapacitors. <b>2018</b> , 44, 3195-3200   | 12  |
| 1147 | Electrocatalysis of oxygen reduction on heteroatom-doped nanocarbons and transition metallitrogenlarbon catalysts for alkaline membrane fuel cells. <b>2018</b> , 6, 776-804                                 | 257 |
| 1146 | N-doped graphdiyne for high-performance electrochemical electrodes. <b>2018</b> , 44, 144-154  | 129 |
| 1145 | Nickel Nanoparticle Encapsulated in Few-Layer Nitrogen-Doped Graphene Supported by Nitrogen-Doped Graphite Sheets as a High-Performance Electromagnetic Wave Absorbing Material. <b>2018</b> , 10, 1399-1407 | 111 |
| 1144 | Uniform Pt@Pd nanocrystals supported on N-doped reduced graphene oxide as catalysts for effective reduction of highly toxic chromium(VI). <b>2018</b> , 205, 64-71   | 29  |
| 1143 | Carbon Nanostructured Catalysts as High Efficient Materials for Low Temperature Fuel Cells. <b>2018</b> , 1-28   | 1   |
| 1142 | Maximizing the Catalytic Activity of Nanoparticles through Monolayer Assembly on Nitrogen-Doped Graphene. <b>2018</b> , 130, 460-464   | 2   |
| 1141 | Maximizing the Catalytic Activity of Nanoparticles through Monolayer Assembly on Nitrogen-Doped Graphene. <b>2018</b> , 57, 451-455  | 38  |
| 1140 | Coordination Polymer Derived Sulfur Vacancies Rich CdS Composite Photocatalyst with Nitrogen Doped Carbon as Matrix for H2 Production. <b>2018</b> , 6, 854-861  | 37  |
| 1139 | A seed-mediated method to design N-doped graphene supported gold-silver nanothorns sensor for rutin detection. <b>2018</b> , 512, 446-454  | 32  |
| 1138 | In situ construction of g-C 3 N 4 /TiO 2 heterojunction films with enhanced photocatalytic activity over magnetic-driven rotating frame. <b>2018</b> , 430, 283-292  | 25  |
| 1137 | Electrocatalysis of Oxygen Reduction on Pristine and Heteroatom-Doped Graphene Materials. <b>2018</b> , 497-506  | 6   |

| 1136         | Graphene-Based Nanostructures in Electrocatalytic Oxygen Reduction. 2018, 651-659  | 3   |
|--------------|--|-----|
| 1135         | Adsorption of P-Nitrophenol Onto Partially Reduced Graphene Oxide: An Experimental and Theoretical Study. <b>2018</b> , 43, 189-200  | O   |
| 1134         | S,N-Co-doped carbon nanoparticles with high quantum yield for metal ion detection, IMP logic gates and bioimaging applications. <b>2018</b> , 42, 20180-20189  | 4   |
| 1133         | Reduced graphene oxide-supported methylene blue nanocomposite as a glucose oxidase-mimetic for electrochemical glucose sensing <b>2018</b> , 8, 32565-32573  | 5   |
| 1132         | Enriched graphitic N in nitrogen-doped graphene as a superior metal-free electrocatalyst for the oxygen reduction reaction. <b>2018</b> , 42, 19665-19670  | 41  |
| 1131         | Bioinspired Micro/Nanofluidic Ion Transport Channels for Organic Cathodes in High-Rate and Ultrastable Lithium/Sodium-Ion Batteries. <b>2018</b> , 28, 1804629   | 47  |
| 1130         | Optimizing phthalocyanine based dye-sensitized solar cells: The role of reduced graphene oxide. <b>2018</b> , 246, 236-245   | 3   |
| 1129         | Exploration of CeO-CuO Quantum Dots in Situ Grown on Graphene under Hypha Assistance for Highly Efficient Solar-Driven Hydrogen Production. <b>2018</b> , 57, 14532-14541  | 19  |
| 1128         | Preparation of nitrogen-doped hollow carbon spheres for sensitive catechol electrochemical sensing. <b>2018</b> , 26, 856-862  | 7   |
| 1127         | Redox-responsive hyaluronic acid-functionalized graphene oxide nanosheets for targeted delivery of water-insoluble cancer drugs. <b>2018</b> , 13, 7457-7472   | 20  |
| 1126         | A brief review on plasma for synthesis and processing of electrode materials. 2018, 3, 28-47   | 30  |
| 1125         | Pt-C Interfaces Based on Electronegativity-Functionalized Hollow Carbon Spheres for Highly Efficient Hydrogen Evolution. <b>2018</b> , 10, 43561-43569   | 22  |
| 1124         | Ultrathin Honeycomb-like Carbon as Sulfur Host Cathode for High Performance LithiumBulfur Batteries. <b>2018</b> , 1, 7076-7084  | 11  |
| 1123         | Controlled Synthesis and Aminating of Poly(melamine)-Paraformaldehyde Mesoporous Resin for CO2 Adsorption. <b>2018</b> , 32, 12772-12779   | 7   |
| 1122         | Spore Carbon from Aspergillus Oryzae for Advanced Electrochemical Energy Storage. <b>2018</b> , 30, e1805165   | 103 |
| 1121         | Supported structure-controlled graphitic carbon nitride catalyst for dehydrochlorination of 1,2-dichloroethane. <b>2018</b> , 8, 5334-5343   | 6   |
| <b>112</b> 0 | Preparation and Characterization of Rice Husks-Derived Silicon-Tin/Nitrogen-Doped Reduced Graphene Oxide Nanocomposites as Anode Materials for Lithium-Ion Batteries. <b>2018</b> , 283, 46-54                               | 2   |
| 1119         | Two-dimensional covalent-organic-framework-derived nitrogen-rich carbon nanosheets modified with small Pd nanoparticles for the hydrodechlorination of chlorophenols and hydrogenation of phenol. <b>2018</b> , 568, 130-138 | 24  |

| Construction of a highly effective self-repair corrosion-resistant epoxy composite through impregnation of 1H-Benzimidazole corrosion inhibitor modified graphene oxide nanosheets (GO-BIM). <b>2018</b> , 145, 119-134        | 72   |
|--|--|
| Insight into Fe(Salen) Encapsulated Co-Porphyrin Framework Derived Thin Film for Efficient Oxygen Evolution Reaction. <b>2018</b> , 18, 7150-7157  | 12   |
| Thermal Conversion of MOF@MOF: Synthesis of an N-Doped Carbon Material with Excellent ORR Performance. <b>2018</b> , 83, 1044-1051   | 14   |
| Defects on carbons for electrocatalytic oxygen reduction. <b>2018</b> , 47, 7628-7658  | 282  |
| Selective and metal-free oxidation of biomass-derived 5-hydroxymethylfurfural to 2,5-diformylfuran over nitrogen-doped carbon materials. <b>2018</b> , 20, 4946-4956   | 69   |
| Boosting ORR Electrocatalytic Performance of Metal-Free Mesoporous Biomass Carbon by Synergism of Huge Specific Surface Area and Ultrahigh Pyridinic Nitrogen Doping. <b>2018</b> , 6, 13807-13812                             | 49   |
| Preparation of a High Performance Electrocatalyst for Oxygen Reduction Reaction by Suppressing the Agglomeration of the Carbon Material with RbCl. <b>2018</b> , 10, 5190-5193   | 1  |
| Hierarchically Porous Heteroatoms-doped Vesica-like Carbons as Highly Efficient Bifunctional Electrocatalysts for Zn-air Batteries. <b>2018</b> , 10, 5297-5305  | 25   |
| Robust and Flexible Micropatterned Electrodes and Micro-Supercapacitors in GrapheneBilk Biopapers. <b>2018</b> , 5, 1801203  | 13   |
| Nanosheet-Filled Polymer Film from Flow-Induced Coassembly: Multiscale Structure Visualization and Application. <b>2018</b> , 34, 14204-14214  | 4  |
| Selective Glucose Isomerization to Fructose via a Nitrogen-doped Solid Base Catalyst Derived from Spent Coffee Grounds. <b>2018</b> , 6, 16113-16120   | 58   |
| What Matters in Fuel Cell Electrocatalysis? Theory Perspective. 2018, 908-919  |  |
| Application of Novel Carbonaceous Materials as Support for Fuel Cell Electrocatalysts. 2018, 175-213   | 1  |
| Facile Fabrication of Novel Hetero-Structured OrganicIhorganic High-Performance Nanocatalyst: A Smart System for Enhanced Catalytic Activity toward Ciprofloxacin Degradation and Oxygen Reduction. <b>2018</b> , 1, 6015-6026 | 18   |
| Recognition of Latent Fingerprints and Ink-Free Printing Derived from Interfacial Segregation of Carbon Dots. <b>2018</b> , 10, 39205-39213  | 31   |
| Supermolecule polymerization derived porous nitrogen-doped reduced graphene oxide as a high-performance electrode material for supercapacitors. <b>2018</b> , 292, 20-30   | 21   |
| Rapid Synthesis of Oxygen-Rich Covalent CN (CNO) Nanosheets by Sacrifice of HKUST-1: Advanced Metal-Free Nanofillers for Polymers. <b>2018</b> , 10, 32688-32697   | 4  |
| Electrocatalytic Activity of Carbon in N-Doped Graphene to Achieve High-Energy Density Li <b>S</b><br>Batteries. <b>2018</b> , 122, 23045-23052  | 13   |
|  | Insight into Fe(Salen) Encapsulated Co-Porphyrin Framework Derived Thin Film for Efficient Oxygen Evolution Reaction, 2018, 18, 7150-7157  Thermal Conversion of MOF@MOF: Synthesis of an N-Doped Carbon Material with Excellent ORR Performance, 2018, 83, 1044-1051  Defects on carbons for electrocatalytic oxygen reduction, 2018, 47, 7628-7658  Selective and metal-free oxidation of biomass-derived 5-hydroxymethylfurfural to 2,5-diformylfuran over nitrogen-doped carbon materials, 2018, 20, 4946-4956  Boosting ORR Electrocatalytic Performance of Metal-Free Mesoporous Biomass Carbon by Synergism of Huge Specific Surface Area and Ultrahigh Pyridinic Nitrogen Doping, 2018, 6, 13807-13812  Preparation of a High Performance Electrocatalyst for Oxygen Reduction Reaction by Suppressing the Agglomeration of the Carbon Material with Rbcl. 2018, 10, 5190-5193  Hierarchically Porous Heteroatoms-doped Vesica-like Carbons as Highly Efficient Bifunctional Electrocatalysts for Zn-air Batteries, 2018, 10, 5297-5305  Robust and Flexible Micropatterned Electrodes and Micro-Supercapacitors in GrapheneBilk Biopapers, 2018, 5, 1801203  Nanosheet-Filled Polymer Film from Flow-Induced Coassembly: Multiscale Structure Visualization and Application, 2018, 34, 14204-14214  Selective Glucose Isomerization to Fructose via a Nitrogen-doped Solid Base Catalyst Derived from Spent Coffee Grounds, 2018, 6, 16113-16120  What Matters in Fuel Cell Electrocatalysis? Theory Perspective, 2018, 908-919  Application of Novel Carbonaceous Materials as Support for Fuel Cell Electrocatalysts, 2018, 175-213  Facile Fabrication of Novel Hetero-Structured OrganicHorganic High-Performance Nanocatalyst: A Smart System for Enhanced Catalytic Activity toward Ciprofioxacin Degradation and Oxygen Reduction, 2018, 10, 39205-39213  Supermolecule polymerization derived porous nitrogen-doped reduced graphene oxide as a high-performance electrode material for supercapacitors, 2018, 292, 20-30  Rapid Synthesis of Oxygen-Rich Covalent CN (CNO) Nanosheets by Sacrifice of HKUST- |

| 1100 | Defective Carbons for Electrocatalytic Oxygen Reduction. <b>2018</b> , 59-75   | О  |
|------|--|----|
| 1099 | Hydrothermal Carbon Materials for the Oxygen Reduction Reaction. <b>2018</b> , 369-401   | 2  |
| 1098 | Functionalized Graphene-Based, Metal-Free Electrocatalysts for Oxygen Reduction Reaction in Fuel Cells. <b>2018</b> , 529-554  | 1  |
| 1097 | Modulating Metal-Free and Non-Enzymatic Electrocatalytic Activity of sp2 Carbons Towards H2O2 Reduction by a Facile and Low-Temperature Electrochemical Approach. <b>2018</b> , 5, 3668-3678                                       |    |
| 1096 | Interconnected nitrogen and sulfur co-doped graphene-like porous carbon nanosheets with high electrocatalytic activity as counter electrodes for dye-sensitized and quantum dot-sensitized solar cells. <b>2018</b> , 290, 273-281 | 11 |
| 1095 | Design and preparation of three-dimensional MnO/N-doped carbon nanocomposites based on waste biomass for high storage and ultra-fast transfer of lithium ions. <b>2018</b> , 6, 19479-19487  | 41 |
| 1094 | Superhydrophobic, mechanically flexible and recyclable reduced graphene oxide wrapped sponge for highly efficient oil/water separation. <b>2018</b> , 12, 390-399  | 15 |
| 1093 | Oxygen reduction reaction activity and the microbial community in response to magnetite coordinating nitrogen-doped carbon catalysts in bioelectrochemical systems. <b>2018</b> , 122, 113-120                                     | 13 |
| 1092 | One-Step Chemical Vapor Deposition Synthesis of 3D N-doped Carbon Nanotube/N-doped Graphene Hybrid Material on Nickel Foam. <b>2018</b> , 8,   | 22 |
| 1091 | Porous Microspherical N and P-co-doped NiFe2O4/Single-Walled Carbon Nanotubes for Efficient Electrochemical Oxygen Evolution Reaction. <b>2018</b> , 10, 5174-5181   | 19 |
| 1090 | Core-shell structure of porous silicon with nitrogen-doped carbon layer for lithium-ion batteries. <b>2018</b> , 108, 170-175  | 15 |
| 1089 | Boron-doped graphene as a promising electrocatalyst for NO electrochemical reduction: a computational study. <b>2018</b> , 42, 16346-16353   | 12 |
| 1088 | N-doped carbon modified Pt/CNTs synthesized by atomic layer deposition with enhanced activity and stability for methanol electrooxidation. <b>2018</b> , 39, 1038-1043   | 11 |
| 1087 | Surface activation of graphene nanoribbons for oxygen reduction reaction by nitrogen doping and defect engineering: An ab initio study. <b>2018</b> , 137, 349-357   | 10 |
| 1086 | Manganese oxide nanoparticles supported nitrogen-doped graphene: a durable alkaline oxygen reduction electrocatalyst. <b>2018</b> , 48, 849-865  | 11 |
| 1085 | Spreading and orientation of silver nano-drops over a flat graphene substrate: An atomistic investigation. <b>2018</b> , 138, 26-41  | 9  |
| 1084 | CeO2 overlapped with nitrogen-doped carbon layer anchoring Pt nanoparticles as an efficient electrocatalyst towards oxygen reduction reaction. <b>2018</b> , 43, 12119-12128   | 14 |
| 1083 | Nitrogen-doped carbon layer coated CeNiOx as electrocatalyst for oxygen reduction reaction. <b>2018</b> , 761, 8-14  | 8  |

| 1082 | Reduced graphene oxide supported raspberry-like SrWO4 for sensitive detection of catechol in green tea and drinking water samples. <b>2018</b> , 89, 215-223  | 37  |
|------|---|-----|
| 1081 | Understanding of the Ultrastable K-Ion Storage of Carbonaceous Anode. <b>2018</b> , 28, 1801989   | 133 |
| 1080 | Novel porous FexCyNz/N-doped CNT nanocomposites with excellent bifunctions for catalyzing oxygen reduction reaction and absorbing electromagnetic wave. <b>2018</b> , 453, 83-92                                | 18  |
| 1079 | Intercalation pseudocapacitance in flexible and self-standing V2O3 porous nanofibers for high-rate and ultra-stable K ion storage. <b>2018</b> , 50, 462-467  | 136 |
| 1078 | From functional structure to packaging: full-printing fabrication of a microfluidic chip. <b>2018</b> , 18, 1859-1866   | 8   |
| 1077 | Sunlight-driven water-splitting using two-dimensional carbon based semiconductors. <b>2018</b> , 6, 12876-12931   | 159 |
| 1076 | Nitrogen-doped holey carbon nanotubes: Dual polysulfides trapping effect towards enhanced lithium-sulfur battery performance. <b>2018</b> , 454, 284-292  | 19  |
| 1075 | Fe2O3 embedded in the nitrogen-doped carbon matrix with strong C-O-Fe oxygen-bridge bonds for enhanced sodium storages. <b>2018</b> , 216, 58-63  | 23  |
| 1074 | High photoluminescence quantum yield of 18.7% by using nitrogen-doped Ti3C2 MXene quantum dots. <b>2018</b> , 6, 6360-6369  | 104 |
| 1073 | Pod-like structured Co/CoOx nitrogen-doped carbon fibers as efficient oxygen reduction reaction electrocatalysts for Zn-air battery. <b>2018</b> , 456, 959-966   | 39  |
| 1072 | Graphite carbon nitride/boron-doped graphene hybrid for efficient hydrogen generation reaction. <b>2018</b> , 29, 345705  | 15  |
| 1071 | Exonuclease III-aided recycling amplification of proximity ligation assay using thymine-melamine-thymine triplex structure for ultrasensitive fluorometric determination of melamine. <b>2018</b> , 92, 325-330 | 4   |
| 1070 | Structural, optical and gas sensing properties of vertically well-aligned ZnO nanowires grown on graphene/Si substrate by thermal evaporation method. <b>2018</b> , 141, 296-317                                | 19  |
| 1069 | A facile and processable integration strategy towards Schiff-base polymer-derived carbonaceous materials with high lithium storage performance. <b>2018</b> , 10, 10351-10356                                   | 12  |
| 1068 | Hierarchical Heterostructures of Ultrasmall FeO-Encapsulated MoS/N-Graphene as an Effective Catalyst for Oxygen Reduction Reaction. <b>2018</b> , 10, 24523-24532   | 44  |
| 1067 | Highly Reversible Li-Se Batteries with Ultra-Lightweight N,S-Codoped Graphene Blocking Layer. <b>2018</b> , 10, 59  | 26  |
| 1066 | 3D nitrogen-doped graphene aerogels as efficient electrocatalyst for the oxygen reduction reaction. <b>2018</b> , 139, 137-144  | 64  |
| 1065 | Recent advancements in the development of bifunctional electrocatalysts for oxygen electrodes in unitized regenerative fuel cells (URFCs). <b>2018</b> , 98, 108-167  | 26  |

| 1064 | Oxidation of Rhodamine B by persulfate activated with porous carbon aerogel through a non-radical mechanism. <b>2018</b> , 358, 53-61   | 81 |
|------|---|----|
| 1063 | Facilely Prepared N-Doped Graphene/Pt/TiO2 as an Efficient Anode for Acetaminophen Degradation. <b>2018</b> , 148, 2418-2431  | 3  |
| 1062 | Selective phenol hydrogenation to cyclohexanone over Pd@N-doped porous carbon: role of storage under air of recovered catalyst. <b>2018</b> , 125, 605-617  | 5  |
| 1061 | Cutting the Green Waste. Structure-Performance Relationship in Functionalized Carbon Xerogels for Hydrolysis of Cellobiose. <b>2018</b> , 10, 4934-4946   | 8  |
| 1060 | Graphynes: indispensable nanoporous architectures in carbon flatland <b>2018</b> , 8, 22998-23018   | 16 |
| 1059 | Synthesis of bare and surface modified TiO2 nanoparticles via a single source precursor and insights into their interactions with serum albumin. <b>2018</b> , 42, 13358-13366  | 14 |
| 1058 | High over-potential nitrogen-doped activated carbon towards hydrogen evolution inhibition in sulfuric acid solution. <b>2018</b> , 29, 14170-14179  | 6  |
| 1057 | Novel preparation of N-doped carbon spheres with excellent oxygen reduction reaction catalytic activity. <b>2018</b> , 217, 513-518   | 2  |
| 1056 | Facile synthesis of nitrogen and sulfur co-doped carbon dots for multiple sensing capacities: alkaline fluorescence enhancement effect, temperature sensing, and selective detection of Fe3+ions. <b>2018</b> , 42, 13147-13156 | 24 |
| 1055 | Three-Dimensional Heteroatom-Doped Nanocarbon for Metal-Free Oxygen Reduction Electrocatalysis: A Review. <b>2018</b> , 8, 301  | 22 |
| 1054 | Molten-Salt-Assisted Synthesis of 3D Holey N-Doped Graphene as Bifunctional Electrocatalysts for Rechargeable ZnAir Batteries. <b>2018</b> , 2, 1800144   | 51 |
| 1053 | Reduced graphene oxide/iron oxide nanohybrid flexible electrodes grown by laser-based technique for energy storage applications. <b>2018</b> , 44, 20409-20416  | 15 |
| 1052 | Highly Graphitic Mesoporous Fe,N-Doped Carbon Materials for Oxygen Reduction Electrochemical Catalysts. <b>2018</b> , 10, 25337-25349   | 33 |
| 1051 | Graphene photocatalysts. <b>2018</b> , 79-101   | 4  |
| 1050 | MnO-encapsulated graphene cubes derived from homogeneous MnCO3-C cubes as high performance anode material for Li ion batteries. <b>2018</b> , 139, 750-758  | 17 |
| 1049 | Synergism of nitrogen and reduced graphene in the electrocatalytic behavior of resorcinol - Formaldehyde based carbon aerogels. <b>2018</b> , 139, 872-879  | 20 |
| 1048 | Bioassembly of fungal hyphae/graphene oxide composite as high performance adsorbents for U(VI) removal. <b>2018</b> , 458, 226-235  | 17 |
| 1047 | Improving energy density of supercapacitors using heteroatom-incorporated three-dimensional macro-porous graphene electrodes and organic electrolytes. <b>2018</b> , 399, 83-88   | 28 |

| 1046 | In Situ CVD Derived Co-N-C Composite as Highly Efficient Cathode for Flexible Li-O Batteries. <b>2018</b> , 14, e1800590   | 47 |
|------|--|----|
| 1045 | Eco-Friendly Synthesis of Nitrogen-Doped Mesoporous Carbon for Supercapacitor Application. <b>2018</b> , 4, 20   | 8  |
| 1044 | Effect of the N/C Ratios of Ammonia Added to Process Gas Mixtures on the Morphology and Structure of MPCVD Diamond Films. <b>2018</b> , 8, 163   | 4  |
| 1043 | Electronic structure tuning during facile construction of two-phase tungsten based electrocatalyst for hydrogen evolution reaction. <b>2018</b> , 283, 834-841   | 13 |
| 1042 | ZnS nanoparticles coated with graphene-like nano-cell as anode materials for high rate capability lithium-ion batteries. <b>2018</b> , 53, 14619-14628   | 10 |
| 1041 | Hierarchical N-doped carbons from designed N-rich polymer: Adsorbents with a record-high capacity for desulfurization. <b>2018</b> , 64, 3786-3793   | 45 |
| 1040 | Formation of YolkBhelled NickelCobalt Selenide Dodecahedral Nanocages from MetalDrganic Frameworks for Efficient Hydrogen and Oxygen Evolution. <b>2018</b> , 6, 10952-10959   | 80 |
| 1039 | Silver sulfide anchored on reduced graphene oxide as a high -performance catalyst for CO 2 electroreduction. <b>2018</b> , 398, 83-90  | 44 |
| 1038 | High-Level Heteroatom Doped Two-Dimensional Carbon Architectures for Highly Efficient Lithium-Ion Storage. <b>2018</b> , 6, 97   | 6  |
| 1037 | Synthesis of nitrogen and sulfur co-doped reduced graphene oxide as efficient metal-free cocatalyst for the photo-activity enhancement of CdS. <b>2018</b> , 236, 212-221  | 57 |
| 1036 | Green approach for in-situ growth of highly-ordered 3D flower-like CuS hollow nanospheres decorated on nitrogen and sulfur co-doped graphene bionanocomposite with enhanced peroxidase-like catalytic activity performance for colorimetric biosensing of glucose. <b>2018</b> , 90, 576-588 | 14 |
| 1035 | Enhancement of Fe@porous carbon to be an efficient mediator for peroxymonosulfate activation for oxidation of organic contaminants: Incorporation NH2-group into structure of its MOF precursor. <b>2018</b> , 354, 835-848  | 75 |
| 1034 | Surface Modified Carbon Cloth via Nitrogen Plasma for Supercapacitor Applications. <b>2018</b> , 165, A2446-A2450  | 23 |
| 1033 | New Application of Waste Citrus Maxima Peel-Derived Carbon as an Oxygen Electrode Material for Lithium Oxygen Batteries. <b>2018</b> , 10, 32058-32066   | 21 |
| 1032 | N-doping of graphene: toward long-term corrosion protection of Cu. <b>2018</b> , 6, 24136-24148  | 45 |
| 1031 | Sulfur, nitrogen co-doped nanocomposite of graphene and carbon nanotube as an efficient bifunctional electrocatalyst for oxygen reduction and evolution reactions. <b>2018</b> , 93, 336-341   | 8  |
| 1030 | Nickel phthalocyanine integrated graphene architecture as bifunctional electrocatalyst for CO2 and O2 reductions. <b>2018</b> , 826, 1-9   | 19 |
| 1029 | Morphological Ensembles of N-Doped Porous Carbon Derived from ZIF-8/Fe-Graphene<br>Nanocomposites: Processing and Electrocatalytic Studies. <b>2018</b> , 3, 8688-8697   | 5  |

| 1028                         | Synthesis of Carbon Nanosheets and Nitrogen-Doped Carbon Nanosheets from Perylene Derivatives for Supercapacitor Application. <b>2018</b> , 1, 4576-4586   | 5                          |
|------------------------------|--|----------------------------|
| 1027                         | Combined experimental and theoretical investigation on selective removal of mercury ions by metal organic frameworks modified with thiol groups. <b>2018</b> , 354, 790-801  | 73                         |
| 1026                         | A novel "signal-on" photoelectrochemical sensor for ultrasensitive detection of alkaline phosphatase activity based on a TiO/g-CN heterojunction. <b>2018</b> , 143, 3399-3407   | 23                         |
| 1025                         | Fenton-Reaction-Derived Fe/N-Doped Graphene with Encapsulated Fe3C Nanoparticles for Efficient Photo-Fenton Catalysis. <b>2018</b> , 148, 2528-2536  | 5                          |
| 1024                         | Urea treatment of nitrogen-doped carbon leads to enhanced performance for the oxygen reduction reaction. <b>2018</b> , 33, 1612-1624   | 14                         |
| 1023                         | Facile synthesis of Co-N-rGO composites as an excellent electrocatalyst for oxygen reduction reaction. <b>2019</b> , 194, 45-53  | 19                         |
| 1022                         | Fabrication of porous carbon nitride foams/acrylic resin composites for efficient oil and organic solvents capture. <b>2019</b> , 355, 299-308   | 25                         |
| 1021                         | Metal-free catalytic ozonation on surface-engineered graphene: Microwave reduction and heteroatom doping. <b>2019</b> , 355, 118-129   | 49                         |
| 1020                         | N-Doped Graphene Quantum Dots Using Different Bases. <b>2019</b> , 18, 1850017   |                            |
| 1019                         | Microwave assisted polymeric modification of graphite oxide and graphite by poly(allyl   | 4                          |
|                              | diazoacetate-co-acrolein). <b>2019</b> , 183, 108116   | 4                          |
| 1018                         | diazoacetate-co-acrolein). <b>2019</b> , 183, 108116  Catalytic Ozonation of Ketoprofen with In Situ N-Doped Carbon: A Novel Synergetic Mechanism of Hydroxyl Radical Oxidation and an Intra-Electron-Transfer Nonradical Reaction. <b>2019</b> , 53, 10342-10351  | 45                         |
|                              | Catalytic Ozonation of Ketoprofen with In Situ N-Doped Carbon: A Novel Synergetic Mechanism of Hydroxyl Radical Oxidation and an Intra-Electron-Transfer Nonradical Reaction. <b>2019</b> , 53, 10342-10351  |                            |
| 1018                         | Catalytic Ozonation of Ketoprofen with In Situ N-Doped Carbon: A Novel Synergetic Mechanism of Hydroxyl Radical Oxidation and an Intra-Electron-Transfer Nonradical Reaction. <b>2019</b> , 53, 10342-10351  Phosphorus Doped MoS2 Nanosheet Promoted with Nitrogen, Sulfur Dual Doped Reduced   | 45                         |
| 1018                         | Catalytic Ozonation of Ketoprofen with In Situ N-Doped Carbon: A Novel Synergetic Mechanism of Hydroxyl Radical Oxidation and an Intra-Electron-Transfer Nonradical Reaction. <b>2019</b> , 53, 10342-10351  Phosphorus Doped MoS2 Nanosheet Promoted with Nitrogen, Sulfur Dual Doped Reduced Graphene Oxide as an Effective Electrocatalyst for Hydrogen Evolution Reaction. <b>2019</b> , 2, 6184-6194  Highly dispersive NiCoS nanoparticles anchored on nitrogen-doped carbon nanofibers for efficient  | 45<br>36                   |
| 1018                         | Catalytic Ozonation of Ketoprofen with In Situ N-Doped Carbon: A Novel Synergetic Mechanism of Hydroxyl Radical Oxidation and an Intra-Electron-Transfer Nonradical Reaction. 2019, 53, 10342-10351  Phosphorus Doped MoS2 Nanosheet Promoted with Nitrogen, Sulfur Dual Doped Reduced Graphene Oxide as an Effective Electrocatalyst for Hydrogen Evolution Reaction. 2019, 2, 6184-6194  Highly dispersive NiCoS nanoparticles anchored on nitrogen-doped carbon nanofibers for efficient hydrogen evolution reaction. 2019, 555, 294-303  Simple preparation of Ni2P/Ni(PO3)2 inlayed in nitrogen-sulfur self-doped ultrathin holey carbon nanosheets with excellent electrocatalytic activities for water splitting. 2019, 320, 134579  In-situ growth of hollow NiCo layered double hydroxide on carbon substrate for flexible  | 45<br>36<br>25             |
| 1018<br>1017<br>1016         | Catalytic Ozonation of Ketoprofen with In Situ N-Doped Carbon: A Novel Synergetic Mechanism of Hydroxyl Radical Oxidation and an Intra-Electron-Transfer Nonradical Reaction. 2019, 53, 10342-10351  Phosphorus Doped MoS2 Nanosheet Promoted with Nitrogen, Sulfur Dual Doped Reduced Graphene Oxide as an Effective Electrocatalyst for Hydrogen Evolution Reaction. 2019, 2, 6184-6194  Highly dispersive NiCoS nanoparticles anchored on nitrogen-doped carbon nanofibers for efficient hydrogen evolution reaction. 2019, 555, 294-303  Simple preparation of Ni2P/Ni(PO3)2 inlayed in nitrogen-sulfur self-doped ultrathin holey carbon nanosheets with excellent electrocatalytic activities for water splitting. 2019, 320, 134579  In-situ growth of hollow NiCo layered double hydroxide on carbon substrate for flexible  | 45<br>36<br>25             |
| 1018<br>1017<br>1016<br>1015 | Catalytic Ozonation of Ketoprofen with In Situ N-Doped Carbon: A Novel Synergetic Mechanism of Hydroxyl Radical Oxidation and an Intra-Electron-Transfer Nonradical Reaction. 2019, 53, 10342-10351  Phosphorus Doped MoS2 Nanosheet Promoted with Nitrogen, Sulfur Dual Doped Reduced Graphene Oxide as an Effective Electrocatalyst for Hydrogen Evolution Reaction. 2019, 2, 6184-6194  Highly dispersive NiCoS nanoparticles anchored on nitrogen-doped carbon nanofibers for efficient hydrogen evolution reaction. 2019, 555, 294-303  Simple preparation of Ni2P/Ni(PO3)2 inlayed in nitrogen-sulfur self-doped ultrathin holey carbon nanosheets with excellent electrocatalytic activities for water splitting. 2019, 320, 134579  In-situ growth of hollow NiCo layered double hydroxide on carbon substrate for flexible supercapacitor. 2019, 321, 134710  Ultrathin atomic Mn-decorated formamide-converted N-doped carbon for efficient oxygen reduction reaction. 2019, 11, 15900-15906 | 45<br>36<br>25<br>19<br>57 |

| 1 | 1010 | A highly efficient cathode based on modified graphite felt for aniline degradation by electro-Fenton. <b>2019</b> , 235, 49-57   | 22 |
|---|------|--|----|
| 1 | 1009 | Coupling enhanced growth by nitrogen and hydrogen plasma of carbon nanotubes. <b>2019</b> , 21, 4653-4660  | 3  |
| 1 | 1008 | Red-blood-cell-like nitrogen-doped porous carbon as an efficient metal-free catalyst for oxygen reduction reaction. <b>2019</b> , 26, 1458-1468  | 7  |
| 1 | 1007 | CoS2 nanodots anchored into heteroatom-doped carbon layer via a biomimetic strategy: Boosting the oxygen evolution and supercapacitor performance. <b>2019</b> , 436, 226862                   | 26 |
| 1 | 1006 | One-step synthesis of tunable nitrogen-doped graphene from graphene oxide and its high performance field emission properties. <b>2019</b> , 168, 108817  | 4  |
| 1 | 1005 | Pyrrolic-nitrogen-rich biomass-derived catalyst for sustainable degradation of organic pollutant via a self-powered electro-Fenton process. <b>2019</b> , 64, 103940                           | 31 |
| 1 | 1004 | Highly selective two-electron oxygen reduction to generate hydrogen peroxide using graphite felt modified with N-doped graphene in an electro-Fenton system. <b>2019</b> , 43, 12657-12667     | 22 |
| 1 | 1003 | 3D interconnected crumpled porous carbon sheets modified with high-level nitrogen doping for high performance lithium sulfur batteries. <b>2019</b> , 154, 58-66                               | 25 |
| 1 | 1002 | The core-shell mesoporous titanium dioxide with in-situ nitrogen doped carbon as the anode for high performance lithium-ion battery. <b>2019</b> , 806, 946-952                                | 5  |
| 1 | 1001 | Electrochemical performance of hydrothermally synthesized N-Doped reduced graphene oxide electrodes for supercapacitor application. <b>2019</b> , 96, 105952                                   | 12 |
| 1 | 1000 | Catalytic Activity Boosting of Nickel Sulfide toward Oxygen Evolution Reaction via Confined Overdoping Engineering. <b>2019</b> , 2, 5363-5372   | 24 |
| 9 | 999  | Facile synthesis of iron phthalocyanine functionalized N,Bdoped reduced graphene oxide nanocomposites and sensitive electrochemical detection for glutathione. <b>2019</b> , 297, 126756       | 18 |
| 9 | 98   | Why nitrogen favors oxygen reduction on graphitic materials. <b>2019</b> , 3, 2391-2398  | 8  |
| 9 | 997  | Towards efficient oxygen reduction reaction electrocatalysts through graphene doping. <b>2019</b> , 319, 72-81   | 20 |
| 9 | 96   | A Depth-Profiling Study on the Solid Electrolyte Interface: Bis(fluorosulfuryl)imide Anion toward Improved K+ Storage. <b>2019</b> , 2, 7942-7951  | 33 |
| 9 | 95   | Microcantilever Array Biosensor for Simultaneous Detection of Carcinoembryonic Antigens and Fetoprotein Based on Real-Time Monitoring of the Profile of Cantilever. <b>2019</b> , 4, 3034-3041 | 11 |
| 9 | 994  | Heterogeneous Nitrogen-doped Graphene Catalysed HOOlGeneration via a Non-radical Mechanism for Base-free Dakin Reaction. <b>2019</b> , 361, 5210-5216  | 4  |
| 9 | 993  | Effect of N-doping on NO2 adsorption and reduction over activated carbon: An experimental and computational study. <b>2019</b> , 258, 116109   | 17 |

| 992 | Multistage Polymerization Design for g-CN Nanosheets with Enhanced Photocatalytic Activity by Modifying the Polymerization Process of Melamine. <b>2019</b> , 4, 17148-17159                    | 20  |
|-----|---|-----|
| 991 | Top-down bottom-up graphene synthesis. <b>2019</b> , 3, 042003  | 12  |
| 990 | Carbon materials from melamine sponges for supercapacitors and lithium battery electrode materials: A review. <b>2019</b> , 1, 253-275  | 87  |
| 989 | Electrochemical Reduction of N2 to NH3 Using a Co-Atom Stabilized on Defective N-Doped Graphene: A Computational Study. <b>2019</b> , 4, 12216-12226  | 8   |
| 988 | Ag2S decorated nanocubes with enhanced near-infrared photothermal and photodynamic properties for rapid sterilization. <b>2019</b> , 33, 100201   | 31  |
| 987 | Facile Green Preparation of Rhodium Nanoclusters Supported Nano-Scaled Graphene Platelets for Sonogashira Coupling Reaction and Reduction of p-Nitrophenol. <b>2019</b> , 9, 908                | 5   |
| 986 | Reduced Graphene Oxide for Biosensing and Electrocatalytic Applications. <b>2019</b> , 143-179  |     |
| 985 | Tunable-Deformed Graphene Layers for Actuation. <b>2019</b> , 7, 725  | 3   |
| 984 | N-Doped Carbon As Peroxidase-Like Nanozymes for Total Antioxidant Capacity Assay. <b>2019</b> , 91, 15267-15274   | 64  |
| 983 | Cetyltrimethyl ammonium mediated enhancement of the red emission of carbon dots and an advanced method for fluorometric determination of iron(III). <b>2019</b> , 186, 791                      | 13  |
| 982 | Atomic- and Molecular-Level Design of Functional Metal-Organic Frameworks (MOFs) and Derivatives for Energy and Environmental Applications. <b>2019</b> , 6, 1901129                            | 77  |
| 981 | Effect of Doping Temperatures and Nitrogen Precursors on the Physicochemical, Optical, and Electrical Conductivity Properties of Nitrogen-Doped Reduced Graphene Oxide. <b>2019</b> , 12,       | 37  |
| 980 | In Situ Grown Monolayer N-Doped Graphene on CdS Hollow Spheres with Seamless Contact for Photocatalytic CO Reduction. <b>2019</b> , 31, e1902868  | 332 |
| 979 | Three-dimensional Polypyrrole Derived N-doped Carbon Nanotube Aerogel as a High-performance Metal-free Catalyst for Oxygen Reduction Reaction. <b>2019</b> , 11, 5495-5504                      | 10  |
| 978 | One Step Synthesis of Tertiary Co-doped Graphene Electrocatalyst Using Microalgae Synechococcus elangatus for Applying in Microbial Fuel Cell. <b>2019</b> , 19, 623-634                        | 3   |
| 977 | In situ coupled amorphous cobalt nitride with nitrogen-doped graphene aerogel as a trifunctional electrocatalyst towards Zn-air battery deriven full water splitting. <b>2019</b> , 259, 118100 | 76  |
| 976 | Graphite N-C-P dominated three-dimensional nitrogen and phosphorus co-doped holey graphene foams as high-efficiency electrocatalysts for Zn-air batteries. <b>2019</b> , 11, 17010-17017        | 29  |
| 975 | Oxygen reduction/evolution activity of air electrodes using nitrogen-doped and perovskite-type oxide-loaded reduced graphene oxides. <b>2019</b> , 49, 1055-1067                                | 3   |

| 974 | Effective incorporation of nitrogen and boron in worm-like carbon foam for confining polysulfides. <b>2019</b> , 155, 379-385   | 8   |
|-----|---|-----|
| 973 | Highly mesoporous Fe and N Co-doped graphitic catalysts prepared from short-time synthesis of precursor towards highly efficient oxygen reduction. <b>2019</b> , 3, 3335-3343                         | 10  |
| 972 | Combustion synthesis of N-doped three-dimensional graphene networks using graphene oxidelitrocellulose composites. <b>2019</b> , 2, 492-500   | 24  |
| 971 | Leveraging electrochemistry to uncover the role of nitrogen in the biological reactivity of nitrogen-doped graphene. <b>2019</b> , 6, 3525-3538   | 6   |
| 970 | New insight to the role of edges and heteroatoms in nanocarbons for oxygen reduction reaction. <b>2019</b> , 66, 104096   | 44  |
| 969 | Direct synthesis of porous graphitic carbon sheets grafted on carbon fibers for high-performance supercapacitors. <b>2019</b> , 7, 3298-3306  | 43  |
| 968 | Controllable conversion of Prussian blue@yeast bio-template into 3D cage-like magnetic FeO@N-doped carbon absorbent and its cohesive regeneration by persulfate activation <b>2019</b> , 9, 1151-1164 | 6   |
| 967 | Facile large-scale synthesis of macroscopic 3D porous graphene-like carbon nanosheets architecture for efficient CO2 adsorption. <b>2019</b> , 145, 751-756   | 36  |
| 966 | Theoretical-limit exceeded capacity of the N2+H2 plasma modified graphite anode material. <b>2019</b> , 146, 194-199  | 10  |
| 965 | Highly Surface-Wrinkled and N-Doped CNTs Anchored on Metal Wire: A Novel Fiber-Shaped Cathode toward High-Performance Flexible Lito2 Batteries. <b>2019</b> , 29, 1808117                             | 52  |
| 964 | Defect Engineering and Surface Functionalization of Nanocarbons for Metal-Free Catalysis. <b>2019</b> , 31, e1805717  | 88  |
| 963 | Highly compressible supercapacitor based on carbon nanotubes-reinforced sponge electrode. <b>2019</b> , 786, 995-1004   | 20  |
| 962 | Magnetic nitrogen-doped sludge-derived biochar catalysts for persulfate activation: Internal electron transfer mechanism. <b>2019</b> , 364, 146-159  | 203 |
| 961 | Optimal structuring of nitrogen-doped hybrid-dimensional nanocarbons for high-performance flexible solid-state supercapacitors. <b>2019</b> , 7, 7501-7515  | 11  |
| 960 | Self-assembly of three-dimensional 1-octadecanol/graphene thermal storage materials. <b>2019</b> , 179, 128-134   | 28  |
| 959 | Ultra-small SnO2 nanoparticles decorated on three-dimensional nitrogen-doped graphene aerogel for high-performance bind-free anode material. <b>2019</b> , 478, 290-298                               | 22  |
| 958 | Defect-rich activated carbons as active and stable metal-free catalyst for acetylene hydrochlorination. <b>2019</b> , 146, 406-412  | 49  |
| 957 | Nitrogen-Doped Graphene Oxide Electrocatalysts for the Oxygen Reduction Reaction. <b>2019</b> , 2, 1675-1682  | 47  |

| 956 | Nanoporous goldNitrogenDoped carbon nano-onions all-solid-state micro-supercapacitor. <b>2019</b> , 17, 239-247  | 26  |
|-----|--|-----|
| 955 | Nitrogen-doped hierarchical porous carbon for supercapacitors with high rate performance. <b>2019</b> , 279, 439-445   | 26  |
| 954 | Synthesis of 3D hierarchical porous Nito layered double hydroxide/N-doped reduced graphene oxide composites for supercapacitor electrodes. <b>2019</b> , 6, 407-416                  | 53  |
| 953 | Sacrificial template induced interconnected bubble-like N-doped carbon nanofoam as a pH-universal electrocatalyst for an oxygen reduction reaction. <b>2019</b> , 6, 621-629         | 4   |
| 952 | One-Pot Synthesized Pd@N-Doped Graphene: An Efficient Catalyst for SuzukiMiyaura Couplings. <b>2019</b> , 9, 469   | 13  |
| 951 | Sandwich membranes based on PVDF-g-4VP and surface modified graphene oxide for Cu(II) adsorption. <b>2019</b> , 377, 17-23   | 15  |
| 950 | The Role of Supported Atomically Distributed Metal Species in Electrochemistry and How to Create Them. <b>2019</b> , 6, 3860-3877  | 9   |
| 949 | Interfacial N-Cu-S coordination mode of CuSCN/CN with enhanced electrocatalytic activity for hydrogen evolution. <b>2019</b> , 11, 12938-12945                                       | 8   |
| 948 | Selective hydrogenation of biomass-derived carbonyl compounds with highly dispersed ZIF derived catalysts. <b>2019</b> , 102, 190-196  | 5   |
| 947 | Direct synthesis of covalent triazine-based frameworks (CTFs) through aromatic nucleophilic substitution reactions <b>2019</b> , 9, 18008-18012                                      | 10  |
| 946 | Molecularly defined graphitic interface toward proton manipulation. <b>2019</b> , 17, 158-166  | 2   |
| 945 | Free-standing macro-porous nitrogen doped graphene film for high energy density supercapacitor. <b>2019</b> , 318, 865-874   | 27  |
| 944 | Highly Sensitive and Selective Dopamine Detection Utilizing Nitrogen-Doped Mesoporous Carbon Prepared by a Molten Glucose-Assisted Hard-Template Approach. <b>2019</b> , 84, 845-852 | 7   |
| 943 | TiO2@g-C3N4 core/shell spheres with uniform mesoporous structures for high performance visible-light photocatalytic application. <b>2019</b> , 45, 18844-18851                       | 26  |
| 942 | Adsorption and competition investigation of phenolic compounds on the solid-liquid interface of three-dimensional foam-like graphene oxide. <b>2019</b> , 378, 122085                | 32  |
| 941 | Removal of sulfamethoxazole from water via activation of persulfate by Fe3C@NCNTs including mechanism of radical and nonradical process. <b>2019</b> , 375, 122004                   | 144 |
| 940 | Oxygen Reduction Reaction Activity of Microwave Mediated Solvothermal Synthesized CeO/g-CN Nanocomposite. <b>2019</b> , 7, 403   | 21  |
| 939 | Nitrogen-doped carbon nanotubes self-catalytically grown on desert sands towards water purification. <b>2019</b> , 21, 1   | 3   |

| 938 | Preparation of sulfur-doped graphene fibers and their application in flexible fibriform micro-supercapacitors. <b>2019</b> , 13, 145-153  | 7  |
|-----|---|----|
| 937 | Enhanced deoxygenation efficiency of graphene oxide under solid-state microwave irradiation via chemical pre-reduction. <b>2019</b> , 97, 107445  | 6  |
| 936 | Anchoring CuO Nanoparticles On C, N-Codoped G-C3N4 Nanosheets from Melamine-Entrapped MOF Gel for High-Efficiency Oxygen Evolution. <b>2019</b> , 5, 1170-1175                              | 5  |
| 935 | N-Graphene-CeO2 nanocomposite enriched with Ce (III) sites to improve the efficiency of peroxone reaction under acidic conditions. <b>2019</b> , 225, 80-87                                 | 4  |
| 934 | Electrochemically Exfoliating Graphite Cathode to N-Doped Graphene Analogue and Its Excellent Al Storage Performance. <b>2019</b> , 166, A1738-A1744  | 5  |
| 933 | Synthesizing multilayer graphene from amorphous activated carbon via ammonia-assisted hydrothermal method. <b>2019</b> , 152, 24-32   | 17 |
| 932 | Fluorinated Reduced Graphene Oxide-Encapsulated ZnO Hollow Sphere Composite as an Efficient Photocatalyst with Increased Charge-Carrier Mobility. <b>2019</b> , 35, 8681-8691               | 14 |
| 931 | Supermolecule Self-Assembly Promoted Porous N, P Co-Doped Reduced Graphene Oxide for High Energy Density Supercapacitors. <b>2019</b> , 2, 4084-4091  | 21 |
| 930 | Scalable synthesis of self-assembled bimetallic phosphide/N-doped graphene nanoflakes as an efficient electrocatalyst for overall water splitting. <b>2019</b> , 11, 12837-12845            | 38 |
| 929 | Mesoporous nitrogen-doped carbon@graphene nanosheets as ultra-stable anode for lithium-ion batteries IMelamine as surface modifier than nitrogen source. <b>2019</b> , 318, 290-301         | 19 |
| 928 | Three-Dimensional Functionalized Carbon Nanotubes/Graphitic Carbon Nitride Hybrid Composite as the Sulfur Host for High-Performance LithiumBulfur Batteries. <b>2019</b> , 123, 15924-15934 | 7  |
| 927 | Bottom-Up Synthesis of Graphene Monolayers with Tunable Crystallinity and Porosity. <i>ACS Nano</i> , <b>2019</b> , 13, 7310-7322   | 18 |
| 926 | Visible-light enhanced photocatalytic performance of polypyrrole/g-C3N4 composites for water splitting to evolve H2 and pollutants degradation. <b>2019</b> , 379, 88-98                    | 54 |
| 925 | Selective Activation of S or N-Containing Carbon Segments by Alkalic or Acidic Activators. <b>2019</b> , 58, 9048-905   | 51 |
| 924 | CO2 Conversion into N-Doped Carbon Nanomesh Sheets. <b>2019</b> , 2, 2991-2998  | 5  |
| 923 | Occurrence of both hydroxyl radical and surface oxidation pathways in N-doped layered nanocarbons for aqueous catalytic ozonation. <b>2019</b> , 254, 283-291                               | 61 |
| 922 | Sulfur-Doped Reduced Graphene Oxide for Enhanced Sodium Ion Pseudocapacitance. <b>2019</b> , 9,   | 9  |
| 921 | Engineering N-reduced graphene oxide wrapped Co3O4@f-MWCNT hybrid for enhance performance dye-sensitized solar cells. <b>2019</b> , 844, 142-154  | 12 |

| 920 | Activated carbon aerogel supported copper catalysts for the hydrogenation of methyl acetate to ethanol: effect of KOH activation. <b>2019</b> , 43, 9430-9438                                       | 10  |
|-----|---|-----|
| 919 | Shape-tailorable high-energy asymmetric micro-supercapacitors based on plasma reduced and nitrogen-doped graphene oxide and MoO2 nanoparticles. <b>2019</b> , 7, 14328-14336                        | 27  |
| 918 | How semiconductor transition metal dichalcogenides replaced graphene for enhancing anticorrosion. <b>2019</b> , 7, 13511-13521  | 46  |
| 917 | A Freestanding Single-Wall Carbon Nanotube Film Decorated with N-Doped Carbon-Encapsulated Ni Nanoparticles as a Bifunctional Electrocatalyst for Overall Water Splitting. <b>2019</b> , 6, 1802177 | 38  |
| 916 | Bimetal phosphide Ni1.4Co0.6P nanoparticle/carbon@ nitrogen-doped graphene network as high-performance anode materials for lithium-ion batteries. <b>2019</b> , 485, 413-422                        | 12  |
| 915 | Universal Method for Producing Reduced Graphene Oxide/Gold Nanoparticles Composites with Controlled Density of Grafting and Long-Term Stability. <b>2019</b> , 9,                                   | 6   |
| 914 | Enhanced adsorption of Rhodamine B by magnetic nitrogen-doped porous carbon prepared from bimetallic ZIFs. <b>2019</b> , 575, 10-17   | 30  |
| 913 | Influence of Inclined Magnetic Field on Carreau Nanoliquid Thin Film Flow and Heat Transfer with Graphene Nanoparticles. <b>2019</b> , 12, 1459   | 40  |
| 912 | From rice straw to magnetically recoverable nitrogen doped biochar: Efficient activation of peroxymonosulfate for the degradation of metolachlor. <b>2019</b> , 254, 312-320                        | 129 |
| 911 | Ni nanoparticles supported on carbon nanosheets with tunable N doping content for hydrogen oxidation reaction. <b>2019</b> , 728, 19-24   | 8   |
| 910 | Synthesize and Characterization of 2-Aminothiazole Monomer and Polymer-based Bifunctional Fe/N/C Catalysts for Oxygen and Carbon Dioxide Reduction Reactions. <b>2019</b> , 4, 4398-4406            | 5   |
| 909 | ZIF-67-Derived N-Doped Co/C Nanocubes as High-Performance Anode Materials for Lithium-Ion Batteries. <b>2019</b> , 11, 16619-16628  | 96  |
| 908 | Synthesis of cobalt and nitrogen co-doped carbon nanotubes and its ORR activity as the catalyst used in hydrogen fuel cells. <b>2019</b> , 44, 25180-25187  | 30  |
| 907 | Preparation of Few-Layer Graphene by Pulsed Discharge in Graphite Micro-Flake Suspension. <b>2019</b> , 9, 150  | 5   |
| 906 | Functionalized Carbon Dots on Graphene as Outstanding Non-Metal Bifunctional Oxygen Electrocatalyst. <b>2019</b> , 15, e1900296   | 37  |
| 905 | Graphene nanoflakes with optimized nitrogen doping fabricated by arc discharge as highly efficient absorbers toward microwave absorption. <b>2019</b> , 148, 204-213                                | 74  |
| 904 | Plasma-Assisted Simultaneous Reduction and Nitrogen/Sulfur Codoping of Graphene Oxide for High-Performance Supercapacitors. <b>2019</b> , 7, 7597-7608  | 47  |
| 903 | Large scale N-doped GNTs@a-SiOx(x=1½)NPs: template-free one-step synthesis, and field emission and photoluminescence properties. <b>2019</b> , 7, 3756-3764   | 2   |

| 902 | Oxygen Reduction Reactions of Fe-N-C Catalysts: Current Status and the Way Forward. 2019, 2, 252-276  | 70  |
|-----|---|-----|
| 901 | Direct Conversion of Acetylene and 1,2-Dichloroethane to Vinyl Chloride Monomer over a Supported Carbon Nitride Catalyst: Tunable Activity Controlled by the Synthesis Temperature. <b>2019</b> , 58, 5404-5413 | 3   |
| 900 | Bulk synthesis of graphene nanosheets from plastic waste: An invincible method of solid waste management for better tomorrow. <b>2019</b> , 88, 48-55   | 37  |
| 899 | Biomass-Derived Air Cathode Materials: Pore-Controlled S,N-Co-doped Carbon for Fuel Cells and Metal <b>A</b> ir Batteries. <b>2019</b> , 9, 3389-3398   | 69  |
| 898 | Simple synthesis of N-doped catalysts with controllable PtNi nanoparticles for high-efficiency ethanol oxidation. <b>2019</b> , 25, 3179-3188   | 4   |
| 897 | W2C/porous graphene nanocomposite as an efficient non-noble metal catalyst for hydrogen and oxygen recombination in nickellron battery. <b>2019</b> , 25, 3749-3759   | 2   |
| 896 | Solid-state thermal exfoliation of graphite nano-fibers to edge-nitrogenized graphene nanosheets for oxygen reduction reaction. <b>2019</b> , 545, 71-81  | 11  |
| 895 | Mechanochemical synthesis of N-doped porous carbon at room temperature. <b>2019</b> , 11, 4712-4718   | 35  |
| 894 | Investigation on Template Etching Process of SBA-15 Derived Ordered Mesoporous Carbon on Electrocatalytic Oxygen Reduction Reaction. <b>2019</b> , 4, 2463-2474   | 5   |
| 893 | A high-performance catalyst based on binary CuFe alloyed nanocrystals encapsulated in nitrogen-doped graphene nanosheets towards oxygen reduction reaction. <b>2019</b> , 273, 132-140                          | 7   |
| 892 | Highly Dispersed Manganese Based Mn/Nt/Al2O3 Catalyst for Selective Oxidation of the CH Bond of Ethylbenzene. <b>2019</b> , 58, 3969-3977   | 15  |
| 891 | Mesoporous layered spinel zinc manganese oxide nanocrystals stabilized nitrogen-doped graphene as an effective catalyst for oxygen reduction reaction. <b>2019</b> , 545, 43-53                                 | 10  |
| 890 | N- and B-Codoped Graphene: A Strong Candidate To Replace Natural Peroxidase in Sensitive and Selective Bioassays. <i>ACS Nano</i> , <b>2019</b> , 13, 4312-4321   | 103 |
| 889 | Work function-tailored graphene via transition metal encapsulation as a highly active and durable catalyst for the oxygen reduction reaction. <b>2019</b> , 12, 2200-2211                                       | 75  |
| 888 | Recent Progress in Defective Carbon-Based Oxygen Electrode Materials for Rechargeable Zink-Air Batteries. <b>2019</b> , 2, 509-523  | 26  |
| 887 | Wall thickness-tunable AgNPs-NCNTs for hydrogen peroxide sensing and oxygen reduction reaction. <b>2019</b> , 306, 466-476  | 16  |
| 886 | Electrochemical sensor based on F,N-doped carbon dots decorated laccase for detection of catechol. <b>2019</b> , 840, 84-92   | 45  |
| 885 | Fabrication of N-doped porous carbons for enhanced CO2 capture: Rational design of an ammoniated polymer precursor. <b>2019</b> , 369, 170-179  | 46  |

| 884 | Mesh-Like Carbon Nanosheets with High-Level Nitrogen Doping for High-Energy Dual-Carbon Lithium-Ion Capacitors. <b>2019</b> , 15, e1805173  | 44  |
|-----|---|-----|
| 883 | Nitrogen-doped graphene fiber webs for multi-battery energy storage. <b>2019</b> , 11, 6334-6342  | 28  |
| 882 | Nitrogen-Doped Graphene on Copper: Edge-Guided Doping Process and Doping-Induced Variation of Local Work Function. <b>2019</b> , 123, 8802-8812   | 3   |
| 881 | Light-Induced Tunable n-Doping of Ag-Embedded GO/RGO Sheets in Polymer Matrix. <b>2019</b> , 123, 10557-10563   | 4   |
| 88o | Biomass derived interconnected hierarchical micro-meso-macro- porous carbon with ultrahigh capacitance for supercapacitors. <b>2019</b> , 147, 540-549  | 208 |
| 879 | Wearable, Flexible, Disposable Plasma-Reduced Graphene Oxide Stress Sensors for Monitoring Activities in Austere Environments. <b>2019</b> , 11, 15122-15132  | 32  |
| 878 | An enhanced beta-blockers degradation method using copper-boron-ferrite supported graphite electrodes and continuous droplet flow-assisted electro-Fenton reactor. <b>2019</b> , 221, 408-420   | 10  |
| 877 | Moderate Adsorption of Oxygen Molecular Induced Better Performance of Oxygen Reduction Reaction. <b>2019</b> , 166, F386-F392   | 5   |
| 876 | Effect of two-step doping pathway on the morphology, structure, composition, and electrochemical performance of three-dimensional N,S-codoped graphene framework. <b>2019</b> , 34, 1993-2002   | 1   |
| 875 | Activating MoS2 with Super-High Nitrogen-Doping Concentration as Efficient Catalyst for Hydrogen Evolution Reaction. <b>2019</b> , 123, 10917-10925   | 22  |
| 874 | Stepwise Fabrication of Co-Embedded Porous Multichannel Carbon Nanofibers for High-Efficiency Oxygen Reduction. <b>2019</b> , 11, 33  | 10  |
| 873 | Chemical vapor deposition-grown carbon nanotubes/graphene hybrids for electrochemical energy storage and conversion. <b>2019</b> , 15, 100091   | 22  |
| 872 | One-step preparation of graphitic carbon nitride/Polyaniline/Palladium nanoparticles based nanohybrid composite modified electrode for efficient methanol electro-oxidation. <b>2019</b> , 251, 91-97                                       | 60  |
| 871 | Exploration of Long-Life Pt/Heteroatom-Doped Graphene Catalysts in Hydrogen Atmosphere. <b>2019</b> , 4, 6573-6584  | 1   |
| 870 | Fe,N-doped graphene prepared by NH3 plasma with a high performance for oxygen reduction reaction. <b>2019</b> , 337, 97-101   | 10  |
| 869 | Pure nitrogen-doped graphene aerogel with rich micropores yields high ORR performance. <b>2019</b> , 242, 1-5   | 17  |
| 868 | PdCoNi nanoparticles supported on nitrogen-doped porous carbon nanosheets for room temperature dehydrogenation of formic acid. <b>2019</b> , 44, 11675-11683  | 14  |
| 867 | Surface Modification of Graphite Support as an Effective Strategy to Enhance the Electro-Fenton Activity of Fe3O4/Graphite Composites in Situ Fabricated from Acid Mine Drainage Using an Air-Cathode Fuel Cell. <b>2019</b> , 7, 8367-8374 | 14  |

## (2019-2019)

| 866 | CoP nanosheets in-situ grown on N-doped graphene as an efficient and stable bifunctional electrocatalyst for hydrogen and oxygen evolution reactions. <b>2019</b> , 307, 543-552  | 79 |
|-----|---|----|
| 865 | Tunable nitrogen-doped graphene sheets produced with in situ electrochemical cathodic plasma at room temperature for lithium-ion batteries. <b>2019</b> , 12, 336-347   | 14 |
| 864 | Laser transmission welding and surface modification of graphene film for flexible supercapacitor applications. <b>2019</b> , 483, 481-488   | 27 |
| 863 | Highly Durable Non-Platinum Catalyst for Protic Ionic Liquid Based Intermediate Temperature PEFCs. <b>2019</b> , 87, 35-46  | 4  |
| 862 | Rapid gas-induced detachable rGO/MnO debonding layer for flexible electronic applications. <b>2019</b> , 146, 756-762   | 3  |
| 861 | Nitrogen-Doped Carbon Nano-Onions as a Metal-Free Electrocatalyst. <b>2019</b> , 10, 222-231  | 8  |
| 860 | Nonmainstream Out-Plane Fluoro- and Amino-Cofunctionalized Graphene for a Striking Electrocatalyst: Programming Substitutive/Reductive Defluorination toward Graphite Fluoride. <b>2019</b> , 6, 1801699                                      | 4  |
| 859 | Progress in Nonmetal-Doped Graphene Electrocatalysts for the Oxygen Reduction Reaction. <b>2019</b> , 12, 2133-2146   | 45 |
| 858 | Electrocatalytic Water Splitting and CO2 Reduction: Sustainable Solutions via Single-Atom Catalysts Supported on 2D Materials. <b>2019</b> , 3, 1800492   | 41 |
| 857 | Highly fluorescent nitrogen-doped carbon dots for the determination and the differentiation of the rare earth element ions. <b>2019</b> , 198, 501-509  | 17 |
| 856 | Carbon Nanomaterials for Energy and Biorelated Catalysis: Recent Advances and Looking Forward. <b>2019</b> , 5, 389-408   | 50 |
| 855 | Pyridinic-N Protected Synthesis of 3D Nitrogen-Doped Porous Carbon with Increased Mesoporous Defects for Oxygen Reduction. <b>2019</b> , 15, e1805325   | 39 |
| 854 | Barrier mechanism of nitrogen-doped graphene against atomic oxygen irradiation. <b>2019</b> , 479, 669-678  | 8  |
| 853 | Green, single-pot synthesis of functionalized Na/N/P co-doped graphene nanosheets for high-performance supercapacitors. <b>2019</b> , 837, 30-38  | 18 |
| 852 | A few-layered MoS nanosheets/nitrogen-doped graphene 3D aerogel as a high performance and long-term stability supercapacitor electrode. <b>2019</b> , 11, 4318-4327   | 34 |
| 851 | Functionalized Graphene Nanocomposites in Air Filtration Applications. <b>2019</b> , 65-89  | 2  |
| 850 | Nitrogen configuration dependent holey active sites toward enhanced K+ storage in graphite foam. <b>2019</b> , 419, 82-90   | 27 |
| 849 | Oxygen-vacancy Bi2O3 nanosheet arrays with excellent rate capability and CoNi2S4 nanoparticles immobilized on N-doped graphene nanotubes as robust electrode materials for high-energy asymmetric supercapacitors. <b>2019</b> , 7, 7918-7931 | 66 |

| 848 | A Low-Cost and Facile Method for the Preparation of Fe-N/C-Based Hybrids with Superior Catalytic Performance toward Oxygen Reduction Reaction. <b>2019</b> , 6, 1900273                   | 16 |
|-----|---|----|
| 847 | Biotemplate derived three dimensional nitrogen doped graphene@MnO as bifunctional material for supercapacitor and oxygen reduction reaction catalyst. <b>2019</b> , 544, 155-163          | 49 |
| 846 | Study of a saturation point to establish the doping density limit of silicon with graphene oxide. <b>2019</b> , 96, 116-121   | 3  |
| 845 | Impact of Surface Carbonyl- and Hydroxyl-Group Concentrations on Electrode Kinetics in an All-Vanadium Redox Flow Battery. <b>2019</b> , 123, 6370-6378                                   | 25 |
| 844 | Highly thermally conductive graphene film produced using glucose under low-temperature thermal annealing. <b>2019</b> , 54, 7553-7562   | 12 |
| 843 | Electron reduction for the preparation of rGO with high electrochemical activity. <b>2019</b> , 337, 63-68  | 11 |
| 842 | Sulfur-regulated the binding configurations of nitrogen in three-dimensional graphene to improve lithium storage kinetics. <b>2019</b> , 786, 1013-1020                                   | 12 |
| 841 | ZIF-67-Derived CoSe/NC Composites as Anode Materials for Lithium-Ion Batteries. <b>2019</b> , 14, 358   | 16 |
| 840 | Formation of thin layer graphite wrapped meso-porous SiOx and its lithium storage application. <b>2019</b> , 45, 24707-24716  | 4  |
| 839 | Catalytically Active Carbon From Cattail Fibers for Electrochemical Reduction Reaction. <b>2019</b> , 7, 786  | 12 |
| 838 | High-performance water desalination of heteroatom nitrogen- and sulfur-codoped open hollow tubular porous carbon electrodes via capacitive deionization. <b>2019</b> , 6, 3359-3373       | 20 |
| 837 | Arc-discharge synthesis of nitrogen-doped C embedded TiCN nanocubes with tunable dielectric/magnetic properties for electromagnetic absorbing applications. <b>2019</b> , 11, 19994-20005 | 25 |
| 836 | A functionalized ruthenium-graphene nanosheet photocatalyst for highly regioselective visible light driven CH arylation of imidazo-pyrimidines. <b>2019</b> , 3, 3324-3328                | 2  |
| 835 | Upgrading the Properties of Reduced Graphene Oxide and Nitrogen-Doped Reduced Graphene Oxide Produced by Thermal Reduction toward Efficient ORR Electrocatalysts. <b>2019</b> , 9,        | 14 |
| 834 | Effect of Fe3O4-Decorated N-Doped Reduced Graphene Oxide Nanohybrid on the Anticorrosion Performance of Epoxy Composite Coating. <b>2019</b> , 4, 13446-13454                             | 7  |
| 833 | Anchoring MnCoO Nanorods from Bimetal-Organic Framework on rGO for High-Performance Oxygen Evolution and Reduction Reaction. <b>2019</b> , 4, 22325-22331                                 | 11 |
| 832 | Fe/N-Codoped Hollow Carbonaceous Nanospheres Anchored on Reduced Graphene Oxide for Microwave Absorption. <b>2019</b> , 2, 8063-8074  | 25 |
| 831 | Double-layer carbon protected CoS nanoparticles as an advanced anode for sodium-ion batteries <b>2019</b> , 9, 40956-40960  | 5  |

| 830 | Capacitive deionization of saline water using graphene nanosphere decorated N-doped layered mesoporous carbon frameworks. <b>2019</b> , 6, 3442-3453  | 40  |
|-----|---|-----|
| 829 | Interface self-assembly preparation of multi-element doped carbon nanobowls with high electrocatalysis activity for oxygen reduction reaction. <b>2019</b> , 533, 569-577                               | 5   |
| 828 | Heteroatom-doped graphene and its application as a counter electrode in dye-sensitized solar cells. <b>2019</b> , 43, 1702-1734   | 15  |
| 827 | Bimetal/Metal Oxide Encapsulated in Graphitic Nitrogen Doped Mesoporous Carbon Networks for Enhanced Oxygen Electrocatalysis. <b>2019</b> , 6, 1485-1491  | 16  |
| 826 | Hydrogels that couple nitrogen-enriched graphene with Ni(OH)2 nanosheets for high-performance asymmetric supercapacitors. <b>2019</b> , 782, 516-524  | 33  |
| 825 | Pine pollen derived porous carbon with efficient capacitive deionization performance. <b>2019</b> , 298, 360-371  | 25  |
| 824 | Catalysis with Two-Dimensional Materials Confining Single Atoms: Concept, Design, and Applications. <b>2019</b> , 119, 1806-1854  | 442 |
| 823 | Synthesis, characterization and thermodynamic stability of nanostructured <code>Bron</code> carbonitride powder prepared by a solid-state mechanochemical route. <b>2019</b> , 778, 327-336             | 4   |
| 822 | A Mn Fe based Prussian blue Analogue@Reduced graphene oxide composite as high capacity and superior rate capability anode for lithium-ion batteries. <b>2019</b> , 143, 706-713                         | 25  |
| 821 | Simultaneous determination of dihydroxybenzene isomers at nitrogen-doped graphene surface using fast Fourier transform square wave voltammetry and multivariate calibration. <b>2019</b> , 145, 596-605 | 16  |
| 820 | Bimetallic Manganese Cobalt Phosphide Nanodots Modified Graphitic Carbon Nitride for High-Performance Hydrogen Production. <b>2019</b> , 7, 1800927   | 16  |
| 819 | Self-Assembly of Nanoparticles into Two-Dimensional Arrays for Catalytic Applications. <b>2019</b> , 20, 23-30  | 14  |
| 818 | Two-dimensional covalent organic frameworks as self-template derived nitrogen-doped carbon nanosheets for eco-friendly metal-free catalysis. <b>2019</b> , 244, 25-35                                   | 100 |
| 817 | Vertically-oriented graphene nanowalls: Growth and application in Li-ion batteries. <b>2019</b> , 91, 54-63   | 19  |
| 816 | Porous nitrogen/halogen dual-doped nanocarbons derived from imidazolium functionalized cationic metal-organic frameworks for highly efficient oxygen reduction reaction. <b>2019</b> , 62, 671-680      | 23  |
| 815 | Cu+2 loaded "zeolite A"/ nitrogen-doped graphene as a novel hybrid for simultaneous voltammetry determination of carbamazepine and dopamine. <b>2019</b> , 225, 137-144                                 | 6   |
| 814 | Ultrafine Pd nanoparticles supported on zeolite-templated mesocellular graphene network via framework aluminum mediation: An advanced oxygen reduction electrocatalyst. <b>2019</b> , 244, 957-964      | 20  |
| 813 | Deriving Efficient Porous Heteroatom-Doped Carbon Electrocatalysts for Hydrazine Oxidation from Transition Metal Ions-Coordinated Casein. <b>2019</b> , 29, 1808486                                     | 19  |

| 812             | Bioinspired Color Changing Molecular Sensor toward Early Fire Detection Based on Transformation of Phthalonitrile to Phthalocyanine. <b>2019</b> , 29, 1806586  | 44  |
|-----------------|---|-----|
| 811             | Ultrapure Graphene Is a Poor Electrocatalyst: Definitive Proof of the Key Role of Metallic Impurities in Graphene-Based Electrocatalysis. <i>ACS Nano</i> , <b>2019</b> , 13, 1574-1582   | 76  |
| 810             | Heteroatoms co-Doping (N, F) to the Porous Carbon Derived from Spent Coffee Grounds as an Effective Catalyst for Oxygen Reduction Reaction in Polymer Electrolyte Fuel Cells. <b>2019</b> , 166, F93-F101                             | 18  |
| 809             | Active Sites and Mechanism of Oxygen Reduction Reaction Electrocatalysis on Nitrogen-Doped Carbon Materials. <b>2019</b> , 31, e1804297   | 252 |
| 808             | Nitrogen-doped nanocarbons (NNCs): Current status and future opportunities. 2019, 15, 67-76   | 14  |
| 807             | Corncob-to-xylose residue (CCXR) derived porous biochar as an excellent adsorbent to remove organic dyes from wastewater. <b>2019</b> , 51, 234-245   | 10  |
| 806             | A novel approach of fluorescent porous graphite carbon nitride based silica gel powder for latent fingerprint detection. <b>2019</b> , 9, 255-277   | 8   |
| 805             | Fabrication of a three-dimensional porous Z-scheme silver/silver bromide/graphitic carbon nitride@nitrogen-doped graphene aerogel with enhanced visible-light photocatalytic and antibacterial activities. <b>2019</b> , 536, 389-398 | 36  |
| 804             | Highly porous carbon nanofoams synthesized from gas-phase plasma for symmetric supercapacitors. <b>2019</b> , 360, 1310-1319  | 23  |
| 803             | Controllable synthesis of nitrogen-doped carbon nanotubes derived from halloysite-templated polyaniline towards nonprecious ORR catalysts. <b>2019</b> , 469, 269-275   | 29  |
| 802             | Carbon-Based Materials in Microbial Fuel Cells. <b>2019</b> , 49-74   | 5   |
| 801             | Amino-functionalized graphene quantum dots prepared using high-softening point asphalt and their application in Fe3+ detection. <b>2019</b> , 467-468, 446-455  | 49  |
| 800             | One-step hydrothermal synthesis of three-dimensional nitrogen-doped reduced graphene oxide hydrogels anchored PtPd alloyed nanoparticles for ethylene glycol oxidation and hydrogen evolution reactions. <b>2019</b> , 293, 504-513   | 122 |
| 799             | Hierarchical design and development of nanostructured trifunctional catalysts for electrochemical oxygen and hydrogen reactions. <b>2019</b> , 56, 724-732  | 31  |
| 79 <sup>8</sup> | Cancer-Targeting Graphene Quantum Dots: Fluorescence Quantum Yields, Stability, and Cell Selectivity. <b>2019</b> , 29, 1805860   | 39  |
| 797             | Oxygen Reduction Reaction. <b>2019</b> , 27, 203-252  | 8   |
| 796             | Alcohol Oxidation and Hydrogen Evolution. <b>2019</b> , 27, 253-301   | 10  |
| 795             | Synthesis and Surface Modification. <b>2019</b> , 27, 67-108  | 1   |

## (2020-2019)

| 794        | Uniform WMoSx nanoparticles attached graphene nanosheets as highly effective electrocatalyst for oxygen reduction reaction in alkaline medium. <b>2019</b> , 224, 186-195   | 5  |
|------------|---|----|
| 793        | Nitrogen-doped carbon materials as a promising platform toward the efficient catalysis for hydrogen generation. <b>2019</b> , 571, 25-41  | 41 |
| 792        | Fabrication of Pd@N-doped porous carbon-TiO2 as a highly efficient catalyst for the selective hydrogenation of phenol to cyclohexanone in water. <b>2019</b> , 126, 463-476   | 6  |
| 791        | Ultra-dispersed island-like Co9S8 nanoparticles composed of nanosheets in-situ grown on nitrogen-doped graphene for asymmetric supercapacitor. <b>2019</b> , 293, 419-425   | 19 |
| 790        | Bifunctional biomass-derived 3D nitrogen-doped porous carbon for oxygen reduction reaction and solid-state supercapacitor. <b>2019</b> , 465, 303-312   | 57 |
| 789        | Loading of Ag on Fe-Co-S/N-doped carbon nanocomposite to achieve improved electrocatalytic activity for oxygen evolution reaction. <b>2019</b> , 773, 40-49   | 33 |
| 788        | Construction of porous N-doped graphene layer for efficient oxygen reduction reaction. <b>2019</b> , 194, 36-44   | 24 |
| 787        | Iodinated carbon materials for oxygen reduction reaction in proton exchange membrane fuel cell. Scalable synthesis and electrochemical performances. <b>2019</b> , 12, 868-880  | 16 |
| 786        | Nitrogen-doped soft carbon frameworks built of well-interconnected nanocapsules enabling a superior potassium-ion batteries anode. <b>2020</b> , 382, 121759  | 55 |
| 785        | Construction of three-dimensional nitrogen-doped graphene aerogel (NGA) supported cobalt catalysts for Fischer-Tropsch synthesis. <b>2020</b> , 355, 10-16  | 4  |
| 784        | Surface construction of nitrogen-doped chitosan-derived carbon nanosheets with hierarchically porous structure for enhanced sulfacetamide degradation via peroxymonosulfate activation: Maneuverable porosity and active sites. <b>2020</b> , 382, 122908   | 34 |
| 783        | Nitrogen Doped CarbonBilica Based Cu(0) Nanometal Catalyst Enriched with Well-Defined N-moieties: Synthesis and Application in One-Pot Synthesis of 1,4-Disubstituted-1,2,3-triazoles. <b>2020</b> , 150, 82-94   | 8  |
| 782        | Synthesis of porous nitrogen-doped graphene decorated by Fe2O3 nanorings for enhancing microwave absorbing performance. <b>2020</b> , 46, 1002-1010   | 18 |
|            |   |    |
| 781        | Ag supported Z-scheme WO2.9/g-C3N4 composite photocatalyst for photocatalytic degradation under visible light. <b>2020</b> , 501, 144258  | 23 |
| 781<br>780 |   | 23 |
|            | under visible light. <b>2020</b> , 501, 144258  Efficient anchoring of nanoscale Pd on three-dimensional carbon hybrid as highly active and stable  |    |
| 780        | under visible light. 2020, 501, 144258  Efficient anchoring of nanoscale Pd on three-dimensional carbon hybrid as highly active and stable catalyst for electro-oxidation of formic acid. 2020, 263, 118304  Boosting oxygen reduction catalysis with tailorable active-N-dominated doped defective CNTs. | 20 |

| 776 | A high-efficiency corrosion inhibitor of N-doped citric acid-based carbon dots for mild steel in hydrochloric acid environment. <b>2020</b> , 381, 121019                      | 141 |
|-----|--|-----|
| 775 | Multicolor emissive carbon dot with solvatochromic behavior across the entire visible spectrum. <b>2020</b> , 156, 110-118   | 31  |
| 774 | 2.2V high performance symmetrical fiber-shaped aqueous supercapacitors enabled by Water-in-salt[gel electrolyte and N-Doped graphene fiber. <b>2020</b> , 24, 495-503          | 43  |
| 773 | Fe7Se8 nanoparticles anchored on N-doped carbon nanofibers as high-rate anode for sodium-ion batteries. <b>2020</b> , 24, 439-449  | 66  |
| 772 | Nitrogen-doped reduced graphene oxide as a sensing platform for detection of guanine and application in cell necrosis. <b>2020</b> , 74, 89-98                                 | О   |
| 771 | Nitrogen-Doped Carbon Nanomaterials: Synthesis, Characteristics and Applications. <b>2020</b> , 15, 2282-2293  | 38  |
| 770 | Highly Nitrogen-Doped Porous Carbon Nanosheets as High-Performance Anode for Potassium-Ion Batteries. <b>2020</b> , 3, 185-193   | 19  |
| 769 | Non-destructive, uniform, and scalable electrochemical functionalization and exfoliation of graphite. <b>2020</b> , 158, 356-363   | 20  |
| 768 | Bimetallic Culdn Co-Doped Porous N/C as Efficient Catalysts for Oxygen Reduction Reaction and Oxidation of 1,2-Propanediol. <b>2020</b> , 12, 584-592                          | 4   |
| 767 | Nitrogen doped char from anaerobically digested fiber for phosphate removal in aqueous solutions. <b>2020</b> , 240, 124889  | 26  |
| 766 | Effect of different coupling agents in the doping of graphite oxide with 3B? diaminobenzidine: textural, structural and electrical properties. <b>2020</b> , 7, 025603         | 4   |
| 765 | Synthesis of Benzoxazine-Based N-Doped Mesoporous Carbons as High-Performance Electrode Materials. <b>2020</b> , 10, 422   | 3   |
| 764 | Fluorometric detection of pH and quercetin based on nitrogen and phosphorus co-doped highly luminescent graphene-analogous flakes. <b>2019</b> , 145, 115-121                  | 2   |
| 763 | Quantum dot embedded N-doped functionalized multiwall carbon nanotubes boost the short-circuit current of Ru(ii) based dye-sensitized solar cells. <b>2020</b> , 12, 1046-1060 | 13  |
| 762 | The synergistic effect of nitrogen and fluorine co-doping in graphene quantum dot catalysts for full water splitting and supercapacitor. <b>2020</b> , 507, 145157             | 40  |
| 761 | Cobalt (0/II) incorporated N-doped porous carbon as effective heterogeneous peroxymonosulfate catalyst for quinclorac degradation. <b>2020</b> , 563, 197-206                  | 24  |
| 760 | High-Performance Intraocular Biosensors from Chitosan-Functionalized Nitrogen-Containing Graphene for the Detection of Glucose. <b>2020</b> , 6, 673-679                       | 31  |
| 759 | Green Synthesis of Pyridyl Conjugated Microporous Polymers as Precursors for Porous Carbon Microspheres for Efficient Electrochemical Energy Storage. <b>2020</b> , 7, 959-966 | 16  |

| 758             | Pattern-based recognition of proteins by an array of fluorescent carbon-nanodot receptors. <b>2020</b> , 209, 120551   | 6  |
|-----------------|--|----|
| 757             | 3D Nitrogen-Doped Graphene Encapsulated Metallic Nickel-Iron Alloy Nanoparticles for Efficient Bifunctional Oxygen Electrocatalysis. <b>2020</b> , 26, 4044  | 12 |
| 756             | Hydrothermal Synthesis of N-Doped Graphene for Supercapacitor Electrodes. <b>2020</b> , 20, 3258-3264  | 11 |
| 755             | Urea-assisted one-step fabrication of a novel nitrogen-doped carbon fiber aerogel from cotton as metal-free catalyst in peroxymonosulfate activation for efficient degradation of carbamazepine. <b>2020</b> , 386, 124015 | 21 |
| 754             | Composition-Graded Cu <b>P</b> d Nanospheres with Ir-Doped Surfaces on N-Doped Porous Graphene for Highly Efficient Ethanol Electro-Oxidation in Alkaline Media. <b>2020</b> , 10, 1171-1184                               | 53 |
| 753             | Preparation and evaluation of iron nanoparticles embedded CNTs grown on ZSM-5 as catalysts for NO decomposition. <b>2020</b> , 392, 123798   | 5  |
| 75 <sup>2</sup> | Flexible all-solid-state supercapacitors based on an integrated electrode of hollow N-doped carbon nanofibers embedded with graphene nanosheets. <b>2020</b> , 332, 135398   | 21 |
| 75 <sup>1</sup> | The Crystallinity of Metal Oxide in Carbonized Metal Organic Frameworks and the Effect on Restricting Polysulfides. <b>2020</b> , 6, 274-279   | 4  |
| 75°             | A novel N and Se codoped-carbon support anchoring Pd nanoparticles as an efficient electrocatalyst towards ethylene glycol electrooxidation. <b>2020</b> , 252, 114467   | 2  |
| 749             | Facile preparation and high photocatalytic activity of crystalline graphitic carbon nitride in hydrogen evolution from electron donor solutions under visible light. <b>2020</b> , 390, 112295                             | 9  |
| 748             | Nitrogen and sulfur co-doped biochar derived from peanut shell with enhanced adsorption capacity for diethyl phthalate. <b>2020</b> , 258, 113674  | 31 |
| 747             | Surface construction of loose Co(OH) shell derived from ZIF-67 nanocube for efficient oxygen evolution. <b>2020</b> , 562, 279-286   | 20 |
| 746             | Tailoring the Polymer-Derived Carbon Encapsulated Silicon Nanoparticles for High-Performance Lithium-Ion Battery Anodes. <b>2020</b> , 3, 268-278  | 29 |
| 745             | Tunable high workfunction contacts: Doped graphene. <b>2020</b> , 509, 144893  | 3  |
| 744             | Design and synthesis of MnN4 macrocyclic complex for efficient oxygen reduction reaction electrocatalysis. <b>2020</b> , 112, 107700   | 15 |
| 743             | Making a cup of carbon dots for ratiometric and colorimetric fluorescent detection of Cu2+ ions. <b>2020</b> , 586, 124233   | 12 |
| 742             | A Mechanochemical-Assisted Synthesis of Boron, Nitrogen Co-Doped Porous Carbons as Metal-Free Catalysts. <b>2020</b> , 26, 2041-2050   | 8  |
| 741             | In situ nitrogen-doped carbon nano-onions for ultrahigh-rate asymmetric supercapacitor. <b>2020</b> , 331, 135363  | 22 |

| 740             | Electrochemical activation of graphene sheets embedded carbon films for high sensitivity simultaneous determination of hydroquinone, catechol and resorcinol. <b>2020</b> , 305, 127495 | 41 |
|-----------------|---|----|
| 739             | Facile one-step synthesis of nitrogen-doped carbon sheets supported tungsten carbide nanoparticles electrocatalyst for hydrogen evolution reaction. <b>2020</b> , 45, 33430-33439       | 7  |
| 738             | One-pot and surfactant-free synthesis of N-doped mesoporous carbon spheres for the sensitive and selective screening of small biomolecules. <b>2020</b> , 873, 114462                   | 1  |
| 737             | Atomically Dispersed Co-Pyridinic N-C for Superior Oxygen Reduction Reaction. <b>2020</b> , 10, 2002592   | 72 |
| 736             | Single-Walled Carbon Nanotubes Wrapped by Cationic Nitrogen-Doped Carbon for Electrocatalytic Applications. <b>2020</b> , 3, 10183-10189  | 3  |
| 735             | Synthesis and testing of defected g-C3N4 with improved photocatalytic activity. <b>2020</b> , 770, 012027   |    |
| 734             | Carbon Dots Derived from the Maillard Reaction for pH Sensors and Cr (VI) Detection. 2020, 10,  | 5  |
| 733             | Graphene/graphitic carbon nitride-based ternary nanohybrids: Synthesis methods, properties, and applications for photocatalytic hydrogen production. <b>2020</b> , 24, 100200           | 38 |
| 73 <sup>2</sup> | Photoreduction of CO2 in the presence of CH4 over g-C3N4 modified with TiO2 nanoparticles at room temperature. <b>2020</b> , 6, 938-938   | 7  |
| 731             | Electronic structure engineering on two-dimensional (2D) electrocatalytic materials for oxygen reduction, oxygen evolution, and hydrogen evolution reactions. <b>2020</b> , 77, 105080  | 60 |
| 730             | Few-layer N-doped porous carbon nanosheets derived from corn stalks as a bifunctional electrocatalyst for overall water splitting. <b>2020</b> , 280, 118567                            | 23 |
| 729             | Templated N-Doped Carbons for Energy Storage and Conversion. <b>2020</b> , 97, 803-816  |    |
| 728             | Thermal Transformation of End-of-Life Latex to Valuable Materials. <b>2020</b> , 4, 166   |    |
| 727             | Highly Effective Methods of Obtaining N-Doped Graphene by Gamma Irradiation. 2020, 13,  | 12 |
| 726             | Amino Acid Assisted One-Pot Green Synthesis of N-Doped 3D Graphene for Ultrasensitive Neurochemical Sensing. <b>2020</b> , 5, 13951-13956   |    |
| 725             | Non-precious Melamine/Chitosan Composites for the Oxygen Reduction Reaction: Effect of the Transition Metal. <b>2020</b> , 7,   | 2  |
| 724             | Stabilization of 🛘 ron carbide as high-temperature catalyst under realistic Fischer-Tropsch synthesis conditions. <b>2020</b> , 11, 6219  | 34 |
| 723             | Dielectric properties and microwaves response behavior of polypyrrole-derived N-doped carbon nanotubes. <b>2020</b> , 1   | 1  |

| 722 | Petroleum Coke. <b>2020</b> , 25,  | 3   |
|-----|--|-----|
| 721 | The processing and analysis of graphene and the strength enhancement effect of graphene-based filler materials: A review. <b>2020</b> , 15, 100257   | 14  |
| 720 | A multi-component system for urea electrooxidation: Ir3Sn nanoparticles loading on Iron- and Nitrogen- codoped composite carbon support. <b>2020</b> , 112, 116-121  | 3   |
| 719 | Boron-doped graphene as electrocatalytic support for iridium oxide for oxygen evolution reaction. <b>2020</b> , 10, 6599-6610  | 12  |
| 718 | Fabrication of porous graphene-like carbon nanosheets with rich doped-nitrogen for high-performance electromagnetic microwave absorption. <b>2020</b> , 530, 147298  | 30  |
| 717 | Comparison of N-doped carbon dots synthesized from the main components of plants including cellulose, lignin, and xylose: Characterized, fluorescence mechanism, and potential applications. <b>2020</b> , 183, 108725 | 12  |
| 716 | Single-site pyrrolic-nitrogen-doped sp-hybridized carbon materials and their pseudocapacitance. <b>2020</b> , 11, 3884   | 51  |
| 715 | Polymer-Derived Heteroatom-Doped Porous Carbon Materials. <b>2020</b> , 120, 9363-9419   | 196 |
| 714 | Analysis of reaction pathways and catalytic sites on metal-free porous biochar for persulfate activation process. <b>2020</b> , 261, 127747  | 20  |
| 713 | Hydrothermally Modified Graphite Felt as an Efficient Cathode for Salty Organic Wastewater Treatment. <b>2020</b> , 37, 790-802  | 2   |
| 712 | Boosting Coulombic Efficiency of Conversion-Reaction Anodes for Potassium-Ion Batteries via Confinement Effect. <b>2020</b> , 30, 2007712  | 30  |
| 711 | Structural Advantage Induced by Zinc Gluconate: Hierarchically Porous Carbon with In-Situ Growth Iron-Inside Carbon Nanotubes for Efficient Oxygen Reduction Reaction. <b>2020</b> , 5, 12759-12763                    | 1   |
| 710 | N-Doped Graphene Oxide Nanoparticles Studied by EPR. <b>2020</b> , 51, 1481-1495   | 1   |
| 709 | Atomic level design of single iron atom embedded mesoporous hollow carbon spheres as multi-effect nanoreactors for advanced lithium ulfur batteries. <b>2020</b> , 8, 23772-23783                                      | 27  |
| 708 | Confinement of Ru nanoparticles inside the carbon nanotube: Selectivity controls on methanol decomposition. <b>2020</b> , 37, 1365-1370  | 2   |
| 707 | Electrochemical conversion of CO2 to syngas with a wide range of CO/H2 ratio over Ni/Fe binary single-atom catalysts. <b>2020</b> , 13, 3206-3211  | 25  |
| 706 | Design of two-dimensional carbon-nitride structures by tuning the nitrogen concentration. <b>2020</b> , 6,   | 9   |
| 705 | Coordination engineering of iridium nanocluster bifunctional electrocatalyst for highly efficient and pH-universal overall water splitting. <b>2020</b> , 11, 4246   | 92  |

| 704 | Preparation and physicochemical properties of nitrogen-doped graphene inks. 2020, 35, 444-451   | 3   |
|-----|---|-----|
| 703 | Exclusive Substitutional Nitrogen Doping on Graphene Decoupled from an Insulating Substrate. <b>2020</b> , 124, 22150-22157   | 4   |
| 702 | Spinach-Derived Porous Carbon Nanosheets as High-Performance Catalysts for Oxygen Reduction Reaction. <b>2020</b> , 5, 24367-24378  | 11  |
| 701 | Removal of U(VI) by nano-scale zero valent iron supported on porous organic polymers. <b>2020</b> , 326, 845-855  | 1   |
| 700 | Surfactant Intercalated Mono-metallic Cobalt Hydrotalcite: Preparation, Characterization, and its Bi-functional Electrocatalytic Application. <b>2020</b> , 5, 9615-9622  | 1   |
| 699 | Stable Forward Osmosis Nanocomposite Membrane Doped with Sulfonated Graphene Oxide@Metal-Organic Frameworks for Heavy Metal Removal. <b>2020</b> , 12, 57102-57116  | 24  |
| 698 | Preparation of NiFe@NC/CC Integrated Electrode and Its Application in Zinc-Air Battery. 2020, 8, 575288   | 3   |
| 697 | Plasmonic nitriding of graphene on a graphite substrate via gold nanoparticles and NH3/Ar plasma. <b>2020</b> , 38, 063001  |     |
| 696 | Electrochemical Aspects of a Nitrogen-Doped Pseudo-Graphitic Carbon Material: Resistance to Electrode Fouling by Air-Aging and Dopamine Electro-Oxidation. <b>2020</b> , 6, 68  | 1   |
| 695 | Preparation of Mg-Si and Nitrogen-Doped Graphene Nanocomposites for Use as Lithium-Ion Anode. <b>2020</b> , 302, 19-26  | O   |
| 694 | Heteroatom doped graphene engineering for energy storage and conversion. <b>2020</b> , 39, 47-65  | 214 |
| 693 | Advancement of Platinum (Pt)-Free (Non-Pt Precious Metals) and/or Metal-Free (Non-Precious-Metals) Electrocatalysts in Energy Applications: A Review and Perspectives. <b>2020</b> , 34, 6634-6695                                  | 53  |
| 692 | Highly Efficient Nickel, Iron, and Nitrogen Codoped Carbon Catalysts Derived from Industrial Waste Petroleum Coke for Electrochemical CO2 Reduction. <b>2020</b> , 8, 8840-8847   | 13  |
| 691 | Controllable synthesis of FeN4 species for acidic oxygen reduction. <b>2020</b> , 2, 452-460  | 22  |
| 690 | Mesoporous N-doped carbon nanofibers with surface nanocavities for enhanced catalytic activity toward oxygen reduction reaction. <b>2020</b> , 55, 11177-11187  | 4   |
| 689 | Defect-rich carbon based bimetallic oxides with abundant oxygen vacancies as highly active catalysts for enhanced 4-aminobenzoic acid ethyl ester (ABEE) degradation toward peroxymonosulfate activation. <b>2020</b> , 395, 124936 | 43  |
| 688 | Ultra-thin tubular graphitic carbon Nitride-Carbon Dot lateral heterostructures: One-Step synthesis and highly efficient catalytic hydrogen generation. <b>2020</b> , 397, 125470   | 38  |
| 687 | Preparation of high surface area nitrogen doped graphene for the assessment of morphologic properties and nitrogen content impacts on supercapacitors. <b>2020</b> , 868, 114197  | 29  |

686 Pesticides. **2020**, 183-198

| 685 | Self-etching template method to synthesize hollow dodecahedral carbon capsules embedded with Ni <b>C</b> o alloy for high-performance electromagnetic microwave absorption. <b>2020</b> , 20, 100354 | 19 |
|-----|--|----|
| 684 | Thermally stable cobalt amide cyanide as high-activity and durable bifunctional electrocatalyst toward O2 and CO2 reduction. <b>2020</b> , 353, 136605   | 1  |
| 683 | First-principles study of the oxygen reduction reaction on the boron-doped C9N4 metal-free catalyst. <b>2020</b> , 527, 146828   | 10 |
| 682 | Bioinspired Paper-Based Nanocomposites Enabled by BiowaxMineral Hybrids and Proteins. <b>2020</b> , 8, 9906-9919   | 5  |
| 681 | Boosting areal energy density of 3D printed all-solid-state flexible microsupercapacitors via tailoring graphene composition. <b>2020</b> , 30, 412-419  | 20 |
| 680 | Electrochemical sensors based on nitrogen-doped reduced graphene oxide for the simultaneous detection of ascorbic acid, dopamine and uric acid. <b>2020</b> , 842, 155873                            | 49 |
| 679 | Functionalized Graphene Derivatives and TiO for High Visible Light Photodegradation of Azo Dyes. <b>2020</b> , 10,   | 7  |
| 678 | Europium-doped g-C3N4: an efficient remover of textile dyes from water. <b>2020</b> , 35, 095008   | 2  |
| 677 | Corrosion inhibition behavior and mechanism of N-doped carbon dots for metal in acid environment. <b>2020</b> , 270, 122458  | 29 |
| 676 | One-dimensional coaxial cable-like MWCNTs/Sn4P3@C as an anode material with long-term durability for lithium ion batteries. <b>2020</b> , 7, 2651-2659   | 12 |
| 675 | In Situ Nitrogen-Doped Covalent Triazine-Based Multiporous Cross-Linking Framework for High-Performance Energy Storage. <b>2020</b> , 6, 2000253   | 5  |
| 674 | Preparation of nitrogen doped magnesium oxide modified biochar and its sorption efficiency of lead ions in aqueous solution. <b>2020</b> , 314, 123708   | 24 |
| 673 | Chemically modified phosphorene as efficient catalyst for hydrogen evolution reaction. <b>2020</b> , 32, 025202  | 8  |
| 672 | Preparation and Photocatalytic Properties of N-Doped Graphene/TiO2Composites. 2020, 2020, 1-10   | 5  |
| 671 | Cobalt(II) Tetraaminophthalocyanine-modified Multiwall Carbon Nanotubes as an Efficient Sulfur Redox Catalyst for Lithium-Sulfur Batteries. <b>2020</b> , 13, 3034-3044                              | 13 |
| 670 | N-doped Hierarchical Mesoporous Carbon from Mesophase Pitch and Polypyrrole for Supercapacitors. <b>2020</b> , 34, 5044-5051   | 18 |
| 669 | Carbon-Covered Hollow Nitrogen-Doped Carbon Nanoparticles and Nitrogen-Doped Carbon-Covered Hollow Carbon Nanoparticles for Oxygen Reduction. <b>2020</b> , 3, 3487-3493                             | 11 |

| 668 | Confined synthesis of carbon dots with tunable long-wavelength emission in a 2-dimensional layered double hydroxide matrix. <b>2020</b> , 12, 7888-7894  | 8  |
|-----|--|----|
| 667 | Organic template-based ZnO embedded MnO nanoparticles: synthesis and evaluation of their electrochemical properties towards clean energy generation <b>2020</b> , 10, 9854-9867                      | 13 |
| 666 | Facile fabrication of N/S/P tri-doped carbon dots for tetracycline detection by an internal filtering effect of a two-way matching strategy. <b>2020</b> , 12, 2551-2554                             | 9  |
| 665 | Nitrogen-Doped Graphene: The Influence of Doping Level on the Charge-Transfer Resistance and Apparent Heterogeneous Electron Transfer Rate. <b>2020</b> , 20,  | 16 |
| 664 | Modification of graphite felt doped with nitrogen and boron for enhanced removal of dimethyl phthalate in peroxi-coagulation system and mechanisms. <b>2020</b> , 27, 18810-18821                    | 3  |
| 663 | Rationally Designed Three-Dimensional N-Doped Graphene Architecture Mounted with Ru<br>Nanoclusters as a High-Performance Air Cathode for Lithium Dxygen Batteries. <b>2020</b> , 8, 6109-6117       | 13 |
| 662 | Fabrication of immobilized nickel nanoclusters decorated by C N species for cellulose conversion to C2,3 oxygenated compounds: Rational design via typical C- and N-sources. <b>2020</b> , 50, 25-36 | 1  |
| 661 | Bio-Inspired Biomass-Derived Carbon Aerogels with Superior Mechanical Property for OilWater Separation. <b>2020</b> , 8, 6458-6465   | 35 |
| 660 | Highly Efficient Hydrogenation of Nitroarenes by N-Doped Carbon-Supported Cobalt Single-Atom Catalyst in Ethanol/Water Mixed Solvent. <b>2020</b> , 12, 34021-34031                                  | 23 |
| 659 | A Nonenzymatic Glucose Sensor Platform Based on Specific Recognition and Conductive Polymer-Decorated CuCoO Carbon Nanofibers. <b>2020</b> , 13,   | 10 |
| 658 | Efficient full-color emitting carbon-dot-based composite phosphors by chemical dispersion. <b>2020</b> , 12, 15823-15831   | 14 |
| 657 | Efficient Bifunctional Catalytic Electrodes with Uniformly Distributed NiN Active Sites and Channels for Long-Lasting Rechargeable Zinc-Air Batteries. <b>2020</b> , 16, e2002518                    | 12 |
| 656 | Biomass-Based Polymer Nanoparticles With Aggregation-Induced Fluorescence Emission for Cell Imaging and Detection of Fe Ions. <b>2020</b> , 8, 563   | 2  |
| 655 | Oriented Synthesis of Pyridinic-N Dopant within the Highly Efficient Multifunction Carbon-Based Materials for Oxygen Transformation and Energy Storage. <b>2020</b> , 8, 10431-10443                 | 6  |
| 654 | Electrodeposited graphene hybridized graphitic carbon nitride anchoring ultrafine palladium nanoparticles for remarkable methanol electrooxidation. <b>2020</b> , 45, 21483-21492                    | 10 |
| 653 | Scalable synthesis of FeN nanoparticles within N-doped carbon frameworks as efficient electrocatalysts for oxygen reduction reaction. <b>2020</b> , 580, 460-469                                     | 10 |
| 652 | Catalytic performance and mechanism of biochars for dechlorination of tetrachloroethylene in sulfide aqueous solution. <b>2020</b> , 278, 119285   | 7  |
| 651 | An ultrasensitive electrochemiluminescence sensor based on luminol functionalized AuNPs@Fe-Co-Co nanocomposite as signal probe for glutathione determination. <b>2020</b> , 873, 114374              | 6  |

| 650 | study. <b>2020</b> , 124, 114319  | 2               |
|-----|---|-----------------|
| 649 | Porous carbons embedded with nitrogen-coordinated cobalt as an exceptional electrochemical catalyst for high-performance ZnBir batteries. <b>2020</b> , 44, 12850-12856   | 2               |
| 648 | In situ phthalocyanine synthesis chemistry in flames towards molecular fireproof engineering. <b>2020</b> , 56, 9525-9528   | 5               |
| 647 | Ionic liquid-aided hydrothermal treatment of lignocellulose for the synergistic outputs of carbon dots and enhanced enzymatic hydrolysis. <b>2020</b> , 305, 123043   | 16              |
| 646 | Montmorillonite-Synergized Water-Based Intumescent Flame Retardant Coating for Plywood. <b>2020</b> , 10, 109   | 14              |
| 645 | Facile one-step synthesis of N-doped carbon nanotubes/N-doped carbon nanofibers hierarchical composites by chemical vapor deposition. <b>2020</b> , 22, 1   | 7               |
| 644 | Investigation of wet-milled graphene nanosheets with sulfur doping for lithium-ion battery. <b>2020</b> , 26, 3267-3274   | 6               |
| 643 | Activate hydrogen peroxide for efficient tetracycline degradation via a facile assembled carbon-based composite: Synergism of powdered activated carbon and ferroferric oxide nanocatalyst. <b>2020</b> , 269, 118784 | 35              |
| 642 | Ex-situ nitrogen-doped porous carbons as electrode materials for high performance supercapacitor. <b>2020</b> , 569, 332-345  | 33              |
| 641 | In situ growth of metalBrganic framework-derived CoTe2 nanoparticles@nitrogen-doped porous carbon polyhedral composites as novel cathodes for rechargeable aluminum-ion batteries. <b>2020</b> , 8, 5535-554.         | 5 <sup>31</sup> |
| 640 | Nitrogen-doped graphene layer-encapsulated NiFe bimetallic nanoparticles synthesized by an arc discharge method for a highly efficient microwave absorber. <b>2020</b> , 7, 1148-1160                                 | 23              |
| 639 | Substantial Role of Nitrogen and Sulfur in Quaternary-Atom-Doped Multishelled Carbon<br>Nanospheres for the Oxygen Evolution Reaction. <b>2020</b> , 8, 4284-4291   | 6               |
| 638 | In situ integration of CoN and CoFe alloy nanoparticles into intertwined carbon network for efficient oxygen reduction. <b>2020</b> , 569, 267-276  | 13              |
| 637 | Facile Synthesis of High-Performance Nitrogen-Doped Hierarchically Porous Carbon for Catalytic Oxidation. <b>2020</b> , 8, 4236-4243  | 31              |
| 636 | One-step hydrothermal synthesis of nitrogen doped reduced graphene oxide-silver nanocomposites: Catalytic performance. <b>2020</b> , 34, e5621  | 3               |
| 635 | Boosting the Oxygen Reduction Performance via Tuning the Synergy between Metal Core and Oxide Shell of Metal Drganic Frameworks-Derived Co@CoOx. <b>2020</b> , 7, 1590-1597   | 13              |
| 634 | Functionalization of partially reduced graphene oxide by metal complex as electrode material in supercapacitor. <b>2020</b> , 46, 2595-2612   | 5               |
| 633 | Deconvoluting the XPS spectra for nitrogen-doped chars: An analysis from first principles. <b>2020</b> , 162, 528-544   | 95              |

| 632 | Sulfate-reducing bacteria respiration approach to fabricating flexible N,S-reduced graphene oxide thin film electrode for in situ cancer biomarker detection. <b>2020</b> , 859, 113867                         | 4               |
|-----|---|-----------------|
| 631 | Soybean straw biomass-derived Fe-N co-doped porous carbon as an efficient electrocatalyst for oxygen reduction in both alkaline and acidic media <b>2020</b> , 10, 6763-6771                                    | 21              |
| 630 | Sensor array based on carbon dots for ATP-related physiological phosphates detecting and ATP hydrolysis monitoring. <b>2020</b> , 310, 127851   | 13              |
| 629 | Effect of N-doping on the catalytic decomposition of hydrogen iodide over activated carbon: Experimental and DFT studies. <b>2020</b> , 45, 4511-4520   | 7               |
| 628 | A low-overpotential sodium/fluorinated graphene battery based on silver nanoparticles as catalyst. <b>2020</b> , 565, 70-76   | 4               |
| 627 | Porous and flexible membrane derived from ZIF-8-decorated hyphae for outstanding adsorption of Pb ion. <b>2020</b> , 565, 465-473   | 18              |
| 626 | Understanding the Activity of Co-N4⊠Cx in Atomic Metal Catalysts for Oxygen Reduction Catalysis. <b>2020</b> , 132, 6178-6183   | 30              |
| 625 | Understanding the Activity of Co-N C in Atomic Metal Catalysts for Oxygen Reduction Catalysis. <b>2020</b> , 59, 6122-6127  | 86              |
| 624 | Pyridinic-Nitrogen-Containing Carbon Cathode: Efficient Electrocatalyst for Seawater Batteries. <b>2020</b> , 3, 1602-1608  | 13              |
| 623 | N-Doped Carbon Nanotubes Encapsulating Ni/MoN Heterostructures Grown on Carbon Cloth for Overall Water Splitting. <b>2020</b> , 7, 745-752  | 14              |
| 622 | High-performance capacitive deionization using nitrogen and phosphorus-doped three-dimensional graphene with tunable pore size. <b>2020</b> , 336, 135639   | 22              |
| 621 | Effect of pyridinic- and pyrrolic-nitrogen on electrochemical performance of Pd for formic acid electrooxidation. <b>2020</b> , 337, 135758   | 17              |
| 620 | Amorphous nickel sulfide nanoparticles anchored on N-doped graphene nanotubes with superior properties for high-performance supercapacitors and efficient oxygen evolution reaction. <b>2020</b> , 12, 4655-466 | 6 <sup>23</sup> |
| 619 | Composites of thiol-grafted PEDOT with N-doped graphene or graphitic carbon nitride as an electrochemical sensor for the detection of paracetamol. <b>2020</b> , 55, 5571-5586                                  | 15              |
| 618 | Applications of metalorganic framework-derived materials in fuel cells and metal-air batteries. <b>2020</b> , 409, 213214   | 97              |
| 617 | CoFe2O4/N-doped reduced graphene oxide aerogels for high-performance microwave absorption. <b>2020</b> , 388, 124317  | 125             |
| 616 | Double molecular recognition strategy based on boronic acid-diol and NHS ester-amine for selective electrochemical detection of cerebral dopamine. <b>2020</b> , 412, 3727-3736                                 | 5               |
| 615 | Activation-free, porous and superamphiphilic N-doped carbon capsular nanofibrous electrode for high performance electrochemical capacitor. <b>2020</b> , 463, 228112  | 5               |

| 614 | Metal-free heteroatom-doped carbon-based catalysts for ORR: A critical assessment about the role of heteroatoms. <b>2020</b> , 165, 434-454   | 109  |
|-----|---|------|
| 613 | Nitrogen and sulfur dual-doped carbon nanotube derived from a thiazolothiazole based conjugated microporous polymer as efficient metal-free electrocatalysts for oxygen reduction reaction. <b>2020</b> , 461, 228145 | 19   |
| 612 | Selective C-C Coupling by Spatially Confined Dimeric Metal Centers. <b>2020</b> , 23, 101051  | 21   |
| 611 | Highly electroactive NHe hydrothermal carbons and carbon nanotubes for the oxygen reduction reaction. <b>2020</b> , 50, 260-270   | 9    |
| 610 | Stripping voltammetric analysis of mercury ions at nitrogen-doped reduced graphene oxide modified electrode. <b>2020</b> , 865, 114121  | 8    |
| 609 | Magnetic N-doped 3D graphene-like framework carbon for extraction of cephalexin monohydrate and ceftiofur hydrochloride. <b>2020</b> , 215, 120932  | 14   |
| 608 | 3D silk fibroin/carbon nanotube array composite matrix for flexible solid-state supercapacitors. <b>2020</b> , 44, 6575-6582  | 4    |
| 607 | One-pot synthesis of two-dimensional porphyrin-based polymer and derived N-doped porous carbon as efficient oxygen reduction catalysts. <b>2020</b> , 15, 140-144   | 1    |
| 606 | Highly Efficient Polysulfide Trapping and Ion Transferring within a Hierarchical Porous Membrane Interlayer for High-Energy Lithium <b>B</b> ulfur Batteries. <b>2020</b> , 3, 5050-5057                              | 17   |
| 605 | 3D spongy nanofiber structure Fe-NC catalysts built by a graphene regulated electrospinning method. <b>2020</b> , 56, 6277-6280   | 7    |
| 604 | Metal Oxide (CoO and MnO) Impregnation into S, N-doped Graphene for Oxygen Reduction Reaction (ORR). <b>2020</b> , 13,  | 12   |
| 603 | Fabrication of dually N/S-doped carbon from biomass lignin: Porous architecture and high-rate performance as supercapacitor. <b>2020</b> , 156, 988-996   | 16   |
| 602 | The dodecahedral Nitrogen-doped carbon coated ZnO composite derived from zeolitic inidazolate framework-8 with excellent cycling performance for zinc based rechargeable batteries. <b>2020</b> , 463, 228193         | 8    |
| 601 | A feasible method to improve the protection ability of metal by functionalized carbon dots as environment-friendly corrosion inhibitor. <b>2020</b> , 264, 121682   | 49   |
| 600 | Far-Red Carbon Dots as Efficient Light-Harvesting Agents for Enhanced Photosynthesis. <b>2020</b> , 12, 21009-2101  | 1941 |
| 599 | Flexible Antimony@Carbon Integrated Anode for High-Performance Potassium-Ion Battery. <b>2020</b> , 5, 2000199  | 33   |
| 598 | Temperature-Responsive HCl-Releasing Catalysts for Cellulose Hydrolysis into Glucose. <b>2020</b> , 150, 3184-3195  | 2    |
| 597 | Cu powder decorated 3D Mn-MOF with excellent electrochemical properties for supercapacitors. <b>2020</b> , 508, 119629  | 25   |

| 596                             | Ni-Fe bimetallic core-shell structured catalysts supported on biomass longan aril derived nitrogen doped carbon for efficient oxygen reduction and evolution performance. <b>2020</b> , 24, 101127   | 5                    |
|---------------------------------|--|----------------------|
| 595                             | Temperature-responsive Solid Acid Catalyst for Cellulose Hydrolysis to HMF. <b>2020</b> , 5, 4136-4142   | 3                    |
| 594                             | Free-standing flexible graphene-based aerogel film with high energy density as an electrode for supercapacitors. <b>2021</b> , 3, 68-74  | 11                   |
| 593                             | Cobalt phosphide nanoparticles supported within network of N-doped carbon nanotubes as a multifunctional and scalable electrocatalyst for water splitting. <b>2021</b> , 52, 130-138   | 37                   |
| 592                             | Degradation of ofloxacin using peroxymonosulfate activated by nitrogen-rich graphitized carbon microspheres: Structure and performance controllable study. <b>2021</b> , 99, 10-20   | 4                    |
| 591                             | Preparation and Application of Hierarchical Porous Carbon Materials from Waste and Biomass: A Review. <b>2021</b> , 12, 1699-1724  | 30                   |
| 590                             | Recent advances in carbon nanostructures prepared from carbon dioxide for high-performance supercapacitors. <b>2021</b> , 54, 352-367  | 44                   |
| 589                             | The study of the pyrolysis products of Ni (II) and Pd (II) chelate complexes as catalysts for the oxygen electroreduction reaction. <b>2021</b> , 25, 789-796  | О                    |
| 588                             | Synthesis of sponge-like TiO2 with surface-phase junctions for enhanced visible-light photocatalytic performance. <b>2021</b> , 32, 1823-1826  | 14                   |
|                                 |  |                      |
| 587                             | A recent trend: application of graphene in catalysis. <b>2021</b> , 31, 177-199  | 13                   |
| 587<br>586                      | A recent trend: application of graphene in catalysis. <b>2021</b> , 31, 177-199  Efficient removal of phenol and p-nitrophenol using nitrogen-doped reduced graphene oxide. <b>2021</b> , 611, 125866  | 13                   |
|                                 | Efficient removal of phenol and p-nitrophenol using nitrogen-doped reduced graphene oxide. <b>2021</b>   |                      |
| 586                             | Efficient removal of phenol and p-nitrophenol using nitrogen-doped reduced graphene oxide. <b>2021</b> , 611, 125866   | 18                   |
| 586<br>585                      | Efficient removal of phenol and p-nitrophenol using nitrogen-doped reduced graphene oxide. 2021, 611, 125866  Facile preparation of N-doped activated carbon produced from rice husk for CO capture. 2021, 582, 90-101  In situ-derived carbon nanotube-decorated nitrogen-doped carbon-coated nickel hybrids from   | 18<br>59             |
| 586<br>585<br>584               | Efficient removal of phenol and p-nitrophenol using nitrogen-doped reduced graphene oxide. 2021, 611, 125866  Facile preparation of N-doped activated carbon produced from rice husk for CO capture. 2021, 582, 90-101  In situ-derived carbon nanotube-decorated nitrogen-doped carbon-coated nickel hybrids from MOF/melamine for efficient electromagnetic wave absorption. 2021, 581, 783-793  Facile and low-temperature strategy to prepare hollow ZIF-8/CNT polyhedrons as  | 18<br>59<br>48       |
| 586<br>585<br>584<br>583        | Efficient removal of phenol and p-nitrophenol using nitrogen-doped reduced graphene oxide. 2021, 611, 125866  Facile preparation of N-doped activated carbon produced from rice husk for CO capture. 2021, 582, 90-101  In situ-derived carbon nanotube-decorated nitrogen-doped carbon-coated nickel hybrids from MOF/melamine for efficient electromagnetic wave absorption. 2021, 581, 783-793  Facile and low-temperature strategy to prepare hollow ZIF-8/CNT polyhedrons as high-performance lithium-sulfur cathodes. 2021, 404, 126579  Facile in situ nitrogen-doped carbon coated iron sulfide as green and efficient adsorbent for stable  | 18<br>59<br>48<br>20 |
| 586<br>585<br>584<br>583<br>582 | Efficient removal of phenol and p-nitrophenol using nitrogen-doped reduced graphene oxide. 2021, 611, 125866  Facile preparation of N-doped activated carbon produced from rice husk for CO capture. 2021, 582, 90-101  In situ-derived carbon nanotube-decorated nitrogen-doped carbon-coated nickel hybrids from MOF/melamine for efficient electromagnetic wave absorption. 2021, 581, 783-793  Facile and low-temperature strategy to prepare hollow ZIF-8/CNT polyhedrons as high-performance lithium-sulfur cathodes. 2021, 404, 126579  Facile in situ nitrogen-doped carbon coated iron sulfide as green and efficient adsorbent for stable lithiumBulfur batteries. 2021, 404, 126462  N-doped graphitic carbon shell-encapsulated FeCo alloy derived from metal-polyphenol network and melamine sponge for oxygen reduction, oxygen evolution, and hydrogen evolution reactions in | 18<br>59<br>48<br>20 |

| 578 | N-doped graphene wrapped SnP2O7 for sodium storage with high pseudocapacitance contribution. <b>2021</b> , 854, 156992   | 11 |
|-----|--|----|
| 577 | Interface engineering of Co3Fe7-Fe3C heterostructure as an efficient oxygen reduction reaction electrocatalyst for aluminum-air batteries. <b>2021</b> , 404, 127124                                     | 19 |
| 576 | Hollow carbon nanospheres for capacitive-dominated potassium-ion storage. <b>2021</b> , 409, 127383  | 8  |
| 575 | Ultrafast microwave-assisted synthesis of highly nitrogen-doped ordered mesoporous carbon. <b>2021</b> , 310, 110639   | 11 |
| 574 | Si-doped graphene nanosheets for NOx gas sensing. <b>2021</b> , 328, 129005  | 17 |
| 573 | Fabrication of MOF-derivated CuOx-C electrode for electrochemical degradation of ceftazidime from aqueous solution. <b>2021</b> , 268, 129157  | 8  |
| 572 | Tailoring electron transfer with Ce integration in ultrathin Co(OH)2 nanosheets by fast microwave for oxygen evolution reaction. <b>2021</b> , 59, 299-305   | 13 |
| 571 | Highly active and controllable MOF-derived carbon nanosheets supported iron catalysts for Fischer-Tropsch synthesis. <b>2021</b> , 173, 364-375  | 10 |
| 570 | Understanding the Selectivity of the Oxygen Reduction Reaction at the Atomistic Level on Nitrogen-Doped Graphitic Carbon Materials. <b>2021</b> , 11, 2002459  | 25 |
| 569 | Large-scale defect-engineering tailored tri-doped graphene as a metal-free bifunctional catalyst for superior electrocatalytic oxygen reaction in rechargeable Zn-air battery. <b>2021</b> , 285, 119811 | 38 |
| 568 | A Review on Graphene Oxide Two-dimensional Macromolecules: from Single Molecules to Macro-assembly. <b>2021</b> , 39, 267-308  | 16 |
| 567 | Active precursor-induced high-content graphitic-N-doped graphene oxide for the electrocatalytic degradation of paracetamol. <b>2021</b> , 542, 148753  | 2  |
| 566 | Surface oxidized nano-cobalt wrapped by nitrogen-doped carbon nanotubes for efficient purification of organic wastewater. <b>2021</b> , 259, 118098  | 14 |
| 565 | Carbon Microspheres with Tailored Texture and Surface Chemistry As Electrode Materials for Supercapacitors. <b>2021</b> , 9, 541-551   | 2  |
| 564 | Cold-Resistant Nitrogen/Sulfur Dual-Doped Graphene Fiber Supercapacitors with Solar-Thermal Energy Conversion Effect. <b>2021</b> , 27, 3473-3482  | 4  |
| 563 | One-step carbonization of a nickel-containing nitrogen-doped porous carbon material for electrochemical supercapacitors. <b>2021</b> , 45, 1822-1833   | 3  |
| 562 | Holey nitrogen-doped graphene aerogel for simultaneously electrochemical determination of ascorbic acid, dopamine and uric acid. <b>2021</b> , 224, 121851   | 21 |
| 561 | Coral-like nitrogen doped carbon derived from polyaniline-silicon nitride hybrid for highly active oxygen reduction electrocatalysis. <b>2021</b> , 1, e2000010  | _  |

| 560 | Modulating the crystallinity of boron nitride for propane oxidative dehydrogenation. 2021, 393, 149-158  | 3  |
|-----|--|----|
| 559 | Capacity and cycle performance of lithium ion batteries employing CoxZn1-xS/Co9S8@N-doped reduced graphene oxide as anode material. <b>2021</b> , 409, 127372  | 6  |
| 558 | Seeking brightness from nature: Sustainable carbon dots-based AIEgens with tunable emission wavelength from natural rosin. <b>2021</b> , 413, 127457   | 9  |
| 557 | Ni/MoC heteronanoparticles encapsulated within nitrogen-doped carbon nanotube arrays as highly efficient self-supported electrodes for overall water splitting. <b>2021</b> , 406, 126815              | 39 |
| 556 | Mechanochemically assisted fabrication of ultrafine Pd nanoparticles on natural waste-derived nitrogen-doped porous carbon for the efficient formic acid decomposition. <b>2021</b> , 46, 656-665      | 4  |
| 555 | Design and development of honeycomb structured nitrogen-rich cork derived nanoporous activated carbon for high-performance supercapacitors. <b>2021</b> , 34, 102017                                   | 6  |
| 554 | A facile mechanochemical preparation of CoO@g-CN for application in supercapacitors and degradation of pollutants in water. <b>2021</b> , 407, 124360  | 43 |
| 553 | Fabricating CoNII catalysts based on ZIF-67 for oxygen reduction reaction in alkaline electrolyte. <b>2021</b> , 294, 121788   | 7  |
| 552 | A review of the current status of graphitic carbon nitride. <b>2021</b> , 46, 189-217  | 66 |
| 551 | Optimizing the oxygen reduction catalytic activity of a bipyridine-based polymer through tuning the molecular weight. <b>2021</b> , 9, 3322-3327   | 5  |
| 550 | Reduced Graphene Oxide Aerogel inside Melamine Sponge as an Electrocatalyst for the Oxygen Reduction Reaction. <b>2021</b> , 14,   | 1  |
| 549 | Doping mechanism directed graphene applications for energy conversion and storage. <b>2021</b> , 9, 7366-7395  | 6  |
| 548 | Fe containing template derived atomic FeNII to boost Fenton-like reaction and charge migration analysis on highly active FeIII4 sites. <b>2021</b> , 9, 14793-14805                                    | 15 |
| 547 | Efficient Fabrication of Diverse Mesostructured Materials from the Self-Assembly of Pyrrole-Containing Block Copolymers and Their Confined Chemical Transformation. <b>2021</b> , 54, 906-918          | 5  |
| 546 | Three-dimensional nitrogen-doped graphene-based metal-free electrochemical sensors for simultaneous determination of ascorbic acid, dopamine, uric acid, and acetaminophen. <b>2021</b> , 146, 964-970 | 13 |
| 545 | Graphene modification based on plasma technologies. <b>2021</b> , 70, 095208-095208  | Ο  |
| 544 | MetalBrganic framework-derived carbon as a positive electrode for high-performance vanadium redox flow batteries. <b>2021</b> , 9, 5648-5656   | 8  |
| 543 | A review on infiltration techniques for energy conversion and storage devices: from fundamentals to applications.  | 4  |

| 542 | A Ni or Co single atom anchored conjugated microporous polymer for high-performance photocatalytic hydrogen evolution. <b>2021</b> , 9, 19894-19900   | 10  |
|-----|---|-----|
| 541 | Investigation of L-Tryptophan Electrochemical Oxidation with a Graphene-Modified Electrode. <b>2021</b> , 11,   | 2   |
| 540 | Nitrogen and oxygen tailoring of a solid carbon active site for two-electron selectivity electrocatalysis. <b>2021</b> , 8, 173-181   | 2   |
| 539 | Oriented and robust anchoring of Fe via anodic interfacial coordination assembly on ultrathin Co hydroxides for efficient water oxidation. <b>2021</b> , 13, 13463-13472                                      | 3   |
| 538 | Catalytically Active Site Identification of Molybdenum Disulfide as Gas Cathode in a Nonaqueous Li-CO Battery. <b>2021</b> , 13, 6156-6167  | 6   |
| 537 | Room Temperature Gas Sensor Based on Reduced Graphene Oxide for Environmental Monitoring. <b>2021</b> , 3243-3261   |     |
| 536 | Design, Fabrication, and Mechanism of Nitrogen-Doped Graphene-Based Photocatalyst. <b>2021</b> , 33, e2003521   | 114 |
| 535 | Catalyst Materials for Oxygen Reduction Reaction. <b>2021</b> , 85-182  |     |
| 534 | Effect of nitrogen type on carbon dot photocatalysts for visible-light-induced atom transfer radical polymerization. <b>2021</b> , 12, 3060-3066  | 5   |
| 533 | Synthesis of Janus Au@BCP nanoparticles via UV light-initiated RAFT polymerization-induced self-assembly. <b>2021</b> , 3, 347-352  | 5   |
| 532 | Facile fabrication of ion-imprinted FeO/carboxymethyl cellulose magnetic biosorbent: removal and recovery properties for trivalent La ions <b>2021</b> , 11, 25258-25265                                      | 3   |
| 531 | Efficient fixation of CO2 into carbonates by tertiary N-functionalized poly(ionic liquids): Experimental-theoretical investigation. <b>2021</b> , 44, 101427  | 8   |
| 530 | Carbon-based Multi-layered Films for Electronic Application: A Review. <b>2021</b> , 50, 1845-1892  | 3   |
| 529 | Laser-assisted synthesis of cobalt@N-doped carbon nanotubes decorated channels and pillars of wafer-sized silicon as highly efficient three-dimensional solar evaporator. <b>2021</b> ,                       | 3   |
| 528 | Reinforced polysulfide barrier by g-C3N4/CNT composite towards superior lithium-sulfur batteries. <b>2021</b> , 53, 234-240   | 30  |
| 527 | Pulverizing Fe2O3 Nanoparticles for Developing Fe3C/N-Codoped Carbon Nanoboxes with Multiple Polysulfide Anchoring and Converting Activity in Li-S Batteries. <b>2021</b> , 31, 2011249                       | 23  |
| 526 | In-situ synthesis of Fe, N, S co-doped graphene-like nanosheets around carbon nanoparticles with dual-nitrogen-source as efficient electrocatalyst for oxygen reduction reaction. <b>2021</b> , 46, 8002-8013 | 4   |
| 525 | Hollow CeO2@Co2N Nanosheets Derived from Co-ZIF-L for Boosting the Oxygen Evolution Reaction. <b>2021</b> , 8, 2100041  | 4   |

| 524 | Tunable Electrocatalytic Behavior of Sodiated MoS Active Sites toward Efficient Sulfur Redox Reactions in Room-Temperature Na-S Batteries. <b>2021</b> , 33, e2100229                                  |      | 23 |
|-----|--|------|----|
| 523 | Multifunctional Melamine Foam Assisted Lead Halide Perovskites for Highly Efficient and Long-Term Photocatalytic CO2 Reduction Under Pure Water. <b>2021</b> , 5, 2000755                              |      | 4  |
| 522 | Biomass-Derived P, N Self-Doped Hard Carbon as Bifunctional Oxygen Electrocatalyst and Anode Material for Seawater Batteries. <b>2021</b> , 31, 2010882  |      | 16 |
| 521 | Single-Atom Gadolinium Anchored on Graphene Quantum Dots as a Magnetic Resonance Signal Amplifier <b>2021</b> , 4, 2798-2809   |      | 10 |
| 520 | Resin-silica composite nanoparticle grafted polyethylene membranes for lithium ion batteries. <b>2021</b> , 138, 50713   |      | O  |
| 519 | Green algae and gelatine derived nitrogen rich carbon as an outstanding competitor to Pt loaded carbon catalysts. <b>2021</b> , 11, 7084   |      | 7  |
| 518 | Enabling a Stable Room-Temperature Sodium-Sulfur Battery Cathode by Building Heterostructures in Multichannel Carbon Fibers. <i>ACS Nano</i> , <b>2021</b> , 15, 5639-5648                             | 16.7 | 26 |
| 517 | Constructed Interfacial Oxygen-Bridge Chemical Bonding in Core-Shell Transition Metal Phosphides/Carbon Hybrid Boosting Oxygen Evolution Reaction. <b>2021</b> , 14, 2188-2197                         |      | 8  |
| 516 | Controlling assembly-induced single layer RGO to achieve highly sensitive electrochemical detection of Pb(II) via synergistic enhancement. <b>2021</b> , 162, 105883                                   |      | 6  |
| 515 | High-efficiency catalyst for copper nanoparticles attached to porous nitrogen-doped carbon materials: Applied to the coupling reaction of alkyne groups under mild conditions. <b>2021</b> , 35, e6163 |      | О  |
| 514 | Graphene-Decorated Borontarbontalitride-Based Metal-Free Catalysts for an Enhanced Hydrogen Evolution Reaction. <b>2021</b> , 4, 3861-3868   |      | 4  |
| 513 | Highly effective FeNC electrocatalysts toward oxygen reduction reaction originated from 2,6-diaminopyridine. <b>2021</b> , 32, 10349-10358   |      | 2  |
| 512 | Improved capacity and cycling stability of Li2FeSiO4 nanocrystalline induced by nitrogen-doped carbon coating. <b>2021</b> , 25, 1679-1689   |      | 3  |
| 511 | Facile synthesis of alkylated carbon dots with blue emission in halogenated benzene solvents. <b>2021</b> , 613, 126129  |      | 4  |
| 510 | Kilogram-Scale Synthesis and Functionalization of Carbon Dots for Superior Electrochemical Potassium Storage. <i>ACS Nano</i> , <b>2021</b> , 15, 6872-6885  | 16.7 | 60 |
| 509 | Synergistic Effect of N-Doped sp Carbon and Porous Structure in Graphene Gels toward Selective Oxidation of C-H Bond. <b>2021</b> , 13, 13087-13096  |      | 6  |
| 508 | High-Throughput One-Photon Excitation Pathway in 0D/3D Heterojunctions for Visible-Light Driven Hydrogen Evolution. <b>2021</b> , 31, 2100816  |      | 40 |
| 507 | Sulfur and nitrogen co-doped rGO sheets as efficient electrocatalyst for oxygen reduction reaction in alkaline medium. <b>2021</b> , 114, 108338   |      | 5  |

| 506 | Nitrogen-Coordinated CoS@NC Yolk-Shell Polyhedrons Catalysts Derived from a Metal-Organic Framework for a Highly Reversible Li-O Battery. <b>2021</b> , 13, 17658-17667   | 13 |
|-----|---|----|
| 505 | Crystallization of Diamond from Graphene Oxide Nanosheets by a High Temperature and High Pressure Method. <b>2021</b> , 6, 3399-3402  | 1  |
| 504 | Controlling the up-conversion photoluminescence property of carbon quantum dots (CQDs) by modifying its surface functional groups for enhanced photocatalytic performance of CQDs/BiVO4 under a broad-spectrum irradiation. <b>2021</b> , 47, 3469-3485 | 1  |
| 503 | Graphene-like porous carbon nanostructure from corn husk: Synthesis and characterization. <b>2021</b> , 47, 3525-3525   | 2  |
| 502 | Fabrication and electrochemical applications of the Co-embedded N&P-codoped hierarchical porous carbon host from yeast for Li-S batteries. <b>2021</b> , 545, 148936  | 8  |
| 501 | Porous layered cobalt nanocrystal/nitrogen-doped carbon composites as efficient and CO-resistant electrocatalysts for methanol oxidation reaction. <b>2021</b> , 545, 149016  | 7  |
| 500 | Ultrasonic-assisted hydrothermal synthesis of cobalt oxide/nitrogen-doped graphene oxide hybrid as oxygen reduction reaction catalyst for Al-air battery. <b>2021</b> , 72, 105457  | 2  |
| 499 | Porous N-doped C coated gallium nitride submicron bricks/reduced graphene oxide hybrid as high-performance anode for lithium-ion batteries. <b>2021</b> , 263, 124437   | 1  |
| 498 | Understanding the Oxygen Reduction Reaction Activity of Quasi-1D and 2D N-Doped Heat-Treated Graphene Oxide Catalysts with Inherent Metal Impurities. <b>2021</b> , 4, 3593-3603  | 7  |
| 497 | Monodispersed Ruthenium Nanoparticles on Nitrogen-Doped Reduced Graphene Oxide for an Efficient Lithium-Oxygen Battery. <b>2021</b> , 13, 19915-19926   | 6  |
| 496 | Facile d-band tailoring in Sub-10Ihm Pd cubes by in-situ grafting on nitrogen-doped graphene for highly efficient organic transformations. <b>2021</b> , 590, 175-185   | 5  |
| 495 | Synthesis of a novel macromolecular carbon-nitrogen-phosphorous intumescent flame retardant. <b>2021</b> , 32, 1341-1349  | 9  |
| 494 | Graphene family for hydrogen peroxide production in electrochemical system. <b>2021</b> , 769, 144491   | 5  |
| 493 | Nitrogen doped porous carbon coated antimony as high performance anode material for sodium-ion batteries. <b>2021</b> , 32,   | 2  |
| 492 | Advanced Li-S Batteries Enabled by a Biomimetic Polysulfide-Engulfing Net. <b>2021</b> , 13, 23811-23821  | О  |
| 491 | Green conversion of bamboo chips into high-performance phenol adsorbent and supercapacitor electrodes by simultaneous activation and nitrogen doping. <b>2021</b> , 155, 105072   | 9  |
| 490 | Constructing FeN4/graphitic nitrogen atomic interface for high-efficiency electrochemical CO2 reduction over a broad potential window. <b>2021</b> , 7, 1297-1307   | 44 |
| 489 | Trifunctional Electrocatalytic Activities of Nitrogen-Doped Graphitic Carbon Nanofibers Synthesized by Chemical Vapor Deposition. <b>2021</b> , 6, 4867-4873  | 3  |

| 488 | Preparation and Evaluation of Iron-Based Catalysts from Corncob for NO Reduction. 1-17  | О  |
|-----|---|----|
| 487 | Nitrogen-doped carbon dots as high-effective inhibitors for carbon steel in acidic medium. <b>2021</b> , 616, 126280  | 16 |
| 486 | Efficient electrocatalytic oxidation of NADH by highly dispersible in situ N-doped ionic liquid-functionalized graphene nanosheets. e2100050  |    |
| 485 | Cold Plasma Preparation of Pd/Graphene Catalyst for Reduction of p-Nitrophenol. 2021, 11,   | 2  |
| 484 | Electrocatalytic Production of Tunable Syngas from CO2 via a Metal-Free Porous Nitrogen-Doped Carbon. <b>2021</b> , 60, 7739-7745   | 3  |
| 483 | In situ synthesis of nitrogen-doped graphene nanoflakes using non-thermal arc plasma. <b>2021</b> , 129, 213304   | 1  |
| 482 | Highly Stable, Low-Cost Metal-Free Oxygen Reduction Reaction Electrocatalyst Based on Nitrogen-Doped Pseudo-Graphite. <b>2021</b> , 35, 10146-10155   | 1  |
| 481 | S, N co-doped graphene quantum dots decorated TiO2 and supported with carbon for oxygen reduction reaction catalysis. <b>2021</b> , 46, 21549-21565   | 6  |
| 480 | Engineering hydrogenation active sites on graphene oxide and N-doped graphene by plasma treatment. <b>2021</b> , 287, 119962  | 4  |
| 479 | Large-scale in-situ synthesis of nitrogen-doped graphene using magnetically rotating arc plasma. <b>2021</b> , 116, 108417  | 1  |
| 478 | Synthesis, structure and lithium storage performance of a copperholybdenum complex polymer based on 4,4?-bipyridine. <b>2021</b> , 298, 122105  | 7  |
| 477 | Efficient Decomposition of Organic Pollutants over nZVI/FeOx/FeNy-Anchored NC Layers via a Novel Dual-Reaction-Centers-Based Wet Air Oxidation Process under Natural Conditions. <b>2021</b> , 1, 1333-1341 | 3  |
| 476 | Non-thermal effect of microwave on the chemical structure and luminescence properties of biomass-derived carbon dots via hydrothermal method. <b>2021</b> , 552, 149503                                     | 9  |
| 475 | Hexagonal boron nitride quantum dots: Properties, preparation and applications. <b>2021</b> , 20, 100425  | 3  |
| 474 | Investigation of MOF-derived humidity-proof hierarchical porous carbon frameworks as highly-selective toluene absorbents and sensing materials. <b>2021</b> , 411, 125034                                   | 3  |
| 473 | Platinum Nanoparticle Decorated Expired Drug-Derived N-Doped Ketjenblack Carbon as Efficient Catalyst for PEM Fuel Cells. <b>2021</b> , 168, 064517   | 1  |
| 472 | A DFT study of graphene-FeNx (xଢ़ि4, 3, 2, 1) catalysts for acetylene hydrochlorination. <b>2021</b> , 618, 126495  | 1  |
| 471 | CO2 and H2 adsorption on 3D nitrogen-doped porous graphene: Experimental and theoretical studies. <b>2021</b> , 48, 101517  | 6  |

| 470 | N-doped carbon nanotube arrays on reduced graphene oxide as multifunctional materials for energy devices and absorption of electromagnetic wave. <b>2021</b> , 177, 216-225                          | 21 |
|-----|--|----|
| 469 | Tailoring conductive network nanostructures of ZIF-derived cobalt-decorated N-doped graphene/carbon nanotubes for microwave absorption applications. <b>2021</b> , 591, 463-473                      | 24 |
| 468 | Waste sugar solution polymer-derived N-doped carbon spheres with an ultrahigh specific surface area for superior performance supercapacitors. <b>2021</b> , 46, 22735-22746                          | 5  |
| 467 | TiO2/polydopamine S-scheme heterojunction photocatalyst with enhanced CO2-reduction selectivity. <b>2021</b> , 289, 120039   | 98 |
| 466 | Catalytic hydrogenation performance of ZIF-8 carbide for electrochemical reduction of carbon dioxide. <b>2021</b> , 39, 144-144  | 2  |
| 465 | Ti2Nb10O29 anchored on Aspergillus Oryzae spore carbon skeleton for advanced lithium ion storage. <b>2021</b> , 28, e00272   | 3  |
| 464 | On the influence of carbon nanoparticles as additives in the electrosynthesis of bromoarenes. <b>2021</b> , 4, 100075  | 1  |
| 463 | High capacity Li3VO4-Ga2O3/NC as durable anode for Li-ion batteries via robust pseudocapacitive charge storage. <b>2021</b> , 868, 159115  | 5  |
| 462 | Ice-colloidal templated carbon host for highly efficient, dendrite free Li metal anode. <b>2021</b> , 179, 256-265   | 2  |
| 461 | Chemical Vapor Deposition of N-Doped Graphene through Pre-Implantation of Nitrogen Ions for Long-Term Protection of Copper. <b>2021</b> , 14,  | O  |
| 460 | Nest-like N-doped hierarchical porous active carbon formed by sacrifice template for enhanced supercapacitor. <b>2021</b> , 27, 4461-4471  | 1  |
| 459 | Recent Strategies on Hybrid Inorganic-Graphene Materials for Enhancing the Electrocatalytic Activity Towards Heavy Metal Detection. 1  | 1  |
| 458 | A Novel Manganese-Rich Pokeweed Biochar for Highly Efficient Adsorption of Heavy Metals from Wastewater: Performance, Mechanisms, and Potential Risk Analysis. <b>2021</b> , 9, 1209                 | 1  |
| 457 | Construction of hierarchically porous 3D graphene-like carbon material by B, N co-doping for enhanced CO2 capture. <b>2021</b> , 322, 111158   | 12 |
| 456 | Highly flexible and thermal conductive films of graphene/poly(naphthylamine) and applications in thermal management of LED devices. <b>2021</b> , 138, 51383   | О  |
| 455 | Synthesis of nitrogen and phosphorus co-doped graphene as efficient electrocatalyst for oxygen reduction reaction under strong alkaline media in advanced chlor-alkali cell. <b>2021</b> , 4, 100043 | 3  |
| 454 | One-pot synthesis of 3D porous Bi7O9I3/N-doped graphene aerogel with enhanced photocatalytic activity for organic dye degradation in wastewater. <b>2021</b> , 47, 19556-19566                       | 3  |
| 453 | Co3O4 Nanowire Arrays Grown on Carbon Nanotube-Based Films for Fischer Tropsch Synthesis. <b>2021</b> , 4, 7811-7819   |    |

| 452 | Robust pseudocapacitive charge storage behavior in Li3VO4 induced by N doped MXene. <b>2021</b> , 388, 138567  | 2  |
|-----|--|----|
| 451 | Nitrogen and Oxygen Codoped Carbon Anode Fabricated Facilely from Polyaniline Coated Cellulose Nanocrystals for High-Performance Li-Ion Batteries. <b>2021</b> , 4, 9902-9912          | 3  |
| 450 | Nano-manufacturing of Co(OH)2@NC for efficient oxygen evolution/reduction reactions. <b>2021</b> , 81, 131-138   | 3  |
| 449 | Facile regulation of porous N-doped carbon-based catalysts from covalent organic frameworks nanospheres for highly-efficient oxygen reduction reaction. <b>2021</b> , 180, 92-100      | 12 |
| 448 | Single-layered graphene quantum dots with self-passivated layer from xylan for visual detection of trace chromium(VI). <b>2021</b> , 131833  | 3  |
| 447 | Anchoring DTPA grafted PEI onto carboxylated graphene oxide to effectively remove both heavy metal ions and dyes from wastewater with robust stability. <b>2021</b> , 56, 18061-18077  | 2  |
| 446 | Place attachment and brand loyalty: the moderating role of customer experience in the restaurant setting. <b>2021</b> , ahead-of-print,  | 2  |
| 445 | In-situ selective surface engineering of graphene micro-supercapacitor chips. 1  | 4  |
| 444 | Sandwich-like Z-scheme g-C3N4/reduced graphene oxide@TiO2composite for enhanced visible light photoactivity. <b>2021</b> , 140, 111292   | 2  |
| 443 | High Quantum Yield Fluorescent Chitosan-Based Carbon Dots for the Turn-On-Off-On Detection of Cr(VI) and H2O2. <b>2021</b> , 16,   | O  |
| 442 | Pyrrolic-Dominated Nitrogen Redox Enhances Reaction Kinetics of Pitch-Derived Carbon Materials in Aqueous Zinc Ion Hybrid Supercapacitors. <b>2021</b> , 3, 1291-1299                  | 9  |
| 441 | Carbon quantum dots derived from waste acorn cups and its application as an ultraviolet absorbent for polyvinyl alcohol film. <b>2021</b> , 556, 149774                                | 8  |
| 440 | Defect states induced luminescence and electrochemical studies of boron carbon nitride nanosheets. <b>2021</b> , 559, 149982   | 5  |
| 439 | Nitrogen-Doped Carbon Aerogels Derived from Starch Biomass with Improved Electrochemical Properties for Li-Ion Batteries. <b>2021</b> , 22,  | 2  |
| 438 | Solvent Effects on Fluorescence Properties of Carbon Dots: Implications for Multicolor Imaging. <b>2021</b> , 6, 26499-26508   | 6  |
| 437 | Highly Conductive and CO-resistant Cobalt-based Monolithic Electrodes for Catalytic Oxidation of Methanol.   | 1  |
| 436 | Enhanced norfloxacin degradation by iron and nitrogen co-doped biochar: Revealing the radical and nonradical co-dominant mechanism of persulfate activation. <b>2021</b> , 420, 129902 | 19 |
| 435 | Enhanced Fenton-like degradation of sulfadiazine by single atom iron materials fixed on nitrogen-doped porous carbon. <b>2021</b> , 597, 56-65   | 19 |

| 434 | In-situ growth of cobalt manganate spinel nanodots on carbon black toward high-performance zinc-air battery: Dual functions of 3-aminopropyltriethoxysilane. <b>2022</b> , 608, 386-395 | 1  |
|-----|---|----|
| 433 | Novel metal-free in-plane functionalized graphitic carbon nitride with graphene quantum dots for effective photodegradation of 4-bromophenol. <b>2021</b> , 182, 89-99                  | 5  |
| 432 | Adsorption of uremic toxins using biochar for dialysate regeneration. <b>2021</b> , 1-13  |    |
| 431 | Persulfate activation by nanodiamond-derived carbon onions: Effect of phase transformation of the inner diamond core on reaction kinetics and mechanisms. <b>2021</b> , 293, 120205     | 12 |
| 430 | Nanomaterials for Targeted Delivery of Agrochemicals by an All-in-One Combination Strategy and Deep Learning. <b>2021</b> , 13, 43374-43386   | 4  |
| 429 | Enhanced adsorption of aqueous chlorinated aromatic compounds by nitrogen auto-doped biochar produced through pyrolysis of rubber-seed shell. <b>2021</b> , 1-16                        | 1  |
| 428 | Water splitting kinetics of Sr-doped g-C3N4 edge-wrinkled nanosheets under visible light. <b>2021</b> , 132, 105918   | 0  |
| 427 | Embedding Pt-Ni octahedral nanoparticles in the 3D nitrogen-doped porous graphene for enhanced oxygen reduction activity. <b>2021</b> , 391, 138956                                     | 3  |
| 426 | Design and structure of nitrogen and oxygen co-doped carbon spheres with wrinkled nanocages as active material for supercapacitor application. <b>2021</b> , 90, 106540                 | 11 |
| 425 | Acid treated crystalline graphitic carbon nitride with improved efficiency in photocatalytic ethanol oxidation under visible light. <b>2021</b> , 271, 115304                           | 2  |
| 424 | New Inverse Emulsion-Polymerized Iron/Polyaniline Composites for Permanent, Highly Magnetic Iron Compounds via Calcination. <b>2021</b> , 13,   | О  |
| 423 | Spatial confinement and electron transfer moderating MoN bond strength for superior ammonia decomposition catalysis. <b>2021</b> , 294, 120254  | 4  |
| 422 | Photocatalytic water splitting hydrogen production via environmental benign carbon based nanomaterials. <b>2021</b> , 46, 33696-33717   | 27 |
| 421 | High-efficiency water purification for methyl orange and lead(II) by eco-friendly magnetic sulfur-doped graphene-like carbon-supported layered double oxide. <b>2021</b> , 419, 126406  | 7  |
| 420 | Co1-xS/N-doped graphene foam composite as efficient bifunctional electrocatalysts for the evolution reaction of oxygen and hydrogen. <b>2021</b> , 393, 139081                          | 1  |
| 419 | Natural coconut liquid derived nanosheets structured carbonaceous material for high-performance supercapacitors. <b>2021</b> , 626, 127012  | 2  |
| 418 | Porous carbon layers wrapped CoFe alloy for ultrastable Zn-Air batteries exceeding 20,000 charging-discharging cycles. <b>2021</b> , 61, 327-335  | 6  |
| 417 | CNTs-intertwined and N-doped porous carbon wrapped silicon anode for high performance lithium-ion batteries. <b>2021</b> , 877, 160240  | 8  |

| 416 | Magnetic N-doped porous carbon for analysis of trace Pb and Cd in environmental water by magnetic solid phase extraction with inductively coupled plasma mass spectrometry. <b>2021</b> , 184, 106273        | 3  |
|-----|--|----|
| 415 | Facile synthesis of nitrogen, phosphorus and sulfur tri-doped carbon nanosheets as efficient oxygen electrocatalyst for rechargeable Zn-air batteries. <b>2021</b> , 273, 115439                             | 1  |
| 414 | Encapsulated Ni-Co alloy nanoparticles as efficient catalyst for hydrodeoxygenation of biomass derivatives in water. <b>2021</b> , 42, 2027-2037   | 7  |
| 413 | In situ integration of Fe3N@Co4N@CoFe alloy nanoparticles as efficient and stable electrocatalyst for overall water splitting. <b>2021</b> , 395, 139218   | 1  |
| 412 | Nitrogen self-doped activated carbons with narrow pore size distribution from bamboo shoot shells. <b>2021</b> , 629, 127408   | 1  |
| 411 | The green synthesis and enhanced microwave absorption performance of core-shell structured multicomponent alloy/carbon nanocomposites derived from the metal-sericin complexation. <b>2021</b> , 882, 160680 | 4  |
| 410 | Formation of active NIIo(II)ID centers by calcinating cobalt tetraaminophthalocyanine for the elimination of organic pollutants under controllable hydrogen peroxide activation. <b>2021</b> , 567, 150879   |    |
| 409 | Nitrogen-doped graphene nanomaterials for electrochemical catalysis/reactions: A review on chemical structures and stability. <b>2021</b> , 185, 198-214   | 12 |
| 408 | Performance evaluation of functionalized carbon aerogel as oxygen reduction reaction electrocatalyst in zinc-air cell. <b>2021</b> , 511, 230458   | 3  |
| 407 | Progress and challenges in using sustainable carbon anodes in rechargeable metal-ion batteries. <b>2021</b> , 87, 100929   | 8  |
| 406 | Protein-derived 3D amorphous carbon with N, O doping as high rate and long lifespan anode for potassium ion batteries. <b>2021</b> , 512, 230530   | 2  |
| 405 | Achieving ion accessibility within graphene films by carbon nanofiber intercalation for high mass loading electrodes in supercapacitors. <b>2021</b> , 513, 230559   | 2  |
| 404 | Rational construction of Au@Co2N0.67 nanodots-interspersed 3D interconnected N-graphene hollow sphere network for efficient water splitting and Zn-air battery. <b>2021</b> , 89, 106420                     | 5  |
| 403 | Mechanochemistry-driven prelinking enables ultrahigh nitrogen-doping in carbon materials for triiodide reduction. <b>2021</b> , 89, 106332   | 2  |
| 402 | Light-weight 1D heteroatoms-doped Fe3C@C nanofibers for microwave absorption with a thinner matching thickness. <b>2021</b> , 885, 160968  | 7  |
| 401 | Hierarchical porous biomass-derived carbon framework with ultrahigh surface area for outstanding capacitance supercapacitor. <b>2021</b> , 179, 1826-1835  | 5  |
| 400 | Magnetically modified in-situ N-doped Enteromorpha prolifera derived biochar for peroxydisulfate activation: Electron transfer induced singlet oxygen non-radical pathway. <b>2021</b> , 284, 131404         | 3  |
| 399 | Graphitic-N highly doped graphene-like carbon: A superior metal-free catalyst for efficient reduction of CO2. <b>2021</b> , 298, 120510  | 10 |

| 398 | Exceptional capacitive deionization desalination performance of hollow bowl-like carbon derived from MOFs in brackish water. <b>2022</b> , 278, 119550                           | 2  |
|-----|--|----|
| 397 | Three-dimensional MOF-derived hierarchically porous aerogels activate peroxymonosulfate for efficient organic pollutants removal. <b>2022</b> , 427, 130830                      | 14 |
| 396 | Metal-organic framework-derived carbon nanotubes with multi-active Fe-N/Fe sites as a bifunctional electrocatalyst for zinc-air battery. <b>2022</b> , 66, 306-313               | 12 |
| 395 | Heteroatom doping in metal-free carbonaceous materials for the enhancement of persulfate activation. <b>2022</b> , 427, 131655   | 19 |
| 394 | In situ recycling of particulate matter for a high-performance supercapacitor and oxygen evolution reaction. <b>2021</b> , 5, 2742-2748  | 1  |
| 393 | Facile synthesis of 3D Ni@C nanocomposites derived from two kinds of petal-like Ni-based MOFs towards lightweight and efficient microwave absorbers. <b>2021</b> , 13, 3119-3135 | 34 |
| 392 | Carbon fibers assisted 3D N-doped graphene aerogel on excellent adsorption capacity and mechanical property. <b>2021</b> , 608, 125602   | 13 |
| 391 | Electrochemical sensing of pioglitazone hydrochloride on N-doped r-GO modified commercial electrodes. <b>2021</b> , 146, 3578-3588   | O  |
| 390 | Training a Model for PredictingAdsorption Energy of Metal Ions Based on Machine Learning. 2021, 748  | 1  |
| 389 | In situ preparation of metal-free cPANI-GP electrode and catalytic performance in an electro-Fenton system. <b>2021</b> , 18, 1913   | O  |
| 388 | Long-term-stability continuous flow CO2 reduction electrolysers with high current efficiency. <b>2021</b> , 5, 758-766   | 3  |
| 387 | Catalytic role of graphitic nitrogen atoms in the CO oxidation reaction over N-containing graphene: a first-principles mechanistic evaluation. <b>2021</b> , 45, 13822-13832     | O  |
| 386 | Modulation of Cu and Rh single-atoms and nanoparticles for high-performance hydrogen evolution activity in acidic media. <b>2021</b> , 9, 10326-10334                            | 19 |
| 385 | A comprehensive review on selected graphene synthesis methods: from electrochemical exfoliation through rapid thermal annealing towards biomass pyrolysis.                       | 9  |
| 384 | Doping Carbon Nanomaterials with Heteroatoms. 133-161  | 7  |
| 383 | Recent Advances in Stability of Carbon-Based Anodes for Potassium-Ion Batteries. <b>2021</b> , 4, 554-570  | 7  |
| 382 | Non-Precious Metal/Metal Oxides and Nitrogen-Doped Reduced Graphene Oxide based Alkaline Water-Electrolysis Cell. <b>2017</b> , 9, 4295-4300                                     | 18 |
| 381 | Room Temperature Gas Sensor Based on Reduce Graphene Oxide for Environmental Monitoring. <b>2020</b> , 1-19  | 1  |

| 380 | CNT Applications in Microelectronics, Nanoelectronics, And Nanobioelectronics 2018, 65-72   | 1  |
|-----|---|----|
| 379 | CNT Applications in Displays and Transparent, Conductive Films/Substrates. 2018, 73-75  | 1  |
| 378 | Graphene Applications in Electronics, Electrical Conductors, and Related Uses. 2018, 141-146  | 3  |
| 377 | Characterization Methods. <b>2018</b> , 403-488   | 2  |
| 376 | Microwave- and Conductivity-Based Technologies. 2018, 655-669   | 1  |
| 375 | CNT Applications in Sensors and Actuators. <b>2018</b> , 53-60  | 2  |
| 374 | Improved thermal stability of melamine resin spheres and electrochemical properties of their carbon derivatives induced by F127. <b>2020</b> , 55, 12114-12126                                      | 4  |
| 373 | Rationally designed nitrogen-doped yolk-shell Fe7Se8/Carbon nanoboxes with enhanced sodium storage in half/full cells. <b>2020</b> , 166, 175-182   | 17 |
| 372 | Facile and sustainable synthesis of slit-like microporous N-doped carbon with unexpected electrosorption performance. <b>2020</b> , 396, 125249   | 20 |
| 371 | Highly efficient tungsten-doped hierarchical structural N-Enriched porous carbon counter electrode material for dye-sensitized solar cells. <b>2020</b> , 351, 136455                               | 7  |
| 370 | Scalable solvent-free mechanofusion and magnesiothermic reduction processes for obtaining carbon nanospheres-encapsulated crystalline silicon anode for Li-ion batteries. <b>2020</b> , 352, 136457 | 8  |
| 369 | Efficient catalytic removal of COS and H2S over graphitized 2D micro-meso-macroporous carbons endowed with ample nitrogen sites synthesized via mechanochemical carbonization. <b>2020</b> ,        | 5  |
| 368 | Confining ultrafine ZnSe nanoparticles in N,Se-codoped carbon matrix using a direct solid state reaction approach for boosting sodium storage performance. <b>2020</b> , 840, 155703                | 13 |
| 367 | All in one plasma process: From the preparation of S-C composite cathode to alleviation of polysulfide shuttle in Li-S batteries. <b>2020</b> , 577, 450-458  | 6  |
| 366 | Biomass chitin-derived honeycomb-like nitrogen-doped carbon/graphene nanosheet networks for applications in efficient oxygen reduction and robust lithium storage. <b>2016</b> , 4, 11789-11799     | 62 |
| 365 | Ultrafast-charging and long cycle-life anode materials of TiO-bronze/nitrogen-doped graphene nanocomposites for high-performance lithium-ion batteries <b>2020</b> , 10, 43811-43824                | 12 |
| 364 | Color Tuning of Biomass-Derived Carbon Nanodots by Reaction Temperature Toward White Light-Emitting Diodes. <b>2020</b> , 15, 2050159   | 3  |
| 363 | Fabrication and UHV-STM Observation of Melamine-Aldehyde Nanostructures from Solutions on Au. <b>2017</b> , 38, 384-389   | 1  |

| 362 |   | 2  |
|-----|---|----|
| 361 | Nitrogen Coordinated Single Atomic Metals Supported on Nanocarbons: A New Frontier in Electrocatalytic CO2 Reduction. <b>2018</b> ,   | 11 |
| 360 | Nanocomposites of nitrogen-doped graphene and cobalt tungsten oxide as efficient electrode materials for application in electrochemical devices. <b>2016</b> , 3, 1456-1473 | 7  |
| 359 | Nitrogen Doped Graphene as Potential Material for Hydrogen Storage. <b>2017</b> , 06, 41-60   | 51 |
| 358 | Facile Route to Synthesize Cu, S, N-Doped Carbon as Highly Efficient and Durable Electrocatalyst<br>Towards Oxygen Reduction Reaction. 1                                    |    |
| 357 | Defective/doped graphene-based materials as cathodes for metal-air batteries.   | 1  |
| 356 | Multifunctional polyethyleneimine for synthesis of core-shell nanostructures and electrochemiluminescent detection of three AMI biomarkers. 1                               | 0  |
| 355 | Highly efficient photocatalytic dehydrogenative coupling of amines with supported platinum catalyst under the oxidant-free conditions. <b>2021</b> ,                        |    |
| 354 | The significant promotion of g-C3N4 on Pt/CNS catalyst for the electrocatalytic oxidation of methanol. <b>2021</b> ,  | 2  |
| 353 | Green synthesis of orange emissive carbon dots for the detection of Agand their application via solid-phase sensing and security ink. <b>2021</b> , 33,                     | 3  |
| 352 | CHAPTER 13:Smart Ionic Liquids-based Gas Sensors. <b>2017</b> , 337-364   |    |
| 351 | Introduction. <b>2018</b> , 1-22  |    |
| 350 | Basic Electrochemistry of CPs. <b>2018</b> , 283-309  |    |
| 349 | Miscellaneous CNT Applications. <b>2018</b> , 89-90   |    |
| 348 | CNT Applications in Specialized Materials. <b>2018</b> , 45-48  |    |
| 347 | Structural Aspects and Morphology of CPs. <b>2018</b> , 389-402   |    |
| 346 | Electronic Structure and Conduction Models of Graphene. <b>2018</b> , 101-106   |    |
| 345 | Electrochromics. <b>2018</b> , 601-624  |    |
|     |   |    |

| 344 | Classes of CPs: Part 1. <b>2018</b> , 489-507  |
|-----|--|
| 343 | Electro-Optic and Optical Devices. <b>2018</b> , 671-684   |
| 342 | Conduction Models and Electronic Structure of CNTs. 2018, 11-16  |
| 341 | Miscellaneous Applications. <b>2018</b> , 695-715  |
| 340 | CNT Applications in the Environment and in Materials Used in Separation Science. 2018, 81-87                     |
| 339 | Graphene Applications in Displays and Transparent, Conductive Films/Substrates. <b>2018</b> , 147-148            |
| 338 | Classes of CPs: Part 2. <b>2018</b> , 509-545  |
| 337 | Introducing Conducting Polymers (CPs). <b>2018</b> , 159-174   |
| 336 | Syntheses and Processing of CPs. <b>2018</b> , 311-388   |
| 335 | Physical, Mechanical, and Thermal Properties of CNTs. <b>2018</b> , 33-36  |
| 334 | CNT Applications in Electrical Conductors, Quantum Nanowires, And Potential Superconductors. <b>2018</b> , 77-79 |
| 333 | Toxicology of CNTs. <b>2018</b> , 37-39  |
| 332 | Synthesis, Purification, and Chemical Modification of CNTs. <b>2018</b> , 17-31                                  |
| 331 | Introducing Graphene. <b>2018</b> , 93-99  |
| 330 | Sensors. <b>2018</b> , 549-574   |
| 329 | Conduction Models and Electronic Structure of CPs. <b>2018</b> , 175-249   |
| 328 | Brief, General Overview of Applications. <b>2018</b> , 123-124   |
| 327 | Electrochemomechanical, Chemomechanical, and Related Devices. <b>2018</b> , 685-693                              |

Displays, Including Light-Emitting Diodes (LEDs) and Conductive Films. 2018, 625-654 326 Research Progress on Surface Modification of Graphene. 2019, 09, 379-391 325 Carbon Nanostructured Catalysts as High Efficient Materials for Low Temperature Fuel Cells. 2019, 1139-1166 324 Recent Advances in the Synthesis and Applications of Nitrogen-Doped Graphene. 2019, 09, 17-31 323 Achieving near-infrared deep tissue imaging via metal organic complex nanoparticles. 2019, 322 Synthesis of Nitrogen-Doped Graphene by Thermal Annealing of Graphene Oxide with Melamine 321 Compounds. 2019, 29, 677-683 Correlation of Leaf Parameters with Incidence of Papaya Ring Spot Virus in Cultivated Papaya and 320 its Wild Relatives. 2019, 14, 130-136 Toxic Gas Sensors and Biosensors. 2020, 49-67 319 Synthesis of praseodymium-and molybdenum-sulfide nanoparticles for dye-photodegradation and 318 2 near-infrared deep-tissue imaging. 2020, 7, 036203 AgNP-Zeolite AZNG as a Novel Nanocatalyst for Methanol Electro-Oxidation in Alkaline Setting. 317 2020, 44, 677-686 MOF-Directed Construction of Cu-Carbon and Cu@N-Doped Carbon as Superior Supports of Metal 316 Nanoparticles toward Efficient Hydrogen Generation. 2021, Two-dimensional ZnS@N-doped carbon nanoplates for complete lithium ion batteries. 2021, 33, 315 Research Progress on Advanced Carbon Materials as Pt Support for Proton Exchange Membrane 314 1 Fuel Cells. 2020, 35, 407 Drastic change in surface electronic properties and creation of a new carbon-based nanostructure 313 on the vicinal SiC(111)-4\(\mathbb{I}\) surface. **2020**, 1697, 012247 Calcined Co(II)-Triethylenetetramine, Co(II)- Polyaniline-Thiourea as the Cathode Catalyst of Proton 312 1 Exchanged Membrane Fuel Cell. 2020, 12, Facile synthesis of MOF-derived concave cube nanocomposite by self-templated toward 311 12 lightweight and wideband microwave absorption. 2022, 186, 574-588 Regulating pyrolysis strategy to construct CNTs-linked porous cubic Prussian blue analogue 18 310 derivatives for lightweight and broadband microwave absorption. 2022, 430, 132879 Homogeneous Ni nanoparticles anchored on mesoporous N-doped carbon as highly efficient 309 catalysts for Cr(VI), tetracycline and dyes reduction. 2022, 575, 151748

| 308 | N-doped CNT as electron transport promoter by bridging CoP and carbon cloth toward enhanced alkaline hydrogen evolution. <b>2022</b> , 430, 132824   | 10 |
|-----|--|----|
| 307 | Modulation of carbon induced persulfate activation by nitrogen dopants: recent advances and perspectives.  | 9  |
| 306 | Porous TiNb2O7@N-C as Anode Materials for Lithium-Ion Batteries with Ultrahigh-Rate Performance. <b>2021</b> , 125, 23960-23967  | 3  |
| 305 | Catalytic performance of nanostructured materials recently used for developing fuel cells electrodes. <b>2021</b> , 46, 39315-39368  | 5  |
| 304 | N-Doped Porous Carbons Derived from Cross-Linked Polybenzoxazine as Efficient Catalysts for ORR in Alkaline Electrolyte. <b>2020</b> , 167, 116516   | 0  |
| 303 | Effect of benzophenone on the physicochemical properties of N-CNTs synthesized from 1-ferrocenylmethyl (2-methylimidazole) catalyst. 205-217   |    |
| 302 | Extremely fast charging lithium-ion battery using bio-based polymer-derived heavily nitrogen doped carbon. <b>2021</b> ,   | 1  |
| 301 | Sn/SnO core-shell structure encapsulated in nitrogen-doped porous carbon frameworks for enhanced lithium storage. <b>2022</b> , 896, 163009  | 1  |
| 300 | Graphite Classification Based on Improved Convolution Neural Network. <b>2021</b> , 9, 1995  | 1  |
| 299 | Nano-silver Actuated High-performance Porous Silicon Anode from Recycling of Silicon Waste. <b>2021</b> , 100162   | О  |
| 298 | Comparative study of KF, KCl and KBr doped with graphitic carbon nitride for superior photocatalytic degradation of methylene blue under visible light. <b>2021</b> , 15, 6340-6355          | 2  |
| 297 | Titanium Dioxide/N-Doped Graphene Composites as Non-Noble Bifunctional Oxygen Electrocatalysts.  | 1  |
| 296 | Co-construction of advanced sulfur host by implanting titanium carbide into Aspergillus niger spore carbon. <b>2021</b> ,  | 3  |
| 295 | Fluorescent Egg White-Based Carbon Dots as a High-Sensitivity Iron Chelator for the Therapy of Nonalcoholic Fatty Liver Disease by Iron Overload in Zebrafish. <b>2021</b> , 13, 54677-54689 | 2  |
| 294 | Transfer of molecular oxygen and electrons improved by the regulation of C-N/C⊫௴ for highly efficient 2e-ORR. <b>2021</b> , 133591   | 3  |
| 293 | Rational Design of Metal-free Doped Carbon Nanohorn Catalysts for Efficient Electrosynthesis of H2O2 from O2 Reduction. <b>2021</b> , 4, 12436-12447   | 5  |
| 292 | An oligomeric semiconducting nanozyme with ultrafast electron transfers alleviates acute brain injury. <b>2021</b> , 7, eabk1210   | 5  |
| 291 | Integrated Sn/CNT@NC hierarchical porous gas diffusion electrode by phase inversion for electrocatalytic reduction of CO2. <b>2021</b> , 403, 139584   | O  |

| 290 | Boron Carbon Nitride Semiconductor Modified with CeO2 for Photocatalytic Reduction of CO2 with H2O: Comparative Study. <b>2021</b> , 1, 100016   | 2 |
|-----|--|---|
| 289 | Evolution of Microstructure within Carbon Fiber During Pre-Carbonization Revealed by Mean Field Theory.  |   |
| 288 | Highly efficient and self-supported 3D carbon nanotube composite electrode for enhanced oxygen reduction reaction <b>2021</b> , 11, 38856-38861  | О |
| 287 | Enhancing the activation of persulfate using nitrogen-doped carbon materials in the electric field for the effective removal of -nitrophenol <b>2021</b> , 11, 38003-38015                               | O |
| 286 | Electrochemical sensor formed from poly(3,4-ethylenedioxyselenophene) and nitrogen-doped graphene composite for dopamine detection <b>2021</b> , 11, 37544-37551   | 1 |
| 285 | Hybrid graphene-based materials and its catalytic activity toward hydrogen sorption. <b>2022</b> , 121, 108766   |   |
| 284 | Fluorescence properties of carbon dots synthesized by different solvents for pH detector. <b>2022</b> , 123, 111889  | 3 |
| 283 | Fabrication of fluoroalkylsilane/zeolitic imidazolate framework composites for highly efficient superhydrophobic coating. <b>2022</b> , 5, 26-34   | O |
| 282 | Nitrogen-doped carbon nanofibers derived from phenolic-resin-based analogues for high-performance lithium-ion batteries. <b>2022</b> , 376, 115854   | 2 |
| 281 | 3D N-doped graphene/bismuth composite as an efficient catalyst for reduction of 4-nitrophenol. <b>2022</b> , 636, 128098   | 3 |
| 280 | Surface alteration driven bi-functional catalytic activity of alkali niobate-N doped graphene composite for exalted oxygen electrochemistry. <b>2022</b> , 580, 152160                                   | 2 |
| 279 | Sodium-chloride-assisted synthesis of nitrogen-doped porous carbon shells via one-step combustion waves for supercapacitor electrodes. <b>2022</b> , 433, 134486   | 3 |
| 278 | Fermi-level-tuned MOF-derived N-ZnO@NC for photocatalysis: A key role of pyridine-N-Zn bond. <b>2022</b> , 112, 68-76  | 3 |
| 277 | Preparation and Electrochemical Performance of Sulfur-Loaded Frame g-C 3N 4/CNTs for High Performance Lithium-Sulfur Battery by Dissolution-Precipitation Method.  |   |
| 276 | In-Situ Encapsulation of FeCo Alloy in Nitrogen-Doped Carbon Framework as Advanced Bifunctional Cathode Catalysts for Zn-Air Batteries.  |   |
| 275 | Plasma Induced Transformation: A New Strategy to in situ Engineer MOF-derived Heterointerface for High-Efficiency Electrochemical Hydrogen Evolution.  | O |
| 274 | Graphitic carbon nitride and carbon nanotubes modified active carbon fiber cathode with enhanced H2O2 production and recycle of Fe3+/Fe2+ for electro-Fenton treatment of landfill leachate concentrate. | 1 |
| 273 | Structure and Magnetism of Few-Layer Nanographene Clusters in Carbon Microspheres. <b>2022</b> , 126, 493-504  |   |

| 272 | Solvent Recyclable Synthesis of Nitrogen-Rich Nanotubes with Embedded CoFe Nanoparticles for Electrochemical Oxygen-Involving Reactions. 2100957  | O  |
|-----|---|----|
| 271 | Hydrogen-assisted synthesis of Ni-ZIF-derived nickel nanoparticle chains coated with nitrogen-doped graphitic carbon layers as efficient electrocatalysts for non-enzymatic glucose detection <b>2022</b> , 189, 80 | 0  |
| 270 | A Facile Synthesis of Noble-Metal-Free Catalyst Based on Nitrogen Doped Graphene Oxide for Oxygen Reduction Reaction <b>2022</b> , 15,  | 1  |
| 269 | Nanosized copper stabilized on ternary P, N, S-doped graphene from chitosan shellfish waste: preparation and catalysis of single and double A3-type amine coupling. <b>2022</b> , 18, 100109                        | O  |
| 268 | LDH-derived phosphide/N-doped graphene oxide hierarchical electrocatalyst for enhanced oxygen evolution reaction. <b>2022</b> , 24, 1189-1194   | 1  |
| 267 | A review of Ni based powder catalyst for urea oxidation in assisting water splitting reaction. 2022,  | 13 |
| 266 | Iron-based sulfur and nitrogen dual doped porous carbon as durable electrocatalysts for oxygen reduction reaction. <b>2022</b> , 47, 6078-6088  | 5  |
| 265 | Boosting Electrocatalytic Activity of Single Atom Catalysts Supported on Nitrogen-Doped Carbon through N Coordination Environment Engineering <b>2022</b> , e2105329  | 19 |
| 264 | Electrochemiluminescence Resonance Energy Transfer System Based on Silver Metal-Organic Frameworks as a Double-Amplified Emitter for Sensitive Detection of miRNA-107 <b>2022</b> ,                                 | 4  |
| 263 | Emerging 2D Materials for Electrocatalytic Applications: Synthesis, Multifaceted Nanostructures, and Catalytic Center Design <b>2022</b> , e2105831   | 8  |
| 262 | Flash-assisted doping graphene for ultrafast potassium transport. 1   | 1  |
| 261 | Heteroatom-Doped Metal-Free Carbon Nanomaterials as Potential Electrocatalysts <b>2022</b> , 27,  | 1  |
| 260 | Insights into the Determining Effect of Carbon Support Properties on Anchoring Active Sites in FeNC Catalysts toward the Oxygen Reduction Reaction. <b>2022</b> , 12, 1601-1613                                     | 5  |
| 259 | Dynamic Interface with Enhanced Visible-Light Absorption and Electron Transfer for Direct Photoreduction of Flue Gas to Syngas <b>2022</b> ,  | 1  |
| 258 | Nickel-Rich Ni3N Particles Stimulated by Defective Graphitic Carbon Nitrides for the Effective Oxygen Evolution Reaction. <b>2022</b> , 61, 2081-2090   | O  |
| 257 | N-doped 2D graphite-2H nanoplatelets (GNPs) with enhanced PMS activation performance: Structure-dependent performance and Catalytic Mechanism. <b>2022</b> , 131, 104158  | 1  |
| 256 | 3D interconnected N-Doped Carbon/Sulfur Derived from Organic-Inorganic Hybrid ZnS Superlattice Nanorods for High-Performance Lithium-Sulfur Batteries.  | 1  |
| 255 | Hierarchical 3D PAni /N-doped graphene nanocomposite hydrogel for energy storage applications.  | O  |

| 254 | Enhanced electrochemical removal of sulfadiazine using stainless steel electrode coated with activated algal biochar <b>2022</b> , 306, 114535  | 0  |
|-----|---|----|
| 253 | Facile construction and controllable design of CoTiO3@Co3O4/NCNO hybrid heterojunction nanocomposite electrode for high-performance supercapacitors. <b>2022</b> , 407, 139868                | 4  |
| 252 | Adsorption mechanism and flotation behavior of ammonium salt of N-Nitroso-N-phenylhydroxyamine on malachite mineral. <b>2022</b> , 583, 152489  | 1  |
| 251 | Flexible Bi2MoO6/N-doped carbon nanofiber membrane enables tetracycline photocatalysis for environmentally safe growth of Vigna radiata. <b>2022</b> , 902, 163860                            | 1  |
| 250 | Ge nanoparticles uniformly immobilized on 3D interconnected porous graphene frameworks as anodes for high-performance lithium-ion batteries. <b>2022</b> , 69, 161-173                        | 3  |
| 249 | Electrocatalysis in Alkaline Media and Alkaline Membrane-Based Energy Technologies 2022,  | 25 |
| 248 | Chemically controlled nitrogen-doped reduced-Graphene/Graphite oxide frameworks for aiding superior thermal/anti-corrosion performance: Integrated DFT-D & experimental. <b>2022</b> , 135241 | 1  |
| 247 | Pyridinic nitrogen enables dechlorination of trichloroethylene to acetylene by green rust: Performance, mechanism and applications <b>2022</b> , 824, 153825                                  | O  |
| 246 | A Green Strategy for Nitrogen-Doped Polymer Nanodots with High Oxygen and Chloride Corrosion Resistance in Extremely Acidic Condition. <b>2022</b> , 437, 135242                              | Ο  |
| 245 | Efficient ORR catalysts for zinc-air battery: Biomass-derived ultra-stable co nanoparticles wrapped with graphitic layers via optimizing electron transfer. <b>2022</b> ,                     | 5  |
| 244 | Bimetallic nanoarrays embedded in three-dimensional carbon foam as lightweight and efficient microwave absorbers. <b>2022</b> , 191, 486-486  | 1  |
| 243 | Chain-tailed dodecahedron structure derived from Zn/Co-ZIFs/CNTs with excellent rate capability as an anode for lithium-ion batteries. <b>2022</b> , 904, 164104                              | Ο  |
| 242 | Highly graphitized carbon-wrapped PtFeCo alloy with enhanced durability and activity toward methanol electro-oxidation. <b>2022</b> , 24, 100788  | 0  |
| 241 | Facile assembly and excellent elimination behavior of porous BiOBr-g-CN heterojunctions for organic pollutants <b>2022</b> , 209, 112889  | 6  |
| 240 | Synthesis of nitrogen-doped carbons from single-source precursors by solution plasma. <b>2022</b> , 475-505   |    |
| 239 | Defective Carbon Nanostructures for Biomedical Application. <b>2022</b> , 1-34  |    |
| 238 | Ultrafine Mo2c-Mo2n Heterojunction Anchored on Three-Dimensional Porous N-Doped Carbon Framework for Hydrogen Evolution Reaction and Lithium-Ion Batteries.                                   |    |
| 237 | Effectively raising the rate performance and cyclability of a graphite anode via hydrothermal modification with melamine and its electrochemical derivatives.                                 | O  |

| 236 | Heteroatom Doping in Nanocarbon and Its Applications. <b>2022</b> , 61-81  | О |
|-----|--|---|
| 235 | Advanced carbon-based nanostructured materials for fuel cells. <b>2022</b> , 201-227   |   |
| 234 | In Situ Synthesis of Fe/N Co-Doped Carbonaceous Nanocomposites Using Biogas Residue as an Effective Persulfate Activator for Remediation of Aged Petroleum Contaminated Soils.               |   |
| 233 | N-doped graphitized carbon supported Co@Ru coreShell bimetallic catalyst for hydrogen storage of N-ethylcarbazole.   | O |
| 232 | Lialo2 Supported Melamine for Efficient and Rapid Iodine Capture.  |   |
| 231 | Nitrogen and sulfur co-doped carbon dot-based ratiometric fluorescent probe for Zn sensing and imaging in living cells <b>2022</b> , 189, 107  | O |
| 230 | Unravelling the origin of the capacitance in nanostructured nitrogen-doped carbon - NiO hybrid electrodes deposited with laser. <b>2022</b> ,  | 0 |
| 229 | Fabricating N, S Co-Doped Hierarchical Macro-Meso-Micro Carbon Materials as pH-Universal ORR Electrocatalysts**. <b>2022</b> , 7,  | 1 |
| 228 | MXene (Ti 3 C 2 T x )-Supported Binary Co-, Zn-Doped Carbon as Oxygen Reduction Reaction Catalyst for Anion Exchange Membrane Fuel Cells. 2101168  | 1 |
| 227 | Three-dimensional N-doped carbon nanotube/graphene composite aerogel anode to develop high-power microbial fuel cell.  | 2 |
| 226 | One-step Synthesis of Biomass-Based Carbon Dots for Detection of Metal Ions and Cell Imaging. <b>2022</b> , 10,  | 0 |
| 225 | Preparation and Recycling of High-Performance Carbon Nanotube Films. <b>2022</b> , 10, 3851-3861   | 1 |
| 224 | Boosting photocharge separation in Z-schemed g-C3N4/RGO/ln2S3 photocatalyst for H2 evolution and antibiotic degradation. <b>2022</b> ,   | О |
| 223 | N-doped hollow porous carbon microspheres with high late performance as anode for sodium-ion batteries. <b>2022</b> , 33, 7913-7922  | O |
| 222 | Preparation and Characterization of Multi-Doped Porous Carbon Nanofibers from Carbonization in Different Atmospheres and Their Oxygen Electrocatalytic Properties Research <b>2022</b> , 12, | 1 |
| 221 | Synthesis of Ag@GQD and their application in photoacoustic imaging and chemical/photothermal combination therapy and bacteriostasis. <b>2022</b> , 57, 7056-7067                             | O |
| 220 | Pd nanoparticles decorated ZIFs/polymer core-shell nanofibers derived hierarchically porous N-doped carbon for efficient catalytic conversion of phenol. <b>2022</b> , 634, 118538           | 3 |
| 219 | Electrochemical Thin-Film Transistors using Covalent Organic Framework Channel. 2201120  | 2 |

 ${\tt 218}$   $\,$  The facile fabrication of Li3VO4/N-doped graphene hybrid for superior lithium storage.

| 217 | N-doped activated carbon for high-efficiency ofloxacin adsorption. <b>2022</b> , 335, 111848  | 2 |
|-----|---|---|
| 216 | Design and synthesis of core-shell structure 3D-graphene/Fe3O4@N-C composite derived from Fe-MOF as lightweight microwave absorber. <b>2022</b> , 124, 108941   | O |
| 215 | Three-Dimensional Porous Carbon/Nitrogen Framework-Decorated Palladium Nanoparticles for Stable and Wide-Concentration-Range Hydrogen Sensing <b>2022</b> ,   | 1 |
| 214 | Acid-base bifunctional catalyst with coordinatively unsaturated cobalt-nitrogen sites for the simultaneous conversion of microalgal triglycerides and free fatty acids into biodiesel <b>2022</b> , 126862  | О |
| 213 | Dual-carbon materials coated Ge/Si composite for high performance lithium-ion batteries. <b>2022</b> , 140337   | 1 |
| 212 | Enhanced in-situ electrosynthesis of hydrogen peroxide on a modified active carbon fiber prepared through response surface methodology. <b>2022</b> , 912, 116241   |   |
| 211 | 2,2?-bipyridine palladium (II) complexes derived N-doped carbon encapsulated palladium nanoparticles for formic acid oxidation. <b>2022</b> , 413, 140179   | O |
| 210 | Preparation of g-C3N4/CNTs composite by dissolution-precipitation method as sulfur host for high-performance lithium-sulfur batteries. <b>2022</b> , 283, 126014  | 0 |
| 209 | Ionic liquid-assisted preparation of N, S-rich carbon dots as efficient corrosion inhibitors. <b>2022</b> , 356, 118943   | O |
| 208 | Theoretical evaluation and experimental design of nitrogen doped porous carbon from Cu-based metal-organic frameworks for lithium-ion batteries. <b>2022</b> , 30, 101851   |   |
| 207 | Hydrogenolysis of cornstalk lignin in supercritical ethanol over N-doped micro-mesoporous biochar supported Ru catalyst. <b>2022</b> , 231, 107218  | 2 |
| 206 | Degradation of mixed cationic dye pollutant by metal free melem derivatives and graphitic carbon nitride <b>2022</b> , 134249   | 1 |
| 205 | Seeking eye protection from biomass: Carbon dot-based optical blocking films with adjustable levels of blue light blocking <b>2022</b> , 617, 44-52   | 1 |
| 204 | Flower-like nickel-cobalt-layered double hydroxide nanosheets deposited on hierarchically porous graphitic carbon nitride for enhanced electrochemical energy storage. <b>2022</b> , 51, 104541   | 0 |
| 203 | Sludge-derived biochar toward sustainable Peroxymonosulfate Activation: Regulation of active sites and synergistic production of reaction oxygen species. <b>2022</b> , 440, 135897   | 1 |
| 202 | Ionic liquid-derived FeCo alloys encapsulated in nitrogen-doped carbon framework as advanced bifunctional catalysts for rechargeable Zn-air batteries. <b>2022</b> , 908, 164565  | 6 |
| 201 | Self-Assembled Silver Nanoparticles Decorated on Exfoliated Graphitic Carbon Nitride/Carbon Sphere Nanocomposites as a Novel Catalyst for Catalytic Reduction of Cr(VI) to Cr(III) from Wastewater and Reuse for Photocatalytic Applications <b>2021</b> , 6, 35221-35243 | 1 |

| 200                             | Synthesis of turbostratic nanoscale graphene via chamber detonation of oxygen/acetylene mixtures.   | 1 |
|---------------------------------|---|---|
| 199                             | Porous Carbon Nanofibers Derived from Silk Fibroin through Electrospinning as N-Doped Metal-Free Catalysts for Hydrogen Evolution Reaction in Acidic and Alkaline Solutions <b>2021</b> ,   | 1 |
| 198                             | Fe3C coupled with Fe-Nx supported on N-doped carbon as oxygen reduction catalyst for assembling Zn-air battery to drive water splitting. <b>2021</b> ,  | 2 |
| 197                             | Synergetic Effects of Mixed-Metal Polyoxometalates@Carbon-Based Composites as Electrocatalysts for the Oxygen Reduction and the Oxygen Evolution Reactions. <b>2022</b> , 12, 440   | 0 |
| 196                             | Nitrogen-doping effects on few-layer graphene as an anode material for Lithium-ion batteries. <b>2022</b> , 103498  | 1 |
| 195                             | Catalytic oxidation of pentanethiol on basic nitrogen doped carbon hollow spheres derived from waste tires. <b>2022</b> ,   |   |
| 194                             | Table_1.DOC. <b>2019</b> ,  |   |
| 193                             | Presentation1.PDF. 2018,  |   |
| 192                             | Table_1.docx. <b>2020</b> ,   |   |
|                                 |   |   |
| 191                             | Data_Sheet_1.doc. <b>2020</b> ,   |   |
| 191<br>190                      | Data_Sheet_1.doc. 2020,  Graphdiyne (G-Cnh2n-2) Based Co3s4 Anchoring and Edge-Covalently Modification Coupled with Carbon-Defects G-C3n4 for Photocatalytic Hydrogen Production.   |   |
|                                 | Graphdiyne (G-Cnh2n-2) Based Co3s4 Anchoring and Edge-Covalently Modification Coupled with  |   |
| 190                             | Graphdiyne (G-Cnh2n-2) Based Co3s4 Anchoring and Edge-Covalently Modification Coupled with Carbon-Defects G-C3n4 for Photocatalytic Hydrogen Production.  |   |
| 190<br>189                      | Graphdiyne (G-Cnh2n-2) Based Co3s4 Anchoring and Edge-Covalently Modification Coupled with Carbon-Defects G-C3n4 for Photocatalytic Hydrogen Production.  In-Situ Synthesis and Assembly of Acid Nanospheres in Wood to Promote Flame Retardation.  Ultra-High Voltage Efficiency Rechargeable Zinc-Air Battery Based on High-Performance Structurally Regulated Metal-Rich Nickel Phosphides and Carbon Hybrids Bifunctional   |   |
| 190<br>189<br>188               | Graphdiyne (G-Cnh2n-2) Based Co3s4 Anchoring and Edge-Covalently Modification Coupled with Carbon-Defects G-C3n4 for Photocatalytic Hydrogen Production.  In-Situ Synthesis and Assembly of Acid Nanospheres in Wood to Promote Flame Retardation.  Ultra-High Voltage Efficiency Rechargeable Zinc-Air Battery Based on High-Performance Structurally Regulated Metal-Rich Nickel Phosphides and Carbon Hybrids Bifunctional Electrocatalysts.  Nitrogen-doped 3D hollow carbon spheres for efficient selective oxidation of CH bonds under  |   |
| 190<br>189<br>188               | Graphdiyne (G-Cnh2n-2) Based Co3s4 Anchoring and Edge-Covalently Modification Coupled with Carbon-Defects G-C3n4 for Photocatalytic Hydrogen Production.  In-Situ Synthesis and Assembly of Acid Nanospheres in Wood to Promote Flame Retardation.  Ultra-High Voltage Efficiency Rechargeable Zinc-Air Battery Based on High-Performance Structurally Regulated Metal-Rich Nickel Phosphides and Carbon Hybrids Bifunctional Electrocatalysts.  Nitrogen-doped 3D hollow carbon spheres for efficient selective oxidation of CH bonds under mild conditions.   | 1 |
| 190<br>189<br>188<br>187<br>186 | Graphdiyne (G-Cnh2n-2) Based Co3s4 Anchoring and Edge-Covalently Modification Coupled with Carbon-Defects G-C3n4 for Photocatalytic Hydrogen Production.  In-Situ Synthesis and Assembly of Acid Nanospheres in Wood to Promote Flame Retardation.  Ultra-High Voltage Efficiency Rechargeable Zinc-Air Battery Based on High-Performance Structurally Regulated Metal-Rich Nickel Phosphides and Carbon Hybrids Bifunctional Electrocatalysts.  Nitrogen-doped 3D hollow carbon spheres for efficient selective oxidation of CH bonds under mild conditions.  Structures, properties, and applications of nitrogen-doped graphene. 2022, 211-248  Salt-assisted Pyrolysis of Covalent Organic Framework for Controlled Active Nitrogen | 1 |

| 182 | Synthesis of Pure Thiophene-Sulfur-Doped Graphene for an Oxygen Reduction Reaction with High Performance <b>2022</b> , 4350-4356  | O |
|-----|---|---|
| 181 | High specific surface area N-doped activated carbon from hydrothermal carbonization of shaddock peel for the removal of norfloxacin from aqueous solution.  | О |
| 180 | Outlining Key Perspectives for the Advancement of Electrocatalytic Remediation of Nitrate from Polluted Waters. <b>2022</b> , 2, 746-768  | 1 |
| 179 | LiAlO2-melamine for efficient and rapid iodine capture. <b>2022</b> , 107842  | Ο |
| 178 | Hydrogen peroxide generation from gas diffusion electrode for electrochemical degradation of organic pollutants in water: A review. <b>2022</b> , 107882  | 0 |
| 177 | The ORR activity of nitrogen doped-reduced graphene oxide below decomposition temperature cooperated with cobalt prepared by strong electrostatic adsorption technique. <b>2022</b> , 915, 116366       | O |
| 176 | N-doped graphene modulated N-rich carbon nitride realizing a promising all-solid-state flexible supercapacitor. <b>2022</b> , 52, 104731  | 1 |
| 175 | In situ synthesis of Fe-N co-doped carbonaceous nanocomposites using biogas residue as an effective persulfate activator for remediation of aged petroleum contaminated soils <b>2022</b> , 435, 128963 | 2 |
| 174 | High areal capacity sodium-ion battery anode enabled by free-standing red phosphorus@N-doped graphene/CNTs aerogel.   | 0 |
| 173 | PdCo Alloy Supported on a ZIF-Derived N-Doped Carbon Hollow Polyhedron for Dehydrogenation of Ammonia Borane.   | 2 |
| 172 | Electrochemical Reduction of CO2 on Copper-Based Electrocatalyst Supported on MWCNTs with Different Functional Groups.  | 2 |
| 171 | Ionothermal synthesis of carbon dots from cellulose in deep eutectic Solvent: A sensitive probe for detecting Cu2+ and glutathione with Dff-on[pattern. <b>2022</b> , 153705                            | 2 |
| 170 | Thermo-catalytic conversion of waste plastics into surrogate fuels over spherical activated carbon of long-life durability. <b>2022</b> , 148, 1-11   | 0 |
| 169 | Electrocatalysis Based on Carbon Composite Catalysts. <b>2022</b> , 371-405   |   |
| 168 | Surface Plasmon-Enhanced Electrochemiluminescence of P, N-Doped Carbon Dots for Ultrasensitive Detection of Braf Gene.  |   |
| 167 | Nitrogen Doped Vanadium Oxide (Alvo-N) as Cathode for Zinc Ion Battery with High Stability and High Rate Performance.   |   |
| 166 | Nitrogen-Rich Carbonaceous Materials for Advanced Oxygen Electrocatalysis: Synthesis, Characterization, and Activity of Nitrogen Sites. 2204137   | 4 |
| 165 | Synthesis of Holmium-Oxide Nanoparticles for Near-Infrared Imaging and Dye-Photodegradation. <b>2022</b> , 27, 3522   |   |

| 164 | A heterostructured ZnAl-LDH@ZIF-8 hybrid as a bifunctional photocatalyst/adsorbent for CO2 reduction under visible light irradiation. <b>2022</b> , 137003                                 | 1 |
|-----|--|---|
| 163 | Room-temperature nitrogen dioxide gas sensor based on graphene oxide nanoribbons decorated with MoS2 nanospheres. <b>2022</b> , 128,   | Ο |
| 162 | Design and synthesis of highly efficient Nitrogen-doped carbon nano-onions for asymmetric supercapacitors. <b>2022</b> , 165609  | 1 |
| 161 | Study on the photothermal performance of supra-(carbon nanodots) developed with dicyandiamide N-doped. <b>2022</b> , 648, 129346   | O |
| 160 | Aqueous-phase hydrogenation of ⊕inene catalyzed by Ni-B alloys loaded on a Janus amphiphilic carbon@silica nanomaterial. <b>2022</b> , 185, 115140   | 2 |
| 159 | Unzipping MWCNTs for controlled edge- and heteroatom-defects in revealing their roles in gas-phase oxidative dehydrogenation of ethanol to acetaldehyde. <b>2022</b> , 446, 137150         | 1 |
| 158 | Fe/Cu Bimetal Mof-Derived Nitrogen-Doped Cathode for Efficient Degradation of Ceftazidime from Aqueous Solution Via Electro-Fenton: Fabrication, Characterization and Degradation Pathway. |   |
| 157 | Oxygen reduction reaction by metal-free catalysts. <b>2022</b> , 241-275   |   |
| 156 | Fluorine-doped graphene as triboelectric material.   | О |
| 155 | High-Quality N-Doped Graphene with Controllable Nitrogen Bonding Configurations Derived from Ionic Liquids.  |   |
| 154 | Anodic corrosion of heteroatom doped graphene oxide supports and its influence on the electrocatalytic oxygen evolution reaction. <b>2022</b> , 47, 22738-22751                            | 2 |
| 153 | Mechanism and efficiency research of P- and N-codoped graphene for enhanced paracetamol electrocatalytic degradation.  | Ο |
| 152 | Electrochemical grafting of a pyridinium-conjugated assembly on graphite for H2O2 electrochemical production.  |   |
| 151 | Hollow hydrangea-like nitrogen-doped NiO/Ni/carbon composites as lightweight and highly efficient electromagnetic wave absorbers.  | 1 |
| 150 | Facile synthesis of S-doped LiFePO4@N/S-doped carbon core-shell structured composites for lithium-ion batteries.   | 1 |
| 149 | Pb3(OH)2(CO3)2-Acetylene Black Composites for Enhanced Hydrogen Evolution Reaction Inhibition of Lead-Acid Batteries.  |   |
| 148 | Metal-Free Carbon-Based Nanomaterials: Fuel Cell Applications as Electrocatalysts. <b>2022</b> , 73-139  |   |
| 147 | Graphitic carbon nitride on reduced graphene oxide prepared via semi-closed pyrolysis as electrocatalyst for oxygen reduction reaction. <b>2022</b> , 288, 126415                          | O |

| 146                      | Supramolecular confinement pyrolysis to carbon-supported Mo nanostructures spanning four scales for hydroquinone determination. <b>2022</b> , 437, 129327  | O           |
|--------------------------|--|-------------|
| 145                      | Transfer- and lithography-free CVD of N-doped graphenic carbon thin films on non-metal substrates. <b>2022</b> , 154, 111943   |             |
| 144                      | Photocatalytic and photo-electrochemical ammonia synthesis over dimensional oriented cobalt titanate/nitrogen-doped reduced graphene oxide junction interface catalyst. <b>2022</b> , 625, 83-99   | 1           |
| 143                      | Carbon nitride photocatalysts for water treatment and purification. <b>2022</b> , 137-174  |             |
| 142                      | Inner Wrinkled Mesoporous Hollow Carbon Spheres with Nanopillars Connected to Double Shells for Excellent Potassium Storage.   |             |
| 141                      | Inner Wrinkled Mesoporous Hollow Carbon Spheres with Nanopillars Connected to Double Shells for Excellent Potassium Storage.   |             |
| 140                      | Temperature-Dependent Properties of Graphene on SiC Substrates for Triboelectric Nanogenerators. 9,  |             |
| 139                      | Solid Carbon Spheres with Interconnected Open Pore Channels Enabling High-Efficient Polysulfide Conversion for High-Rate LithiumBulfur Batteries.  | O           |
| 138                      | One-Pot Synthesis of LiFePO4/N-Doped C Composite Cathodes for Li-ion Batteries. <b>2022</b> , 15, 4738   | 1           |
|                          |  |             |
| 137                      | Stable Co/N-Doped Carbon Nanotubes as Catalysts for Oxygen Reduction.  | O           |
| 137                      | Stable Co/N-Doped Carbon Nanotubes as Catalysts for Oxygen Reduction.  Electric Field Polarized Fe® Functionalized Graphene Oxide Nanosheet Catalyst for Efficient Oxygen Reduction Reaction. 2022, 7,   | 0           |
|                          | Electric Field Polarized Fe® Functionalized Graphene Oxide Nanosheet Catalyst for Efficient  | 5           |
| 136                      | Electric Field Polarized FeN Functionalized Graphene Oxide Nanosheet Catalyst for Efficient Oxygen Reduction Reaction. <b>2022</b> , 7,  Graphdiyne (g-CnH2n-2) based Co3S4 anchoring and edge-covalently modification coupled with  |             |
| 136<br>135               | Electric Field Polarized Fe® Functionalized Graphene Oxide Nanosheet Catalyst for Efficient Oxygen Reduction Reaction. 2022, 7,  Graphdiyne (g-CnH2n-2) based Co3S4 anchoring and edge-covalently modification coupled with carbon-defects g-C3N4 for photocatalytic hydrogen production. 2022, 298, 121564  Surface plasmon-enhanced electrochemiluminescence of P, N-doped carbon dots for ultrasensitive  | 5           |
| 136<br>135<br>134        | Electric Field Polarized FeN Functionalized Graphene Oxide Nanosheet Catalyst for Efficient Oxygen Reduction Reaction. 2022, 7,  Graphdiyne (g-CnH2n-2) based Co3S4 anchoring and edge-covalently modification coupled with carbon-defects g-C3N4 for photocatalytic hydrogen production. 2022, 298, 121564  Surface plasmon-enhanced electrochemiluminescence of P, N-doped carbon dots for ultrasensitive detection of BRAF gene. 2022, 369, 132288  Stable magnetic CoZn/N-doped polyhedron with self-generating carbon nanotubes for highly  | 5           |
| 136<br>135<br>134        | Electric Field Polarized FeN Functionalized Graphene Oxide Nanosheet Catalyst for Efficient Oxygen Reduction Reaction. 2022, 7,  Graphdiyne (g-CnH2n-2) based Co3S4 anchoring and edge-covalently modification coupled with carbon-defects g-C3N4 for photocatalytic hydrogen production. 2022, 298, 121564  Surface plasmon-enhanced electrochemiluminescence of P, N-doped carbon dots for ultrasensitive detection of BRAF gene. 2022, 369, 132288  Stable magnetic CoZn/N-doped polyhedron with self-generating carbon nanotubes for highly efficient removal of bisphenols from complex wastewaters. 2022, 439, 129584  Exploring the interfacial polarization in poly(vinylidene fluoride-chlorotrifluoroethylene) dielectric  | 2           |
| 136<br>135<br>134<br>133 | Electric Field Polarized Feß Functionalized Graphene Oxide Nanosheet Catalyst for Efficient Oxygen Reduction Reaction. 2022, 7,  Graphdiyne (g-CnH2n-2) based Co3S4 anchoring and edge-covalently modification coupled with carbon-defects g-C3N4 for photocatalytic hydrogen production. 2022, 298, 121564  Surface plasmon-enhanced electrochemiluminescence of P, N-doped carbon dots for ultrasensitive detection of BRAF gene. 2022, 369, 132288  Stable magnetic CoZn/N-doped polyhedron with self-generating carbon nanotubes for highly efficient removal of bisphenols from complex wastewaters. 2022, 439, 129584  Exploring the interfacial polarization in poly(vinylidene fluoride-chlorotrifluoroethylene) dielectric film with regulated surface conductivity of C@BT particles. 2022, 600, 154113  The nitrogen-doped carbon coated Na4MnV(PO4)3 as a high electrochemical performance cathode | 5<br>2<br>1 |

| 128 | N-Doped Graphene Aerogels Decorated by MoS2 Nanoflowers for Steam Generation under Low Solar Flux.  | 1 |
|-----|---|---|
| 127 | Atomically Dispersed FeN5 Sites Anchored on 3D N-Doped Porous Carbon for Efficient Selective Oxidation of Aromatic Alkanes at Room Temperature.   | O |
| 126 | Investigation of fluorescence enhancement and antibacterial properties of nitrogen-doped carbonized polymer nanomaterials (N-CPNs). 1-13  | 0 |
| 125 | In situ induced cation-vacancies in metal sulfides as dynamic electrocatalyst accelerating polysulfides conversion for Li-S battery. <b>2022</b> ,                                      | 1 |
| 124 | Robust C-PdNi-CNF Sandwich-Structured Catalyst for Suzuki Reactions and Experimental Study on the Mechanism.  |   |
| 123 | Two birds with one stone: Engineering polymeric carbon nitride with n-⊞ electronic transition for extended light absorption and reduced charge recombination. <b>2022</b> , 100077      | O |
| 122 | Tuning electron delocalization and surface area in COFs derived N, B co-doped carbon materials for efficient selective hydrogenation of nitroarenes. <b>2022</b> , 107770               |   |
| 121 | Pollen Carbon-Based Rare-Earth Composite Material for Highly Efficient Photocatalytic Hydrogen Production from EthanolWater Mixtures.   | 1 |
| 120 | Single-Atomic Iron Doped Carbon Dots with Both Photoluminescence and Oxidase-Like Activity. 2203001   | 5 |
| 119 | Enhanced nitrogen doping in porous carbon and its composite with MnO2 as an efficient oxygen reduction catalyst for MgBir batteries.  | O |
| 118 | Graphene-based lithium-ion battery anode materials manufactured by mechanochemical ball milling process: A review and perspective. <b>2022</b> , 110232                                 | 3 |
| 117 | Dependence of Precursor Graphite Flake Size on Nitrogen Doping in Graphene Oxide and Its Effect on OER Catalytic Activity. <b>2022</b> , 7, 29287-29296                                 | O |
| 116 | Influence of growth parameters on the dopant configuration of nitrogen-doped graphene synthesized from phthalocyanine molecules. <b>2022</b> , 33, 19361-19375                          |   |
| 115 | The role of surface and structural functionalisation on graphene adsorbent nanomaterial for CO2 adsorption application: Recent progress and future prospects. <b>2022</b> , 167, 112840 |   |
| 114 | Palladium-MXenes aerogel decorated by alkyne functionalized polyvinyl alcohol (PVA) as a highly efficient catalyst for electrocatalytic hydrogen evolution. <b>2022</b> , 805, 139942   |   |
| 113 | Inner wrinkled mesoporous hollow carbon spheres with nanopillars connected to double shells for excellent potassium storage. <b>2022</b> , 200, 236-246                                 |   |
| 112 | Multicolor carbon dots assembled polyvinyl alcohol with enhanced emission for white light-emitting diode. <b>2022</b> , 251, 119164   | О |
| 111 | Heteroatom doping effect of Pt/rGO catalysts for formaldehyde abatement at ambient temperature. <b>2022</b> , 5, 100103   | О |

| 110 | Enhanced photocatalytic splitting of photothermally induced water vapor to evolve hydrogen. <b>2022</b> , 450, 138419   | 0  |
|-----|---|----|
| 109 | ZIF-8-derived N-doped porous carbon wrapped in porous carbon films as an air cathode for flexible solid-state Zn-air batteries. <b>2022</b> , 628, 691-700  | 1  |
| 108 | Oxidation States Regulation of Cobalt Active Sites through Crystal Surface Engineering for Enhanced Polysulfide Conversion in LithiumBulfur Batteries. 2202352  | 0  |
| 107 | Promotion of tetracycline degradation by electro-Fenton: Controlling the reaction zone by N-doped modified activated carbon cathode. <b>2022</b> , 370, 133524  | O  |
| 106 | ZIF-12-derived N-doped Fe/Co/S/@C nanoparticles as high-performance composite anode electrode materials for lithium-ion batteries. <b>2022</b> , 928, 167037  | О  |
| 105 | Nanotubular g-C3N4 confining AuPd particle for the improved catalytic reactivity in hydrogen production from formic acid. <b>2022</b> , 26, 101140  | O  |
| 104 | Spherical NiCo2S4 wrapped with nitrogen-doped carbon as ultra-fast/high lithium storage materials. <b>2022</b> , 927, 167067  | 0  |
| 103 | N/B co-doped polymeric carbon nitride with boosted charge transfer property and enhanced photocatalytic degradation of tetracycline. <b>2022</b> , 604, 154655  | O  |
| 102 | Enhanced sorption of carbonyl groups by zirconium hydroxide modified with polydopamine for highly selective production of alcohols via MPV reduction under mild conditions. <b>2023</b> , 331, 125786                 | О  |
| 101 | High Fluorescent N-Doped Carbon Dots Derived from Sanghuangporus Lonicericola for Detecting Tetracyclines in Aquaculture Water and Rat Serum Samples.   | О  |
| 100 | Strategic design of Fe and N co-doped hierarchically porous carbon as superior ORR catalyst: from the perspective of nanoarchitectonics. <b>2022</b> , 13, 10836-10845  | 14 |
| 99  | Influence of the Reducing Agent on the Physicochemical and Electrocatalytic Properties of Graphene-Based Aerogels.  | O  |
| 98  | Molecular firefighting biocomposites for plastic life-cycle management: fabrication, use and upcycling. <b>2022</b> , 24, 7531-7544   | 1  |
| 97  | Single atomic Fe-pyridine N catalyst with dense active sites improve bifunctional electrocatalyst activity for rechargeable and flexible Zn-air batteries.  | 3  |
| 96  | Heterogeneous Ni3P/Ni nanoparticles with optimized Ni active sites anchored in N-doped mesoporous nanofibers for boosting pH-universal hydrogen evolution.  | 0  |
| 95  | Ultra-high voltage efficiency rechargeable zinc-air battery based on high-performance structurally regulated metal-rich nickel phosphides and carbon hybrids bifunctional electrocatalysts. <b>2023</b> , 321, 122041 | O  |
| 94  | Structural Manipulation of 3D Graphene-Based Macrostructures for Water Purification. 2022, 8, 622   | O  |
| 93  | Obtaining N-Enriched Mesoporous Carbon-Based by Means of Gamma Radiation. <b>2022</b> , 12, 3156  | O  |

| 92 | Insight into the Evolution of Ordered Mesoporous sp2 Carbonaceous Material Derived from Self-Assembly of a Block Copolymer. <b>2022</b> , 14, 43690-43700   | 1 |
|----|---|---|
| 91 | Pd-Decorated Hierarchically Porous Carbon Nanofibers for Enhanced Selective Hydrogenation of Phenol. <b>2022</b> , 61, 13416-13430  | O |
| 90 | N-doped fiber anchoring PdNi nanoparticles and catalyzing Suzuki reaction. 1-11   | O |
| 89 | Vertical Growth of 2D Covalent Organic Framework Nanoplatelets on Macroporous Scaffold for<br>High-Performance Electrodes. 2204250  | 2 |
| 88 | Preparation of N-doped porous carbon nanofibers derived from their phenolic-resin-based analogues for high performance supercapacitor. <b>2022</b> , 116869   | O |
| 87 | Metal-Free and Additive-Free Synthesis of Imides and Nitriles from Ketones via Oxidative Cleavage of C(O)II Bonds. 13300-13311  | O |
| 86 | Fabrication of a Heterojunction by Coupling a Metal®rganic Framework and N-Doped Carbon for the Photocatalytic Removal of Antibiotic Drugs with High Efficiency. <b>2022</b> , 38, 12968-12980        | O |
| 85 | Selective Phosphorus Removal from Wastewater Using Graphene Aerogel Loaded with Ferrocene-Polyaniline: Synergetic Adsorption and Electrochemically Mediated Oxidation.                                | O |
| 84 | Regulating The Shell Thickness of Nitrogen-Doped Hollow Carbon Nanospheres for Enhanced Electrochemical Performance. <b>2022</b> ,  | O |
| 83 | Influence of the reducing agent on the physicochemical and electrocatalytic properties of graphene-based aerogels. <b>2022</b> , 36, 100435   | O |
| 82 | 3D N-doped graphene aerogel sponge-loaded CoS2 co-catalytic Fenton system for ciprofloxacin degradation. <b>2022</b> , 135008   | O |
| 81 | Preparation of magnetic N-doped iron sludge based biochar and its potential for persulfate activation and tetracycline degradation. <b>2022</b> , 378, 134519   | O |
| 80 | In-situ synthesis and assembly of nanospheres (Py1H2PW, Py2H1PW, and Py3PW) in wood to promote flame retardation. <b>2022</b> , 189, 115875   | О |
| 79 | Construction of Mo-MOF-derived molybdenum dioxide on carbon nanotubes with tunable nitrogen content and particle size for oxidative desulfurization. <b>2023</b> , 239, 107526                        | 1 |
| 78 | Catalysis-involved 3D N-doped graphene aerogel achieves a superior solar water purification rate and efficiency. <b>2023</b> , 453, 139793  | 1 |
| 77 | A bio-based adhesive reinforced with functionalized nanomaterials to build multiple strong and weak cross-linked networks with high strength and excellent mold resistance. <b>2023</b> , 453, 139761 | 1 |
| 76 | Ultrafast degradation of emerging organic pollutants via activation of peroxymonosulfate over Fe3C/Fe@N-C-x: Singlet oxygen evolution and electron-transfer mechanisms. <b>2023</b> , 321, 122034     | 2 |
| 75 | Nitrogen-doped magnetic porous carbon material from low-cost anion-exchange resin as an efficient adsorbent for tetracyclines in water.   | O |

| 74 | Uncovering the optimal pyrolysis temperature of NH2-MIL-88B-derived FeOX/Fe@porous carbon composites for the ultrasensitive electrochemical detection of baicalin in natural plant samples. <b>2022</b> , | 1 |
|----|---|---|
| 73 | Ultrathin Bi2Se3/Graphene Derived from Bi-based Metal-Organic-Framework as Superior Electrode Material for Sodium-Ion Storage. <b>2022</b> , 133542   | Ο |
| 72 | Nitrogen doped vanadium oxide (AlVO-N) as cathode for zinc ion battery with high stability and high rate performance. <b>2022</b> , 116997  | O |
| 71 | A molecular strategy to Ni45Pt55@NC nanoparticles as efficient and robust Electrocatalyst for hydrogen evolution reaction. <b>2023</b> , 983, 122558  | O |
| 70 | Probing the electronic properties of chemically synthesised doped and undoped graphene derivative. <b>2023</b> , 287, 116145  | O |
| 69 | Improved electrochemical performance of SBA-15 based SiO2 anodes with N-doping porous carbon. <b>2023</b> , 928, 117019   | O |
| 68 | Scalable production of reduced graphene oxide via biowaste valorisation: an efficient oxygen reduction reaction towards metal-free electrocatalysis.  | 0 |
| 67 | Toward strategical bottom-up synthesis of carbon materials with exceptionally high basal-nitrogen content: Development of screening techniques. <b>2023</b> , 203, 498-522                                | Ο |
| 66 | Ultralight, Superhydrophobic, Low-cost Nitrogen-doped Graphene Aerogels with ⊞oneycomb□ Porous Structure for Efficient Oil Removal.   | 0 |
| 65 | Atomically dispersed FeN4 moieties in porous carbon as efficient cathode catalyst for enhancing the performance in microbial fuel cells. <b>2023</b> , 556, 232434  | O |
| 64 | Promotion of O2 activation by ZIF-8 derived N-rich aluminum-graphite (Al-Gr-NPC) composite for non-radical degradation of antibiotic at neutral pH. <b>2023</b> , 308, 122806                             | 0 |
| 63 | O-hetero-Fe-N3.6 active sites in ZIF-derived carbon nanotubes for the electrocatalytic oxygen evolution reaction. <b>2022</b> , 140694  | O |
| 62 | In situ synthesis and self-assembly of acid nanospheres with anti-leach properties for the development of fire-resistant wood. <b>2022</b> ,  | 0 |
| 61 | Graphene-based flame-retardant polyurethane: a critical review.   | O |
| 60 | Rational design of nitrogen-doped carbon nanotubes by defect engineering for Zn-air batteries with high performance. <b>2022</b> ,  | 0 |
| 59 | Isometric Covalent Triazine Frameworks Derived Porous Carbons as Efficient Metal-Free<br>Electrocatalysts for Oxygen Reduction Reactions.   | O |
| 58 | Melamine-derived carbon foam-supported graphenetoNi nanocomposites as high-performance OER / HER bifunctional electrocatalysts.   | О |
| 57 | Electrochemical Performance and Conductivity of N-Doped Carbon Nanotubes Annealed under Various Temperatures as Cathode for Lithium-Ion Batteries. <b>2022</b> , 12, 2166                                 | O |

| 56 | Investigating the Diversity of Coordination Environments around Pt Atoms.  | O |
|----|--|---|
| 55 | Incorporation of Fluorescent Carbon Quantum Dots into Metal®rganic Frameworks with Peroxidase-Mimicking Activity for High-Performance Ratiometric Fluorescent Biosensing.  | O |
| 54 | N-doped graphitic carbon encapsulating cobalt nanoparticles derived from novel metal <b>b</b> rganic frameworks for electrocatalytic oxygen evolution reaction. <b>2022</b> , 108056   | О |
| 53 | Modulating the in-plane local charge density of graphene via carbon quantum dots for enhanced triiodide reduction.   | O |
| 52 | Novel Preoxidation-Assisted Mechanism to Preciously Form and Disperse Bi2O3 Nanodots in Carbon Nanofibers for Ultralong-Life and High-Rate Sodium Storage. <b>2023</b> , 15, 1891-1902   | O |
| 51 | Synthetic porous carbons for clean energy storage and conversion. <b>2023</b> , 100099   | O |
| 50 | Fe-Trimesic Acid/Melamine Gel-Derived Fe/N-Doped Carbon Nanotubes as Catalyst of Peroxymonosulfate to Remove Sulfamethazine. <b>2023</b> , 15, 381   | О |
| 49 | Accelerating Photocatalytic Degradation of Pollutants by Electrochemical Capacitive Co3O4/TiO2<br>Nanopine Arrays. <b>2023</b> , 109298  | O |
| 48 | Fabrication of carbon nanotubes with rich Pyridinic nitrogen in H2/Ar atmosphere for efficient electroreduction of CO2 to CO. <b>2023</b> , 132, 109667  | O |
| 47 | Efficient degradation of levofloxacin using a g-C3N4@glucose-derived carbon catalyst with adjustable N content via peroxymonosulfate activation. <b>2023</b> , 314, 137684   | O |
| 46 | FeCoS2/Co4S3/N-doped graphene composite as efficient electrocatalysts for overall water splitting. <b>2023</b> , 441, 141790   | О |
| 45 | Nonmetallic N/C Nanozyme Performs Continuous Consumption of Glu for Inhibition of Colorectal Cancer Cells. <b>2023</b> , 6, 267-276  | O |
| 44 | Comprehensive Review on Nitrogen-Doped Graphene: Structure Characterization, Growth Strategy, and Capacitive Energy Storage. <b>2023</b> , 37, 902-918   | O |
| 43 | Oxynitride Amorphous Carbon Layer for Electrically and Thermally Robust Bipolar Resistive Switching. 2201090   | O |
| 42 | External Electric Field-Assisted Electronic Restructuring of Transition Metal Oxides Derived from Spent Lithium-Ion Batteries to Enhance Persulfate Activationexternal Electric Field-Assisted Electronic Restructuring of Transition Metal Oxides Derived from Spent Lithium-Ion Batteries to | O |
| 41 | Enhance Persulfate Activation.  New insight into the synergy of nitrogen-related sites on biochar surface for sulfamethoxazole adsorption from water. <b>2023</b> , 108159   | O |
| 40 | Graphitic carbon nitride: An uprising carbonaceous material. 2023, 1-14  | О |
| 39 | Carbon quantum dots aqueous solution as electrolyte for H2O2 production based on photoelectrochemical water splitting.   | O |

| 38 | Electronic Properties of Graphene Nanoribbons Doped with Pyrrole-Like Nitrogen. 2022, 56, 406-410   | O |
|----|---|---|
| 37 | Dynamically Reversible Interconversion of Molecular Catalysts for Efficient Electrooxidation of Propylene into Propylene Glycol.  | O |
| 36 | Nitrogen doped carbon layer of LiFePO4 improve the electrochemical performance for lithium ion batteries.   | О |
| 35 | Modification of graphene with nitrogen and oxygen via radical reactions with simple mechanical treatment. <b>2023</b> , 135, 109857   | O |
| 34 | High fluorescent nitrogen doped carbon dots derived from Sanghuangporus lonicericola for detecting tetracyclines in aquaculture water and rat serum samples. <b>2023</b> , 189, 108517  | 0 |
| 33 | Energy storage enhancement of LixMn1.8Ti0.2O4@N-doped graphene oxide in organic and ionic liquid electrolytes. <b>2023</b> , 449, 142210  | O |
| 32 | Generation and transfer of long lifetime reactive oxygen species (ROSs) from electrochemical regulation. <b>2023</b> , 464, 142443  | O |
| 31 | Utilization of nitrogen, sulfur co-doped porous carbon micron spheres as bifunctional electrocatalysts for electrochemical detection of cadmium, lead and mercury ions and oxygen evolution reaction. <b>2023</b> , 640, 391-404  | O |
| 30 | Mechanistic regulation of gram-scale synthesis of triple emission cyanobacteria-based carbon dots and visual ratiometric sensing applications. <b>2023</b> , 623, 157049  | 0 |
| 29 | Efficient degradation of ceftazidime in heterogeneous electro-Fenton process with Fe/Cu bimetal MOF-derived nitrogen-doped cathode. <b>2023</b> , 945, 169263   | O |
| 28 | Electrocatalytic transformation of oxygen to hydroxyl radicals via three-electron pathway using nitrogen-doped carbon nanotube-encapsulated nickel nanocatalysts for effective organic decontamination. <b>2023</b> , 452, 131352 | 0 |
| 27 | Tuning N/O-doped carbon materials for supercapacitors by direct pyrolysis of imidazolinium polymer. <b>2023</b> , 64, 107057  | O |
| 26 | Thermal behaviors, thermal decomposition mechanism, kinetic model analysis and thermal hazard prediction of 3,6,7-triamino-7H- [1,2,4]triazolo [4,3-b] [1,2,4]triazole (TATOT). <b>2023</b> , 179515                              | O |
| 25 | Achieving air-stable n-type single-walled carbon nanotubes with high thermoelectric performance by doping with polyethylene glycol and N,N-dimethylferrocenemethylamine. <b>2023</b> , 238, 110043                                | O |
| 24 | A high-performance and flexible electrode film based on bacterial cellulose/polypyrrole/nitrogen-doped graphene for supercapacitors. <b>2023</b> , 311, 120754  | 0 |
| 23 | External electric field-assisted electronic restructuring of transition metal oxides derived from spent lithium-ion batteries to enhance persulfate activation. <b>2023</b> , 625, 157120   | O |
| 22 | Highly dispersed 1[hm PtPd bimetallic clusters for formic acid electrooxidation through a CO-free mechanism. <b>2023</b> , 78, 554-564  | 0 |
| 21 | High energy-power characteristics of microstructurally engineered sodium vanadium phosphate in full cell level. <b>2023</b> , 334, 120665   | O |

| 20 | Operando Studies of Electrochemical Denitrogenation and Its Mitigation of N-Doped Carbon Catalysts in Alkaline Media. <b>2023</b> , 13, 2813-2821   | Ο |
|----|---|---|
| 19 | 2,6-Diaminopyridine-Based Polyurea as an ORR Electrocatalyst of an Anion Exchange Membrane Fuel Cell. <b>2023</b> , 15, 915   | Ο |
| 18 | Bottom-up synthesis of pyridinic nitrogen-containing carbon materials with C目 groups next to pyridinic nitrogen from two-ring aromatics. <b>2023</b> , 207, 270-291                               | 0 |
| 17 | Metal-Decorated InN Monolayer Senses N2 against CO2. <b>2023</b> , 15, 12534-12544  | 1 |
| 16 | Sn Anodes Protected by Intermetallic FeSn 2 Layers for Long-lifespan Sodium-ion Batteries with High Initial Coulombic Efficiency of 93.8 %. <b>2023</b> , 62,                                     | 0 |
| 15 | Sn Anodes Protected by Intermetallic FeSn 2 Layers for Long-lifespan Sodium-ion Batteries with High Initial Coulombic Efficiency of 93.8 %. <b>2023</b> , 135,                                    | O |
| 14 | ECyclodextrin derived full-spectrum fluorescent carbon dots: The formation process investigation and biological applications. <b>2023</b> , 108239  | 0 |
| 13 | A hydrazone-linked covalent organic framework with abundant N and O atoms for detecting heavy metal ions. <b>2023</b> , 934, 117307   | Ο |
| 12 | Pyridinic Nitrogen Doped Carbon Dots Supply Electrons to Improve Photosynthesis and Extracellular Electron Transfer of Chlorella pyrenoidosa. 2206222   | 0 |
| 11 | Preparation of low internal resistance electrode material with multistage interconnected pores from coffee grounds.   | O |
| 10 | Three-dimensional N-doped mesoporous carbon MXene hybrid architecture for supercapacitor applications. <b>2023</b> , 13, 9983-9997  | 0 |
| 9  | Nitrogen-doped carbon decorated 3D NiCoSe2 micro-flowers as high-performance anode materials for lithium-ion batteries.   | О |
| 8  | Nitrogen-Doped Graphene Oxide as Efficient Metal-Free Electrocatalyst in PEM Fuel Cells. <b>2023</b> , 13, 1233   | 0 |
| 7  | Nitrogen-Doped Carbon Coated Na3V2(PO4)2F3 Derived from Polyvinylpyrrolidone as a High-Performance Cathode for Sodium-Ion Batteries.  | O |
| 6  | Study on Nitrogen-Doped Biomass Carbon-Based Composite Cobalt Selenide Heterojunction and Its Electrocatalytic Performance. <b>2023</b> , 13, 767   | 0 |
| 5  | Effective removal of heavy metal-lead and inorganic salts by microporous carbon derived from Zeolitic Imidazolate Framework-67 electrode using capacitive deionization. <b>2023</b> , 558, 116619 | O |
| 4  | Loading nano-rod cobalt phthalocyanine onto nitrogen-doped graphene and its application in photodegradation reaction under visible-light. <b>2023</b> , 122721                                    | 0 |
| 3  | Synergistic effect of n-⊞ electronic transitions in porous ultrathin graphitic carbon nitride nanosheets for efficient photocatalytic hydrogen production. <b>2023</b> , 157305                   | О |

A review of nitrogen-doped carbon materials for lithium-ion battery anodes. 2023, 38, 247-278

О

Single-atom Cu anchored on N-doped graphene/carbon nitride heterojunction for enhanced photocatalytic H2O2 production. **2023**, 161, 192-200

О