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3D nitrogen-doped graphene aerogel-supported Fe3O4 nanoparticles as efficient electrocatalysts for the oxygen reduction reaction

DOI: 10.1021/ja3030565 Journal of the American Chemical Society, 2012, 134, 9082-5.

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1904	EMnO2 nanorods grown in situ on graphene as catalysts for LiD2 batteries with excellent electrochemical performance. 2012 , 5, 9765		214
1903	Three-dimensional graphene-based macro- and mesoporous frameworks for high-performance electrochemical capacitive energy storage. <i>Journal of the American Chemical Society</i> , 2012 , 134, 19532-5	16.4	934
1902	Three-dimensional assemblies of graphene prepared by a novel chemical reduction-induced self-assembly method. 2012 , 4, 7038-45		152
1901	Co/CoO nanoparticles assembled on graphene for electrochemical reduction of oxygen. 2012 , 51, 11770	0-3	364
1900	Co/CoO Nanoparticles Assembled on Graphene for Electrochemical Reduction of Oxygen. 2012 , 124, 11940-11943		126
1899	A Versatile, Ultralight, Nitrogen-Doped Graphene Framework. 2012 , 124, 11533-11537		262
1898	Nitrogen-Doped Graphene Foams as Metal-Free Counter Electrodes in High-Performance Dye-Sensitized Solar Cells. 2012 , 124, 12290-12293		60
1897	A versatile, ultralight, nitrogen-doped graphene framework. 2012 , 51, 11371-5		663
1896	Nitrogen-doped graphene foams as metal-free counter electrodes in high-performance dye-sensitized solar cells. 2012 , 51, 12124-7		535
1895	Porous and hollow metal-layer@SiO2 nanocomposites as stable nanoreactors for hydrocarbon selective oxidation. 2012 , 22, 20182		20
1894	3D porous and redox-active prussian blue-in-graphene aerogels for highly efficient electrochemical detection of H2O2. 2012 , 22, 22090		128
1893	Phosphorus-doped ordered mesoporous carbons with different lengths as efficient metal-free electrocatalysts for oxygen reduction reaction in alkaline media. <i>Journal of the American Chemical Society</i> , 2012 , 134, 16127-30	16.4	784

1892	Review on the latest design of graphene-based inorganic materials. 2012 , 4, 6205-18	81
1891	Graphene-based 3D composite hydrogel by anchoring Co3O4 nanoparticles with enhanced electrochemical properties. 2013 , 15, 12940-5	87
1890	Ultrasensitive non-enzymatic and non-mediator electrochemical biosensor using nitrogen-doped graphene sheets for signal amplification and nanoporous alloy as carrier. 2013 , 97, 105-111	40
1889	Mesoporous hybrid material composed of Mn3O4 nanoparticles on nitrogen-doped graphene for highly efficient oxygen reduction reaction. 2013 , 49, 7705-7	226
1888	Pickering emulsion polymerization of graphene oxide-stabilized styrene. 2013 , 291, 1631-1639	51
1887	Three-dimensional homogeneous ferrite-carbon aerogel: one pot fabrication and enhanced electro-Fenton reactivity. 2013 , 5, 842-52	108
1886	Covalently interconnected three-dimensional graphene oxide solids. 2013 , 7, 7034-40	204
1885	Free-standing nitrogen-doped carbon nanofiber films as highly efficient electrocatalysts for oxygen reduction. 2013 , 5, 9528-31	104
1884	Fluorine-Doped Carbon Blacks: Highly Efficient Metal-Free Electrocatalysts for Oxygen Reduction Reaction. 2013 , 3, 1726-1729	299
1883	Nanoporous PdCu alloys as highly active and methanol-tolerant oxygen reduction electrocatalysts. 2013 , 38, 10029-10038	37
1882	Multi-Metallic Nanoparticles as More Efficient Catalysts for Fuel Cell Reactions. 2013, 333-346	
1881	N-doped graphene natively grown on hierarchical ordered porous carbon for enhanced oxygen reduction. 2013 , 25, 6226-31	358
1880	Non-precious Ir W bimetallic nanoclusters assembled on reduced graphene nanosheets as catalysts for the oxygen reduction reaction. 2013 , 1, 11457	46
1879	Electrochemical biosensors on platforms of graphene. 2013 , 49, 9526-39	134
1878	3D Honeycomb-Like Structured Graphene and Its High Efficiency as a Counter-Electrode Catalyst for Dye-Sensitized Solar Cells. 2013 , 125, 9380-9384	67
1877	Graphene-Based Materials as Nanocatalysts. 2013 , 347-369	3
1876	3D honeycomb-like structured graphene and its high efficiency as a counter-electrode catalyst for dye-sensitized solar cells. 2013 , 52, 9210-4	308
1875	Three-dimensional graphene/metal oxide nanoparticle hybrids for high-performance capacitive deionization of saline water. 2013 , 25, 6270-6	437

1874	Porous B-doped graphene inspired by Fried-Ice for supercapacitors and metal-free catalysts. 2013 , 1, 13476		88
1873	Ultralight, Flexible, and Fire-Resistant Carbon Nanofiber Aerogels from Bacterial Cellulose. 2013 , 125, 2997-3001		201
1872	Hierarchical interconnected macro-/mesoporous Co-containing N-doped carbon for efficient oxygen reduction reactions. 2013 , 1, 12074		58
1871	Modeling electronic properties and quantum transport in doped and defective graphene. 2013 , 175-176, 90-100		30
1870	A class of high performance metal-free oxygen reduction electrocatalysts based on cheap carbon blacks. 2013 , 3, 2505		150
1869	Enhanced electrochemical catalytic activity by copper oxide grown on nitrogen-doped reduced graphene oxide. 2013 , 1, 13179		87
1868	High-performance oxygen reduction electrocatalysts based on cheap carbon black, nitrogen, and trace iron. 2013 , 25, 6879-83		258
1867	Hierarchically porous nitrogen-doped graphene-NiCo(2)O(4) hybrid paper as an advanced electrocatalytic water-splitting material. 2013 , 7, 10190-6		457
1866	Three-dimensional SiO2@Fe3O4 core/shell nanorod array/graphene architecture: synthesis and electromagnetic absorption properties. 2013 , 5, 12296-303		193
1865	N-doped graphene film-confined nickel nanoparticles as a highly efficient three-dimensional oxygen evolution electrocatalyst. 2013 , 6, 3693		282
1864	Ag@Fe2O3-GO nanocomposites prepared by a phase transfer method with long-term antibacterial property. 2013 , 5, 11307-14		77
1863	Electrocatalytic Activity of BN Codoped Graphene Oxide Derived from Carbon Dioxide. 2013 , 117, 2416	7-2417	73 8
1862	Controllable disorder engineering in oxygen-incorporated MoS2 ultrathin nanosheets for efficient hydrogen evolution. <i>Journal of the American Chemical Society</i> , 2013 , 135, 17881-8	16.4	1750
1861	Sol-gel design strategy for ultradispersed TiO2 nanoparticles on graphene for high-performance lithium ion batteries. <i>Journal of the American Chemical Society</i> , 2013 , 135, 18300-3	16.4	313
1860	Oxygen Reduction Electrocatalysis Using N-Doped Graphene Quantum-Dots. 2013, 4, 4160-4165		112
1859	Controllable synthesis of nano-LiFePO4 on graphene using Fe2O3 precursor for high performance lithium ion batteries. 2013 , 112, 207-210		13
1858	Catalysis-material crosstalk at tailored nano-carbon interfaces. 2014 , 348, 139-80		8
1857	Interconnected porous and nitrogen-doped carbon network for supercapacitors with high rate capability and energy density. 2013 , 114, 165-172		33

1856	Water dispersible, highly graphitic and nitrogen-doped carbon nanobubbles. 2013, 9, 4135-41	32
1855	Three-dimensional macroporous NiCo(2)O(4) sheets as a non-noble catalyst for efficient oxygen reduction reactions. 2013 , 19, 14271-8	90
1854	Graphene-based hollow spheres as efficient electrocatalysts for oxygen reduction. 2013 , 5, 10839-43	69
1853	Synthesis of carbon quantum dots/SiO2 porous nanocomposites and their catalytic ability for photo-enhanced hydrocarbon selective oxidation. 2013 , 42, 10380-3	52
1852	Carbon supported MnOxto3O4 as cathode catalyst for oxygen reduction reaction in alkaline media. 2013 , 38, 13611-13616	51
1851	Spontaneous redox synthesis of Prussian blue/graphene nanocomposite as a non-precious metal catalyst for efficient four-electron oxygen reduction in acidic medium. 2013 , 240, 101-108	39
1850	N-heterocycles tethered graphene as efficient metal-free catalysts for an oxygen reduction reaction in fuel cells. 2013 , 1, 10166	13
1849	Ion-exchanged route synthesis of Fe2N-N-doped graphitic nanocarbons composite as advanced oxygen reduction electrocatalyst. 2013 , 49, 3022-4	111
1848	Mesoporous anatase TiO2 submicrospheres embedded in self-assembled three-dimensional reduced graphene oxide networks for enhanced lithium storage. 2013 , 1, 12750	64
1847	Recent progress in graphene-based nanomaterials as advanced electrocatalysts towards oxygen reduction reaction. 2013 , 5, 1753-67	312
1846	Graphene-xerogel-based non-precious metal catalyst for oxygen reduction reaction. 2013 , 28, 5-8	22
1845	Highly ordered multilayered 3D graphene decorated with metal nanoparticles. 2013 , 1, 1639-1645	72
1844	Assembly of graphene nanocomposites into honeycomb-structured macroporous films with enhanced hydrophobicity. 2013 , 37, 1307	16
1843	Three dimensional macroporous architectures and aerogels built of carbon nanotubes and/or graphene: synthesis and applications. 2013 , 42, 794-830	957
1842	Cobalt and nitrogen-cofunctionalized graphene as a durable non-precious metal catalyst with enhanced ORR activity,. 2013 , 1, 3593	150
1841	Porous-organic-framework-templated nitrogen-rich porous carbon as a more proficient electrocatalyst than Pt/C for the electrochemical reduction of oxygen. 2013 , 19, 974-80	86
1840	Nitrogen-doped porous carbon nanosheets as low-cost, high-performance anode material for sodium-ion batteries. 2013 , 6, 56-60	558
1839	Electromagnetic Wave Absorption Properties of Reduced Graphene Oxide Modified by Maghemite Colloidal Nanoparticle Clusters. 2013 , 117, 19701-19711	287

1838	Nanocellulose aerogels functionalized by rapid layer-by-layer assembly for high charge storage and beyond. 2013 , 52, 12038-42	170
1837	Facile hydrothermal synthesis of urchin-like NiCo2O4 spheres as efficient electrocatalysts for oxygen reduction reaction. 2013 , 38, 6657-6662	127
1836	One-step strategy to graphene/Ni(OH)2 composite hydrogels as advanced three-dimensional supercapacitor electrode materials. 2013 , 6, 65-76	182
1835	Highly nitrogen-doped carbon capsules: scalable preparation and high-performance applications in fuel cells and lithium ion batteries. 2013 , 5, 2726-33	158
1834	One-Pot Approach to a Highly Robust Iron Oxide/Reduced Graphene Oxide Nanocatalyst for Fischer Tropsch Synthesis. 2013 , 5, 714-719	27
1833	Simultaneous formation of ultrahigh surface area and three-dimensional hierarchical porous graphene-like networks for fast and highly stable supercapacitors. 2013 , 25, 2474-80	594
1832	Self-assembled hydrothermal synthesis for producing a MnCO3/graphene hydrogel composite and its electrochemical properties. 2013 , 3, 4400	58
1831	Not a molecule, not a polymer, not a substratelthe many faces of graphene as a chemical platform. 2013 , 49, 2848-57	39
1830	In situ fabrication of porous graphene electrodes for high-performance energy storage. 2013 , 7, 2422-30	374
1829	Recent progress in doped carbon nanomaterials as effective cathode catalysts for fuel cell oxygen reduction reaction. 2013 , 236, 238-249	408
1828	In situ assembly of graphene sheets-supported SnS2 nanoplates into 3D macroporous aerogels for high-performance lithium ion batteries. 2013 , 237, 178-186	157
1827	Ultralight, flexible, and fire-resistant carbon nanofiber aerogels from bacterial cellulose. 2013 , 52, 2925-9	570
1826	Hydrothermal synthesis of macroscopic nitrogen-doped graphene hydrogels for ultrafast supercapacitor. 2013 , 2, 249-256	469
1825	3D graphene foams cross-linked with pre-encapsulated Fe3O4 nanospheres for enhanced lithium storage. 2013 , 25, 2909-14	665
1824	Three-dimensional graphene-based aerogels prepared by a self-assembly process and its excellent catalytic and absorbing performance. 2013 , 1, 7612	162
1823	A one-step method for reduction and self-assembling of graphene oxide into reduced graphene oxide aerogels. 2013 , 1, 2869	98
1822	Facile fabrication of nanoparticles confined in graphene films and their electrochemical properties. 2013 , 19, 7631-6	19
1821	High-Loading Cobalt Oxide Coupled with Nitrogen-Doped Graphene for Oxygen Reduction in Anion-Exchange-Membrane Alkaline Fuel Cells. 2013 , 117, 8697-8707	221

1820 PtAu/nitrogen-doped graphene nanocomposites for enhanced electrochemical activities. 2013, 1, 1754-1762 105 A nitrogen-doped graphene/carbon nanotube nanocomposite with synergistically enhanced 1819 520 electrochemical activity. 2013, 25, 3192-6 Poly(ionic liquid)-derived nitrogen-doped hollow carbon spheres: synthesis and loading with Fe2O3 1818 32 for high-performance lithium ion batteries. 2013, 3, 7979 Biomass-derived activated carbon as high-performance non-precious electrocatalyst for oxygen 1817 68 reduction. 2013, 3, 12039 Hybrid hydrogels of porous graphene and nickel hydroxide as advanced supercapacitor materials. 1816 126 2013. 19. 7118-24 High Performance Fe- and N- Doped Carbon Catalyst with Graphene Structure for Oxygen 1815 454 Reduction. **2013**, 3, Activity and stability of the Ni(OH)2MnOx/C composite for oxygen reduction reaction in alkaline 1814 35 solution. 2013, 91, 314-322 Assembly of tin oxide/graphene nanosheets into 3D hierarchical frameworks for high-performance 1813 85 lithium storage. **2013**, 6, 1510-5 A Highly Efficient Catalyst toward Oxygen Reduction Reaction in Neutral Media for Microbial Fuel 1812 85 Cells. **2013**, 52, 6076-6082 Novel rGO/Fe2O3 composite hydrogel: synthesis, characterization and high performance of 1811 214 electromagnetic wave absorption. 2013, 1, 8547 Iron-Mediated Decarboxylative Trifluoromethylation of #Unsaturated Carboxylic Acids with 1810 80 Trifluoromethanesulfinate. 2013, 2013, 5247-5250 One-pot, green, rapid synthesis of flowerlike gold nanoparticles/reduced graphene oxide 1809 157 composite with regenerated silk fibroin as efficient oxygen reduction electrocatalysts. 2013, 5, 654-62 Promotion of oxygen reduction by a bio-inspired tethered iron phthalocyanine carbon 1808 513 nanotube-based catalyst. 2013, 4, 2076 Monodisperse M(x)Fe(3-x)O4 (M = Fe, Cu, Co, Mn) nanoparticles and their electrocatalysis for 1807 373 oxygen reduction reaction. 2013, 13, 2947-51 Molecular architecture of cobalt porphyrin multilayers on reduced graphene oxide sheets for 1806 226 high-performance oxygen reduction reaction. 2013, 52, 5585-9 Molecular Architecture of Cobalt Porphyrin Multilayers on Reduced Graphene Oxide Sheets for 1805 95 High-Performance Oxygen Reduction Reaction. 2013, 125, 5695-5699 Low-temperature synthesis of nitrogen/sulfur co-doped three-dimensional graphene frameworks 1804 374 as efficient metal-free electrocatalyst for oxygen reduction reaction. 2013, 62, 296-301 Vesicular nitrogen doped carbon material derived from Fe2O3 templated polyaniline as improved 1803 35 non-platinum fuel cell cathode catalyst. 2013, 99, 30-37

1802	Review on the Synthesis and Applications of Fe3O4Nanomaterials. 2013, 2013, 1-7	11
1801	Nitrogen-Doped Pt/C Electrocatalysts with Enhanced Activity and Stability toward the Oxygen Reduction Reaction. 2013 , 78, 1252-1257	6
1800	Nanocellulose Aerogels Functionalized by Rapid Layer-by-Layer Assembly for High Charge Storage and Beyond. 2013 , 125, 12260-12264	22
1799	Titanium nitride nanocrystals on nitrogen-doped graphene as an efficient electrocatalyst for oxygen reduction reaction. 2013 , 19, 14781-6	66
1798	. 2014,	15
1797	Three-dimensional graphene and their integrated electrodes. 2014 , 9, 785-807	228
1796	Nitrogen-doped carbon nanosheets with size-defined mesopores as highly efficient metal-free catalyst for the oxygen reduction reaction. 2014 , 53, 1570-4	428
1795	Seaweed-derived heteroatom-doped highly porous carbon as an electrocatalyst for the oxygen reduction reaction. 2014 , 7, 1755-63	123
1794	Highly active electrocatalyst for oxygen reduction reaction from pyrolyzing carbon-supported iron tetraethylenepentamine complex. 2014 , 160-161, 676-683	12
1793	Metal Oxide-Coated Three-Dimensional Graphene Prepared by the Use of Metal®rganic Frameworks as Precursors. 2014 , 126, 1428-1433	83
1792	A High Performance Electrochemical Biosensing Platform for Glucose Detection and IgE Aptasensing Based on Fe3O4/Reduced Graphene Oxide Nanocomposite. 2014 , 26, 129-138	15
1791	Nanoconfinement of phase change materials within carbon aerogels: phase transition behaviours and photo-to-thermal energy storage. 2014 , 2, 19963-19968	108
1790	Unification of catalytic water oxidation and oxygen reduction reactions: amorphous beat crystalline cobalt iron oxides. <i>Journal of the American Chemical Society</i> , 2014 , 136, 17530-6	465
1789	Nanocomposite of N-doped TiOIhanorods and graphene as an effective electrocatalyst for the oxygen reduction reaction. 2014 , 6, 21978-85	60
1788	A new approach to nanoporous graphene sheets via rapid microwave-induced plasma for energy applications. 2014 , 25, 495604	18
1787	Nanostructured transition metal sulfides for lithium ion batteries: Progress and challenges. 2014 , 9, 604-630	450
1786	Co/Co3O4/CN, a novel nanostructure and excellent catalytic system for the oxygen reduction reaction. 2014 , 8, 118-125	97
1785	Sulfur-doped carbons prepared from eutectic mixtures containing hydroxymethylthiophene as metal-free oxygen reduction catalysts. 2014 , 7, 3347-55	15

1784	reaction in alkaline media. 2014 , 7, 3356-61	17
1783	ZIF-8 Derived Graphene-Based Nitrogen-Doped Porous Carbon Sheets as Highly Efficient and Durable Oxygen Reduction Electrocatalysts. 2014 , 126, 14459-14463	69
1782	3-Aminopropyltrimethoxysilane and 3-Glycidoxypropyltrimethoxysilane Mediated Synthesis of Graphene and its Nanocomposite: Potential Bioanalytical Appliactions. 2014 , S7,	
1781	Recent advances in graphene-based planar micro-supercapacitors for on-chip energy storage. 2014 , 1, 277-292	249
1780	Graphene-based nanocomposites for energy storage and conversion in lithium batteries, supercapacitors and fuel cells. 2014 , 2, 15-32	375
1779	Magnesium⊞ir batteries: from principle to application. 2014 , 1, 196-206	265
1778	Bimetallic PdCu nanoparticle decorated three-dimensional graphene hydrogel for non-enzymatic amperometric glucose sensor. 2014 , 190, 707-714	169
1777	Synthesis of Fe/Fe3C nanoparticles encapsulated in nitrogen-doped carbon with single-source molecular precursor for the oxygen reduction reaction. 2014 , 75, 381-389	90
1776	Porous SnO2@C/graphene nanocomposite with 3D carbon conductive network as a superior anode material for lithium-ion batteries. 2014 , 116, 103-110	122
1775	Nanoscale zero-valent iron (nZVI) assembled on magnetic Fe3O4/graphene for chromium (VI) removal from aqueous solution. 2014 , 417, 51-9	158
1774	Highly active Vulcan carbon composite for oxygen reduction reaction in alkaline medium. 2014 , 133, 391-398	49
1773	Three-Dimensional Reduced Graphene Oxides Hydrogel Anchored with Ultrafine CoO Nanoparticles as Anode for Lithium Ion Batteries. 2014 , 129, 425-432	58
1772	A simple and green pathway toward nitrogen and sulfur dual doped hierarchically porous carbons from ionic liquids for oxygen reduction. 2014 , 259, 138-144	57
1771	Active Pd/Fe(OH) catalyst preparation for nitrobenzene hydrogenation by tracing aqueous phase chlorine concentrations in the washing step of catalyst precursors. 2014 , 70, 6050-6054	7
1770	Enhanced 3D hierarchical double porous Co3O4/graphene architecture for superior rechargeable lithium ion battery. 2014 , 40, 2523-2528	21
1769	Carbon Aerogels and Monoliths: Control of Porosity and Nanoarchitecture via Sol G el routes. 2014 , 26, 196-210	174
1768	25th anniversary article: hybrid nanostructures based on two-dimensional nanomaterials. 2014 , 26, 2185-204	514
1767	Scalable and facile preparation of graphene aerogel for air purification. 2014 , 4, 4843	42

1766	A review of graphene and graphene oxide sponge: material synthesis and applications to energy and the environment. 2014 , 7, 1564	860
1765	Three-dimensional graphene materials: preparation, structures and application in supercapacitors. 2014 , 7, 1850-1865	705
1764	Metal D rganic Framework-Derived Nitrogen-Doped Core-Shell-Structured Porous Fe/Fe3C@C Nanoboxes Supported on Graphene Sheets for Efficient Oxygen Reduction Reactions. 2014 , 4, 1400337	461
1763	Highly efficient metal-free phosphorus-doped platelet ordered mesoporous carbon for electrocatalytic oxygen reduction. 2014 , 67, 736-743	127
1762	Graphene and graphene-like layered transition metal dichalcogenides in energy conversion and storage. 2014 , 10, 2165-81	479
1761	Controllable synthesis of doped graphene and its applications. 2014 , 10, 2975-91	46
1760	Large scale production of biomass-derived N-doped porous carbon spheres for oxygen reduction and supercapacitors. 2014 , 2, 3317	179
1759	Beanpod-shaped FeបN composite as promising ORR catalyst for fuel cells operated in neutral media. 2014 , 2, 2623	45
1758	A one-pot hydrothermal synthesis of 3D nitrogen-doped graphene aerogels-supported NiS2 nanoparticles as efficient electrocatalysts for the oxygen-reduction reaction. 2014 , 16, 1	21
1757	Porous graphene materials for advanced electrochemical energy storage and conversion devices. 2014 , 26, 849-64	545
1756	Hexafluoroisopropyl alcohol as a new solvent for aerogels preparation. 2014 , 89, 28-32	27
1755	Facile synthesis of nitrogen-doped graphene supported AuPd-CeO2 nanocomposites with high-performance for hydrogen generation from formic acid at room temperature. 2014 , 6, 3073-7	89
1754	Nitrogen-Doped Carbon Nanosheets with Size-Defined Mesopores as Highly Efficient Metal-Free Catalyst for the Oxygen Reduction Reaction. 2014 , 126, 1596-1600	208
1753	Self-assembling synthesis of free-standing nanoporous graphene-transition-metal oxide flexible electrodes for high-performance lithium-ion batteries and supercapacitors. 2014 , 9, 206-11	53
1752	Bifunctional reduced graphene oxide/V2O5 composite hydrogel: fabrication, high performance as electromagnetic wave absorbent and supercapacitor. 2014 , 15, 366-73	77
1751	25th anniversary article: Chemically modified/doped carbon nanotubes & graphene for optimized nanostructures & nanodevices. 2014 , 26, 40-66	432
1750	Nanocarbon Electrocatalysts for Oxygen Reduction in Alkaline Media for Advanced Energy Conversion and Storage. 2014 , 4, 1301415	307
1749	Enriched graphitic N-doped carbon-supported Fe3O4 nanoparticles as efficient electrocatalysts for oxygen reduction reaction. 2014 , 2, 7281-7287	196

1748	In situ nitrogen-doped nanoporous carbon nanocables as an efficient metal-free catalyst for oxygen reduction reaction. 2014 , 2, 10154	67
1747	Synergy between isolated-Fe3O4 nanoparticles and CNx layers derived from lysine to improve the catalytic activity for oxygen reduction reaction. 2014 , 39, 3739-3745	21
1746	Facile construction of Mn3O4 nanorods coated by a layer of nitrogen-doped carbon with high activity for oxygen reduction reaction. 2014 , 6, 44-50	59
1745	A Review of Graphene-Based Nanostructural Materials for Both Catalyst Supports and Metal-Free Catalysts in PEM Fuel Cell Oxygen Reduction Reactions. 2014 , 4, 1301523	365
1744	Ultra-high-performance doped carbon catalyst derived from o-phenylenediamine and the probable roles of Fe and melamine. 2014 , 158-159, 60-69	43
1743	Shape Control of Mn3O4 Nanoparticles on Nitrogen-Doped Graphene for Enhanced Oxygen Reduction Activity. 2014 , 24, 2072-2078	261
1742	Layer-by-layer assembled heteroatom-doped graphene films with ultrahigh volumetric capacitance and rate capability for micro-supercapacitors. 2014 , 26, 4552-8	26 0
1741	Synthesis of nanoporous carbon-cobalt-oxide hybrid electrocatalysts by thermal conversion of metal-organic frameworks. 2014 , 20, 4217-21	226
1740	Monolithic Fe2O3/graphene hybrid for highly efficient lithium storage and arsenic removal. 2014 , 67, 500-507	124
1739	Facile single-step synthesis of nitrogen-doped reduced graphene oxide-Mn(3)O(4) hybrid functional material for the electrocatalytic reduction of oxygen. 2014 , 6, 2692-9	186
1738	High-performance electrocatalysts for oxygen reduction derived from cobalt porphyrin-based conjugated mesoporous polymers. 2014 , 26, 1450-5	378
1737	Amine-functionalized holey graphene as a highly active metal-free catalyst for the oxygen reduction reaction. 2014 , 2, 441-450	109
1736	The role of holes in improving the performance of nitrogen-doped holey graphene as an active electrode material for supercapacitor and oxygen reduction reaction. 2014 , 251, 55-65	106
1735	Polymer-directed synthesis of metal oxide-containing nanomaterials for electrochemical energy storage. 2014 , 6, 106-21	36
1734	Design of advanced porous graphene materials: from graphene nanomesh to 3D architectures. 2014 , 6, 1922-45	548
1733	Room temperature fabrication of an RGOEe3O4 composite hydrogel and its excellent wave absorption properties. 2014 , 4, 14441	37
1732	A three-dimensional graphene skeleton as a fast electron and ion transport network for electrochemical applications. 2014 , 2, 3031	82
1731	Ultra-light, compressible and fire-resistant graphene aerogel as a highly efficient and recyclable absorbent for organic liquids. 2014 , 2, 2934	332

1730	A graphene-MnO2 framework as a new generation of three-dimensional oxygen evolution promoter. 2014 , 50, 207-9	74
1729	Oxygen electrocatalysts in metal-air batteries: from aqueous to nonaqueous electrolytes. 2014 , 43, 7746-86	1073
1728	A two-dimensional hybrid with molybdenum disulfide nanocrystals strongly coupled on nitrogen-enriched graphene via mild temperature pyrolysis for high performance lithium storage. 2014 , 6, 14679-85	59
1727	Low-temperature and one-pot synthesis of sulfurized graphene nanosheets via in situ doping and their superior electrocatalytic activity for oxygen reduction reaction. 2014 , 2, 20714-20722	48
1726	Formation of carbon nanosheets via simultaneous activation and catalytic carbonization of macroporous anion-exchange resin for supercapacitors application. 2014 , 6, 20795-803	76
1725	Multifunctional electroactive heteroatom-doped carbon aerogels. 2014 , 10, 4352-61	53
1724	ZIF-8 derived graphene-based nitrogen-doped porous carbon sheets as highly efficient and durable oxygen reduction electrocatalysts. 2014 , 53, 14235-9	724
1723	Synthesis of graphene-like g-C3N4/Fe3O4 nanocomposites with high photocatalytic activity and applications in drug delivery. 2014 , 4, 62492-62498	40
1722	LiFe2Cln (n = 4B) clusters: Double-exchange mediated molecular magnets. 2014 , 105, 163112	2
1721	Water-dispersible and magnetically separable gold nanoparticles supported on a magnetite/s-graphene nanocomposite and their catalytic application in the Ullmann coupling of aryl iodides in aqueous media. 2014 , 4, 39428-39434	23
1720	Carbonization of self-assembled nanoporous hemin with a significantly enhanced activity for the oxygen reduction reaction. 2014 , 176, 393-408	27
1719	Iodine-treated heteroatom-doped carbon: conductivity driven electrocatalytic activity. 2014 , 2, 18115-18124	50
1718	Mussel-inspired nitrogen-doped graphene nanosheet supported manganese oxide nanowires as highly efficient electrocatalysts for oxygen reduction reaction. 2014 , 2, 6167	39
1717	Cobalt nanoparticles embedded in N-doped carbon as an efficient bifunctional electrocatalyst for oxygen reduction and evolution reactions. 2014 , 6, 15080-9	421
1716	One-step solution-phase synthesis of Co3O4/RGO/acetylene black as a high-performance catalyst for oxygen reduction reaction. 2014 , 4, 18286	14
1715	Phosphorus-doped carbon supports enhance gold-based catalysts for acetylene hydrochlorination. 2014 , 4, 15877-15885	52
1714	A high-performance electrocatalyst for oxygen reduction based on reduced graphene oxide modified with oxide nanoparticles, nitrogen dopants, and possible metal-N-C sites. 2014 , 2, 1631-1635	41
1713	Metal (metal = Fe, Co), N codoped nanoporous carbon for efficient electrochemical oxygen reduction. 2014 , 4, 37779-37785	20

1712	Synthesis and microwave absorption property of flexible magnetic film based on graphene oxide/carbon nanotubes and Fe3O4 nanoparticles. 2014 , 2, 14940	254
1711	Nitrogen-doped activated carbon with micrometer-scale channels derived from luffa sponge fibers as electrocatalysts for oxygen reduction reaction with high stability in acidic media. 2014 , 149, 56-64	53
1710	Strategy to Synthesize Fe3O4/C Nanotubes as Anode Material for Advanced Lithium-Ion Batteries. 2014 , 149, 11-17	45
1709	One-step hydrothermal synthesis of NiCo2S4EGO as an efficient electrocatalyst for the oxygen reduction reaction. 2014 , 2, 20990-20995	65
1708	A facile hard-templating synthesis of mesoporous spinel CoFe2O4 nanostructures as promising electrocatalysts for the H2O2 reduction reaction. 2014 , 4, 1754-1760	24
1707	Ultra-flyweight hydrophobic poly(m-phenylenediamine) aerogel with micro-spherical shell structures as a high-performance selective adsorbent for oil contamination. 2014 , 4, 49000-49005	19
1706	Ultrasmall MnO@N-rich carbon nanosheets for high-power asymmetric supercapacitors. 2014 , 2, 12519	79
1705	Low-temperature solution-processable Ni(OH)2 ultrathin nanosheet/N-graphene nanohybrids for high-performance supercapacitor electrodes. 2014 , 6, 5960-6	41
1704	Mn and Co co-substituted Fe3O4 nanoparticles on nitrogen-doped reduced graphene oxide for oxygen electrocatalysis in alkaline solution. 2014 , 2, 16217-16223	99
1703	Design and synthesis of carbonized polypyrrole-coated graphene aerogel acting as an efficient metal-free catalyst for oxygen reduction. 2014 , 4, 16979-16984	23
1702	Soft-template synthesis of 3D porous graphene foams with tunable architectures for lithium D2 batteries and oil adsorption applications. 2014 , 2, 7973-7979	89
1701	1-Dimensional AgVO3 nanowires hybrid with 2-dimensional graphene nanosheets to create 3-dimensional composite aerogels and their improved electrochemical properties. 2014 , 6, 3536-9	49
1700	Efficient alkene hydrogenation over a magnetically recoverable and recyclable Fe3O4@GO nanocatalyst using hydrazine hydrate as the hydrogen source. 2014 , 50, 12095-7	35
1699	Photolithographic fabrication of high-performance all-solid-state graphene-based planar micro-supercapacitors with different interdigital fingers. 2014 , 2, 8288	142
1698	A novel CoN electrocatalyst with high activity and stability toward oxygen reduction reaction. 2014 , 2, 62-65	50
1697	Spontaneous assembly of strong and conductive graphene/polypyrrole hybrid aerogels for energy storage. 2014 , 6, 12912-20	81
1696	Tuning the catalytic activity of graphene nanosheets for oxygen reduction reaction via size and thickness reduction. 2014 , 6, 19726-36	74
1695	A comparative study of composition and morphology effect of Ni(x)Co(1-x)(OH)2 on oxygen evolution/reduction reaction. 2014 , 6, 10172-80	107

1694	Graphene-supported iron-based nanoparticles encapsulated in nitrogen-doped carbon as a synergistic catalyst for hydrogen evolution and oxygen reduction reactions. 2014 , 176, 135-51	48
1693	Interface chemistry engineering in electrode systems for electrochemical energy storage. 2014 , 4, 37491-3750	D 2
1692	Engineering self-assembled N-doped graphene-carbon nanotube composites towards efficient oxygen reduction electrocatalysts. 2014 , 16, 13605-9	23
1691	Reduction of the oxygen reduction reaction overpotential of nitrogen-doped graphene by designing it to a microspherical hollow shape. 2014 , 2, 14071	35
1690	A highly stable and active Pd catalyst on monolithic cordierite with graphene coating assisted by PDDA. 2014 , 4, 9480	16
1689	FeN/C catalysts synthesized by heat-treatment of iron triazine carboxylic acid derivative complex for oxygen reduction reaction. 2014 , 4, 12168	33
1688	Facile preparation of mesoporous graphenes by the sacrificial template approach for direct methanol fuel cell application. 2014 , 2, 19914-19919	7
1687	One-step replication and enhanced catalytic activity for cathodic oxygen reduction of the mesostructured Co3O4/carbon composites. 2014 , 43, 4163-8	21
1686	Salt-confinement enables production of nitrogen-doped porous carbons in an air oven. 2014 , 4, 37714-37720	7
1685	Dipole-directed assembly of Fe3O4 nanoparticles into nanorings via oriented attachment. 2014 , 16, 1482-148	714
1684	A 3D hybrid of layered MoS2/nitrogen-doped graphene nanosheet aerogels: an effective catalyst for hydrogen evolution in microbial electrolysis cells. 2014 , 2, 13795-13800	172
1683	FTO-free counter electrodes for dye-sensitized solar cells using carbon nanosheets synthesised from a polymeric carbon source. 2014 , 16, 17595-602	10
1682	Boron-doped carbon-iron nanocomposites as efficient oxygen reduction electrocatalysts derived from carbon dioxide. 2014 , 50, 6349-52	36
1681	MOF derived catalysts for electrochemical oxygen reduction. 2014 , 2, 14064-14070	340
1680	3D network-like mesoporous NiCo2O4 nanostructures as advanced electrode material for supercapacitors. 2014 , 149, 144-151	66
1679	Expeditious fabrication of flower-like hierarchical mesoporous carbon superstructures as supercapacitor electrode materials. 2014 , 2, 16884-16891	55
1678	Gold nanodendrities on graphene oxide nanosheets for oxygen reduction reaction. 2014 , 2, 1697-1703	73
1677	Co/CoO/CoFe2O4/G nanocomposites derived from layered double hydroxides towards mass production of efficient Pt-free electrocatalysts for oxygen reduction reaction. 2014 , 6, 203-6	72

1676	Electrocatalytic activity of metalloporphyrins grown in situ on graphene sheets toward oxygen reduction reaction in an alkaline medium. 2014 , 4, 26653-26661	22
1675	Synthesis of 3D cauliflower-fungus-like graphene from CO2 as a highly efficient counter electrode material for dye-sensitized solar cells. 2014 , 2, 16842-16846	73
1674	Nitrogen-doped graphene Be 3O4 architecture as anode material for improved Li-ion storage. 2014 , 4, 17653	40
1673	2D polyacrylonitrile brush derived nitrogen-doped carbon nanosheets for high-performance electrocatalysts in oxygen reduction reaction. 2014 , 5, 2057-2064	49
1672	Enhanced photocatalytic activities of three-dimensional graphene-based aerogel embedding TiO 2 nanoparticles and loading MoS 2 nanosheets as Co-catalyst. 2014 , 39, 19502-19512	144
1671	Co3O4 nanowires supported on 3D N-doped carbon foam as an electrochemical sensing platform for efficient H2O2 detection. 2014 , 6, 11769-76	141
1670	Three-dimensional iron, nitrogen-doped carbon foams as efficient electrocatalysts for oxygen reduction reaction in alkaline solution. 2014 , 142, 317-323	28
1669	MnO2 nanoflakes anchored on reduced graphene oxide nanosheets as high performance anode materials for lithium-ion batteries. 2014 , 4, 30150-30155	19
1668	Ultrafine iron oxide nanoparticles supported on N-doped carbon black as an oxygen reduction reaction catalyst. 2014 , 39, 14777-14782	22
1667	Synthesis of Fe nanoparticles on polyaniline covered carbon nanotubes for oxygen reduction reaction. 2014 , 272, 661-671	37
1666	3D nitrogen-doped graphene foams embedded with ultrafine TiO2 nanoparticles for high-performance lithium-ion batteries. 2014 , 2, 11124	70
1665	Dealloyed Fe3O4 octahedra as anode material for lithium-ion batteries with stable and high electrochemical performance. 2014 , 617, 787-791	22
1664	Production of novel FeOOH/reduced graphene oxide hybrids and their performance as oxygen reduction reaction catalysts. 2014 , 80, 127-134	35
1663	Nitrogen-doped nanoporous carbon nanosheets derived from plant biomass: an efficient catalyst for oxygen reduction reaction. 2014 , 7, 4095-4103	476
1662	Rational design of graphene/porous carbon aerogels for high-performance flexible all-solid-state supercapacitors. 2014 , 2, 10895-10903	93
1661	CVD grown CNTs within iron modified and graphitized carbon aerogel as durable oxygen reduction catalysts in acidic medium. 2014 , 79, 518-528	21
1660	Enhanced amperometric sensing for direct detection of nitenpyram via synergistic effect of copper nanoparticles and nitrogen-doped graphene. 2014 , 734, 25-30	16
1659	One-pot hydrothermal synthesis of zirconium dioxide nanoparticles decorated reduced graphene oxide composite as high performance electrochemical sensing and biosensing platform. 2014 , 143, 196-206	58

1658	Magnetic, superhydrophobic and durable silicone sponges and their applications in removal of organic pollutants from water. 2014 , 50, 7831-3	118
1657	Boron-doped graphene as active electrocatalyst for oxygen reduction reaction at a fuel-cell cathode. 2014 , 318, 203-210	110
1656	Single Crystal (Mn,Co)3O4 Octahedra for Highly Efficient Oxygen Reduction Reactions. 2014 , 144, 31-41	29
1655	A cobalt-nitrogen complex on N-doped three-dimensional graphene framework as a highly efficient electrocatalyst for oxygen reduction reaction. 2014 , 6, 15066-72	110
1654	Mussel-inspired, ultralight, multifunctional 3D nitrogen-doped graphene aerogel. 2014 , 80, 174-182	128
1653	Deft dipping combined with electrochemical reduction to obtain 3D electrochemical reduction graphene oxide and its applications in supercapacitors. 2014 , 2, 1137-1143	28
1652	Hydrothermal transformation of dried grass into graphitic carbon-based high performance electrocatalyst for oxygen reduction reaction. 2014 , 10, 3371-8	122
1651	N-doped mesoporous carbon as a bifunctional material for oxygen reduction reaction and supercapacitors. 2014 , 35, 1078-1083	24
1650	Free-standing three-dimensional graphene/manganese oxide hybrids as binder-free electrode materials for energy storage applications. 2014 , 6, 11665-74	103
1649	Shell thickness-dependent microwave absorption of core-shell Fe3O4@C composites. 2014 , 6, 12997-3006	700
1648	Template-assisted self-assembly method to prepare three-dimensional reduced graphene oxide for dopamine sensing. 2014 , 205, 120-126	74
1647	Investigation on the evolution of N-containing organic compounds during pyrolysis of sewage sludge. 2014 , 48, 10888-96	154
1646	Self-Assembled Three-Dimensional Graphene-Based Aerogel with Embedded Multifarious Functional Nanoparticles and Its Excellent Photoelectrochemical Activities. 2014 , 2, 741-748	132
1645	Synthesis and characterization of carbon black/manganese oxide air cathodes for zinc-air batteries. 2014 , 269, 88-97	53
1644	Preparation and characterization of Ag deposited and Fe doped TiO2 nanotube arrays for photocatalytic hydrogen production by water splitting. 2014 , 40, 15907-15917	86
1643	Synthesis of iron oxide/partly graphitized carbon composites as a high-efficiency and low-cost cathode catalyst for microbial fuel cells. 2014 , 6, 13438-47	53
1642	Fe-N decorated hybrids of CNTs grown on hierarchically porous carbon for high-performance oxygen reduction. 2014 , 26, 6074-9	439
1641	Bioinspired materials: from low to high dimensional structure. 2014 , 26, 6994-7017	150

1640 Recent advances of doped carbon as non-precious catalysts for oxygen reduction reaction. **2014**, 2, 15704-1571%

1639	Heteroatom-doped graphene materials: syntheses, properties and applications. 2014 , 43, 7067-98	1258
1638	Palladium nanoparticles supported on nitrogen-doped carbon spheres as enhanced catalyst for ethanol electro-oxidation. 2014 , 730, 65-68	17
1637	In situ synthesis of poly(ionic liquid)-Pt nanoparticle composite in glass capillary for the electrocatalytic reduction of oxygen. 2014 , 139, 5964-9	9
1636	Graphene aerogel supported Fe5(PO4)4(OH)3D2H2O microspheres as high performance cathode for lithium ion batteries. 2014 , 2, 6174-6179	43
1635	One-step preparation of ultrathin nitrogen-doped carbon nanosheets with ultrahigh pore volume for high-performance supercapacitors. 2014 , 2, 17297-17301	51
1634	Direct synthesis of 3D hollow porous graphene balls from coal tar pitch for high performance supercapacitors. 2014 , 2, 19633-19640	146
1633	Nitrogen-doped carbon nanotubes and graphene composite structures for energy and catalytic applications. 2014 , 50, 6818-30	361
1632	Multifunctional graphene sheetflanoribbon hybrid aerogels. 2014 , 2, 14994-15000	46
1631	Pt-decorated 3D architectures built from graphene and graphitic carbon nitride nanosheets as efficient methanol oxidation catalysts. 2014 , 26, 5160-5	304
1630	Outstanding adsorption performance of graphenellarbon nanotube aerogels for continuous oil removal. 2014 , 80, 523-533	281
1629	Self-assembly of honeycomb-like MoS2 nanoarchitectures anchored into graphene foam for enhanced lithium-ion storage. 2014 , 26, 7162-9	373
1628	Graphene-based macroscopic assemblies and architectures: an emerging material system. 2014 , 43, 7295-325	378
1627	Accurate Identification and Selective Removal of Rotavirus Using a Plasmonic-Magnetic 3D Graphene Oxide Architecture. 2014 , 5, 3216-21	30
1626	A three-dimensional Mn3O4 network supported on a nitrogenated graphene electrocatalyst for efficient oxygen reduction reaction in alkaline media. 2014 , 2, 14493-14501	111
1625	Strategies on the Design of Nitrogen-Doped Graphene. 2014 , 5, 119-25	73
1624	Carbon Composite Cathode Catalysts for Alkaline PEM Fuel Cells. 2014 , 319-356	2
1623	Flexible nitrogen-doped graphene/carbon nanotube/Co3O4 paper and its oxygen reduction activity. 2014 , 6, 7534-41	72

1622	High stability and activity of Pt electrocatalyst on atomic layer deposited metal oxide/nitrogen-doped graphene hybrid support. 2014 , 39, 15967-15974	43
1621	Synthesis and processing of graphene hydrogels for electronics applications. 2014 , 4, 8874	11
1620	An ice-templated, pH-tunable self-assembly route to hierarchically porous graphene nanoscroll networks. 2014 , 6, 9734-41	95
1619	A solvothermal strategy: one-step in situ synthesis of self-assembled 3D graphene-based composites with enhanced lithium storage capacity. 2014 , 2, 9200-9207	53
1618	Free-standing nitrogen-doped carbon nanotubes at electrospun carbon nanofibers composite as an efficient electrocatalyst for oxygen reduction. 2014 , 138, 318-324	53
1617	Preparation of La1¶a MnO3 perovskiteਊraphene composites as oxygen reduction reaction electrocatalyst in alkaline medium. 2014 , 269, 144-151	68
1616	Recent progress on graphene-based hybrid electrocatalysts. 2014 , 1, 379-399	277
1615	Carbon aerogels based on regenerated silk proteins and graphene oxide for supercapacitors. 2014 , 22, 509-514	26
1614	Metal oxide-coated three-dimensional graphene prepared by the use of metal-organic frameworks as precursors. 2014 , 53, 1404-9	255
1613	Facile and green synthesis of a surfactant-free Au clusters/reduced graphene oxide composite as an efficient electrocatalyst for the oxygen reduction reaction. 2014 , 2, 13682	32
1612	Functional graphene nanomesh foam. 2014 , 7, 1913	192
1611	Towards three-dimensional, multi-functional graphene-based nanocomposite aerogels by hydrophobicity-driven absorption. 2014 , 2, 10365	21
1610	Core-shell bimetallic carbide nanoparticles confined in a three-dimensional N-doped carbon conductive network for efficient lithium storage. 2014 , 8, 7846-57	112
1609	Hollow mesoporous carbon nitride nanosphere/three-dimensional graphene composite as high efficient electrocatalyst for oxygen reduction reaction. 2014 , 272, 696-702	48
1608	The performance of phosphorus (P)-doped activated carbon as a catalyst in air-cathode microbial fuel cells. 2014 , 170, 379-384	52
1607	3D-graphene for electrocatalysis of oxygen reduction reaction: Increasing number of layers increases the catalytic effect. 2014 , 46, 148-151	30
1606	Chemical transformations of nanomaterials for energy applications. 2014 , 2, 5965-5978	44
1605	Self-assembled three-dimensional hierarchical graphene/polypyrrole nanotube hybrid aerogel and its application for supercapacitors. 2014 , 6, 9671-9	199

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1604	An electrochemical sensor based on the three-dimensional functionalized graphene for simultaneous determination of hydroquinone and catechol. 2014 , 722-723, 38-45	39
1603	Graphene-supported nanoelectrocatalysts for fuel cells: synthesis, properties, and applications. 2014 , 114, 5117-60	790
1602	Solvothermal-induced self-assembly of Fe2O3/GS aerogels for high Li-storage and excellent stability. 2014 , 10, 2260-9	97
1601	Amphiphilic polymer promoted assembly of macroporous graphene/SnO2 frameworks with tunable porosity for high-performance lithium storage. 2014 , 10, 2226-32	68
1600	Manganese cobaltite/polypyrrole nanocomposite-based air-cathode for sustainable power generation in the single-chambered microbial fuel cells. 2014 , 54, 534-40	67
1599	Influence of pyrolyzing atmosphere on the catalytic activity and structure of Co-based catalysts for oxygen reduction reaction. 2014 , 115, 1-9	12
1598	Electrocatalytic performance of Ni modified MnOx/C composites toward oxygen reduction reaction and their application in ZnBir battery. 2014 , 39, 3423-3432	36
1597	Heteroatom doped mesoporous carbon/graphene nanosheets as highly efficient electrocatalysts for oxygen reduction. 2014 , 421, 160-4	23
1596	Hybrid of Iron Nitride and Nitrogen-Doped Graphene Aerogel as Synergistic Catalyst for Oxygen Reduction Reaction. 2014 , 24, 2930-2937	348
1595	Nitrogen and phosphorus dual-doped hierarchical porous carbon foams as efficient metal-free electrocatalysts for oxygen reduction reactions. 2014 , 20, 3106-12	169
1594	3D Hierarchically Assembled Porous Wrinkled-Paper-like Structure of ZnCo2O4 and [email[protected] as Anode Materials for Lithium-Ion Batteries. 2014 , 14, 3352-3359	41
1593	High performance nitrogen-doped porous graphene/carbon frameworks for supercapacitors. 2014 , 2, 8859	85
1592	Solar-assisted dual chamber microbial fuel cell with a CuInS2 photocathode. 2014 , 4, 23790-23796	20
1591	Monodisperse Au-Pd bimetallic alloyed nanoparticles supported on reduced graphene oxide with enhanced electrocatalytic activity towards oxygen reduction reaction. 2014 , 136, 521-528	83
1590	Functional gels based on chemically modified graphenes. 2014 , 26, 3992-4012	248
1589	A novel Pt/CeO2 catalyst coated with nitrogen-doped carbon with excellent performance for DMFCs. 2014 , 2, 4038	49
1588	Doping of Graphene by Nitrogen, Boron, and Other Elements. 2014 , 283-358	5
1587	One-step synthesis of high-quality N-doped graphene/Fe3O4 hybrid nanocomposite and its improved supercapacitor performances. 2014 , 4, 25658-25665	46

1586	Electrocatalytic activity of various types of h-BN for the oxygen reduction reaction. 2014 , 16, 13755-61	45
1585	Boron nitride nanosheet on gold as an electrocatalyst for oxygen reduction reaction: theoretical suggestion and experimental proof. <i>Journal of the American Chemical Society</i> , 2014 , 136, 6542-5	203
1584	Constructing Fe3O4@N-rich Carbon Core-Shell Microspheres as Anode for Lithium Ion Batteries with Enhanced Electrochemical Performance. 2014 , 130, 679-688	67
1583	Design and synthesis of porous nano-sized Sn@C/graphene electrode material with 3D carbon network for high-performance lithium-ion batteries. 2014 , 604, 188-195	37
1582	Ultralight, high-surface-area, multifunctional graphene-based aerogels from self-assembly of graphene oxide and resol. 2014 , 68, 221-231	162
1581	An In Situ Source-Template-Interface Reaction Route to 3D Nitrogen-Doped Hierarchical Porous Carbon as Oxygen Reduction Electrocatalyst. 2015 , 2, 1500199	38
1580	Three-dimensional Nitrogen-Doped Graphene Supported Molybdenum Disulfide Nanoparticles as an Advanced Catalyst for Hydrogen Evolution Reaction. 2015 , 5, 17542	124
1579	Heteroatom-Doped Nanoporous Carbon for Electrocatalysis. 2015 , 43-74	
1578	Nanocarbon-Based Nonprecious-Metal Electrocatalysts for Oxygen Reduction in Various Electrolytes. 2015 , 75-116	
1577	Fullerene-Structured MoSe2 Hollow Spheres Anchored on Highly Nitrogen-Doped Graphene as a Conductive Catalyst for Photovoltaic Applications. 2015 , 5, 13214	38
1576	Investigation of the Cleanliness of Transferred Graphene: The First Step toward Its Application as a Window Material for Electron Microscopy and Spectroscopy. 2015 , 88, 1029-1035	11
1575	Three-Dimensional Graphene-Based Nanomaterials as Electrocatalysts for Oxygen Reduction Reaction. 2015 , 2015, 1-9	13
1574	Porous VO(x)N(y) nanoribbons supported on CNTs as efficient and stable non-noble electrocatalysts for the oxygen reduction reaction. 2015 , 5, 17385	18
1573	Space charge inhibition effect of nano-Fe3O4 on improvement of impulse breakdown voltage of transformer oil based on improved Kerr optic measurements. 2015 , 5, 097207	14
1572	Hybridization of Graphene in 3D Complex Nanovoids: Synergistic Nanocomposites for Electrocatalytic Reduction of Hydrogen Peroxide. 2015 , 180, 1014-1022	14
1571	Multifunctional graphene-based nanostructures for efficient electrocatalytic reduction of oxygen. 2015 , 90, 2132-2151	20
1570	Well-Combined Magnetically Separable Hybrid Cobalt Ferrite/Nitrogen-Doped Graphene as Efficient Catalyst with Superior Performance for Oxygen Reduction Reaction. 2015 , 11, 5833-43	63
1569	Flexible, Stretchable, and Rechargeable Fiber-Shaped ZincAir Battery Based on Cross-Stacked Carbon Nanotube Sheets. 2015 , 127, 15610-15614	55

1568	Flexible, Stretchable, and Rechargeable Fiber-Shaped Zinc-Air Battery Based on Cross-Stacked Carbon Nanotube Sheets. 2015 , 54, 15390-4	241
1567	Preparation of Mn(III)-Porphyrin-Immobilized Fe3O4@SiO2 Mesoparticles and Their Use in Heterogeneous Catalysis of Styrene Epoxidation. 2015 , 36, 1936-1939	4
1566	Carbon-Based Nanostructures for Advanced Catalysis. 2015 , 7, 2806-2815	77
1565	Nitrogen-Doped Carbon Electrocatalysts Decorated with Transition Metals for the Oxygen Reduction Reaction. 2015 , 7, 3808-3817	59
1564	Nitrogen-Doped Nanoporous Carbon/Graphene Nano-Sandwiches: Synthesis and Application for Efficient Oxygen Reduction. 2015 , 25, 5768-5777	328
1563	MoS2 Nanosheets Supported on 3D Graphene Aerogel as a Highly Efficient Catalyst for Hydrogen Evolution. 2015 , 21, 15908-13	88
1562	High-Performance FeN-Doped Graphene Electrocatalysts with pH-Dependent Active Sites for the Oxygen Reduction Reaction. 2015 , 2, 2032-2040	29
1561	Structural Origin of the Activity in Mn3O4-Graphene Oxide Hybrid Electrocatalysts for the Oxygen Reduction Reaction. 2015 , 8, 3331-9	52
1560	Crosslinking Graphene Oxide into Robust 3D Porous N-Doped Graphene. 2015 , 27, 5171-5	165
1559	Homogenous CoreBhell Nitrogen-Doped Carbon Nanotubes for the Oxygen Reduction Reaction. 2015 , 2, 1892-1896	4
1558	Spinel Manganese Tobalt Oxide on Carbon Nanotubes as Highly Efficient Catalysts for the Oxygen Reduction Reaction. 2015 , 3, 1183-1189	12
1557	A Quasi-Solid-State Sodium-Ion Capacitor with High Energy Density. 2015 , 27, 6962-8	155
1556	Direct Synthesis of Phosphorus-Doped Mesoporous Carbon Materials for Efficient Electrocatalytic Oxygen Reduction. 2015 , 7, 2903-2909	58
1555	Small-Sized Tungsten Nitride Particles Strongly Anchored on Carbon Nanotubes and their Use as Supports for Pt for Methanol Electro-oxidation. 2015 , 21, 18345-53	13
1554	A Discussion on the Activity Origin in Metal-Free Nitrogen-Doped Carbons For Oxygen Reduction Reaction and their Mechanisms. 2015 , 8, 2772-88	97
1553	Ultra-light Hierarchical Graphene Electrode for Binder-Free Supercapacitors and Lithium-Ion Battery Anodes. 2015 , 11, 4922-30	58
1552	Enhanced Cycling Stability of Lithium-Ion Batteries Using Graphene-Wrapped Fe3O4-Graphene Nanoribbons as Anode Materials. 2015 , 5, 1500171	113
1551	Recent Progress on Fe/N/C Electrocatalysts for the Oxygen Reduction Reaction in Fuel Cells. 2015 , 5, 1167-1192	63

1550	Polymer/Carbon-Based Hybrid Aerogels: Preparation, Properties and Applications. 2015, 8, 6806-6848	120
1549	Synthesis of Three-Dimensional Fe3O4/Graphene Aerogels for the Removal of Arsenic Ions from Water. 2015 , 2015, 1-6	15
1548	. 2015,	13
1547	Self-Assembled Three-Dimensional Graphene Macrostructures: Synthesis and Applications in Supercapacitors. 2015 , 48, 1666-75	388
1546	Hybrid Graphene Oxide Based Plasmonic-Magnetic Multifunctional Nanoplatform for Selective Separation and Label-Free Identification of Alzheimer's Disease Biomarkers. 2015 , 7, 13693-700	94
1545	Confining Iron Carbide Nanocrystals inside CNx@CNT toward an Efficient Electrocatalyst for Oxygen Reduction Reaction. 2015 , 7, 11508-15	85
1544	Strength-controllable graphene oxide amphiprotic aerogels as highly efficient carrier for anionic and cationic azo molecules. 2015 , 54, 06FF07	1
1543	Preparation of Metal Oxide Nanofilms Using Graphene Oxide as a Template. 2015 , 119, 12445-12454	30
1542	CoreBhell-like structured graphene aerogel encapsulating paraffin: shape-stable phase change material for thermal energy storage. 2015 , 3, 4018-4025	169
1541	Facile preparation of N-doped mesocellular graphene foam from sludge flocs for highly efficient oxygen reduction reaction. 2015 , 3, 15171-15176	38
1540	Dual-site polydopamine spheres/CoFe layered double hydroxides for electrocatalytic oxygen reduction reaction. 2015 , 170, 248-255	26
1539	Laser-induced chemical transformation of graphene oxidelion oxide nanoparticles composites deposited on polymer substrates. 2015 , 93, 373-383	17
1538	Microemulsion-mediated hydrothermal growth of pagoda-like Fe3O4 microstructures and their application in a lithium battery. 2015 , 41, 8843-8848	13
1537	Graphene Quantum Dots Supported by Graphene Nanoribbons with Ultrahigh Electrocatalytic Performance for Oxygen Reduction. <i>Journal of the American Chemical Society</i> , 2015 , 137, 7588-91	4 221
1536	Electrocatalytic activity of Mn/Cu doped Fe2O3 B ANI B GO composites for fuel cell applications. 2015 , 5, 39455-39463	6
1535	Graphene Oxide. 2015 ,	61
1534	GO/rGO as Advanced Materials for Energy Storage and Conversion. 2015 , 97-127	
1533	Three-dimensional Fe3O4-graphene macroscopic composites for arsenic and arsenate removal. 2015 , 298, 28-35	133

1532	Enhanced cycling stability of hybrid Li-air batteries enabled by ordered Pd3Fe intermetallic electrocatalyst. <i>Journal of the American Chemical Society</i> , 2015 , 137, 7278-81	16.4	128
1531	A facile nanocasting strategy to nitrogen-doped porous carbon monolith by treatment with ammonia for efficient oxygen reduction. 2015 , 3, 12836-12844		41
1530	The effect of material composition of 3-dimensional graphene oxide and self-doped polyaniline nanocomposites on DNA analytical sensitivity. 2015 , 133, 24-31		8
1529	Understanding room-temperature metastability of graphene oxide utilizing hydramines from a synthetic chemistry view. 2015 , 5, 49688-49695		12
1528	Graphitic Carbon Nitride/Graphene Hybrids as New Active Materials for Energy Conversion and Storage. 2015 , 1, 298-318		90
1527	Hierarchical 3D ZnIn2S4/graphene nano-heterostructures: their in situ fabrication with dual functionality in solar hydrogen production and as anodes for lithium ion batteries. 2015 , 17, 31850-61		50
1526	A tungsten carbide/iron sulfide/FePt nanocomposite supported on nitrogen-doped carbon as an efficient electrocatalyst for oxygen reduction reaction. 2015 , 5, 106245-106251		15
1525	Graphene Oxide: A Fertile Nanosheet for Various Applications. 2015 , 84, 121012		19
1524	Functional nanoparticle-decorated graphene oxide sheets as stabilizers for Pickering high internal phase emulsions and graphene oxide based foam monoliths. 2015 , 5, 103394-103402		27
1523	Two-dimensional NiCo2O4 nanosheet-coated three-dimensional graphene networks for high-rate, long-cycle-life supercapacitors. 2015 , 7, 7035-9		126
1522	Monoatomic-thick graphitic carbon nitride dots on graphene sheets as an efficient catalyst in the oxygen reduction reaction. 2015 , 7, 3035-42		74
1521	Sandwich-like Cr2O3graphite intercalation composites as high-stability anode materials for lithium-ion batteries. 2015 , 3, 1703-1708		35
1520	Magnetic three-dimensional graphene solid-phase extraction of chlorophenols from honey samples. 2015 , 32, 40-7		23
1519	Electrophoretic deposition improves catalytic performance of Co3O4 nanoparticles for oxygen reduction/oxygen evolution reactions. 2015 , 3, 4274-4283		61
1518	NiCo2O4/N-doped graphene as an advanced electrocatalyst for oxygen reduction reaction. 2015 , 280, 640-648		90
1517	Oxygen reduction reaction activity of LaMn1-xCoxO3-graphene nanocomposite for zinc-air battery. 2015 , 161, 115-123		90
1516	Co-calcination-derived Pd budded in N-Doped Ordered Mesoporous Graphitic Carbon Nanospheres for Advanced Methanol-tolerant Oxygen Reduction. 2015 , 160, 306-312		17
1515	A facile approach to synthesize stable CNTs@MnO electrocatalyst for high energy lithium oxygen batteries. 2015 , 5, 8012		31

1514	Nitrogen-rich carbon coupled multifunctional metal oxide/graphene nanohybrids for long-life lithium storage and efficient oxygen reduction. 2015 , 12, 578-587	66
1513	Novel 3D graphene aerogel Z nO composites as efficient detection for NO2 at room temperature. 2015 , 211, 220-226	89
1512	Coordinated assembly of a new 3D mesoporous FeD@CuD-graphene oxide framework as a highly efficient and reusable catalyst for the synthesis of quinoxalines. 2015 , 51, 5069-72	28
1511	Carbon foam: Preparation and application. 2015 , 87, 128-152	269
1510	Surface and interfacial engineering of iron oxide nanoplates for highly efficient magnetic resonance angiography. 2015 , 9, 3012-22	99
1509	Graphene Polymer Nanocomposites for Fuel Cells. 2015 , 91-130	3
1508	Template-free synthesis of functional 3D BN architecture for removal of dyes from water. 2014 , 4, 4453	81
1507	Facile synthesis of fine Zn2SnO4 nanoparticles/graphene composites with superior lithium storage performance. 2015 , 281, 341-349	40
1506	In-situ electrochemical route to aerogel electrode materials of graphene and hexagonal CeO[2015 , 446, 77-83	62
1505	Alloyed CoMo Nitride as High-Performance Electrocatalyst for Oxygen Reduction in Acidic Medium. 2015 , 5, 1857-1862	149
1504	Five-fold twinned Pd2NiAg nanocrystals with increased surface Ni site availability to improve oxygen reduction activity. <i>Journal of the American Chemical Society</i> , 2015 , 137, 2820-3	88
1503	Directed Self Assembly Of Copper-Based Hierarchical Nanostructures on Nitrogen-Doped Graphene and Their Field Emission Studies. 2015 , 150126153530009	14
1502	Hydrophobic and nanoporous chitosanBilica composite aerogels for oil absorption. 2015, 132, n/a-n/a	27
1501	A hybrid of holey graphene and Mn3O4 and its oxygen reduction reaction performance. 2015 , 51, 3911-4	46
1500	High Surface Iron/Cobalt-Containing Nitrogen-Doped Carbon Aerogels as Non-Precious Advanced Electrocatalysts for Oxygen Reduction. 2015 , 2, 584-591	56
1499	Amphiphilic, ultralight, and multifunctional graphene/nanofibrillated cellulose aerogel achieved by cation-induced gelation and chemical reduction. 2015 , 7, 3959-64	72
1498	Self-Assembled 3D Graphene Monolith from Solution. 2015 , 6, 658-68	131
1497	Graphene supported non-precious metal-macrocycle catalysts for oxygen reduction reaction in fuel cells. 2015 , 7, 6991-8	56

1496	A Wasted Material, Duck Blood, as a Precursor of Non-Precious Catalyst for the Oxygen Reduction Reaction. 2015 , 15, 214-220	6	
1495	Rational design of three-dimensional nitrogen-doped carbon nanoleaf networks for high-performance oxygen reduction. 2015 , 3, 5617-5627	28	
1494	Three-dimensional Fe2O3 nanocubes/nitrogen-doped graphene aerogels: nucleation mechanism and lithium storage properties. 2014 , 4, 7171	92	
1493	Graphene-Based Electrodes for Lithium Ion Batteries. 2015 , 49-84	3	
1492	Graphene-Supported Metal Nanostructures with Controllable Size and Shape as Advanced Electrocatalysts for Fuel Cells. 2015 , 307-338		
1491	CuO nanoparticles on sulfur-doped graphene for nonenzymatic glucose sensing. 2015 , 156, 244-251	100	
1490	Highly sensitive non-enzymatic glucose sensor based on Pt nanoparticle decorated graphene oxide hydrogel. 2015 , 210, 618-623	120	
1489	Scalable template synthesis of resorcinol-formaldehyde/graphene oxide composite aerogels with tunable densities and mechanical properties. 2015 , 54, 2397-401	137	
1488	Robust superhydrophobic bridged silsesquioxane aerogels with tunable performances and their applications. 2015 , 7, 2016-24	65	
1487	Nitrogen-doped Fe/Fe3C@graphitic layer/carbon nanotube hybrids derived from MOFs: efficient bifunctional electrocatalysts for ORR and OER. 2015 , 51, 2710-3	328	
1486	Scalable Template Synthesis of Resorcinol Formal dehyde/Graphene Oxide Composite Aerogels with Tunable Densities and Mechanical Properties. 2015 , 127, 2427-2431	26	
1485	Nanosheet-structured boron nitride spheres with a versatile adsorption capacity for water cleaning. 2015 , 7, 1824-32	97	
1484	Surface-modified single wall carbon nanohorn as an effective electrocatalyst for platinum-free fuel cell cathodes. 2015 , 3, 4361-4367	36	
1483	Growth of three dimensional flower-like molybdenum disulfide hierarchical structures on graphene/carbon nanotube network: An advanced heterostructure for energy storage devices. 2015 , 280, 39-46	42	
1482	Advanced non-precious electrocatalyst of the mixed valence CoO x nanocrystals supported on N-doped carbon nanocages for oxygen reduction. 2015 , 58, 180-186	17	
1481	Fe-P: a new class of electroactive catalyst for oxygen reduction reaction. <i>Journal of the American Chemical Society</i> , 2015 , 137, 3165-8	225	
1480	Practical, cost-effective and large-scale production of nitrogen-doped porous carbon particles and their use as metal-free electrocatalysts for oxygen reduction. 2015 , 165, 29-35	26	
1479	Ultrasonic cavitation assisted hydrogen implosion synthesis of Pt nanoparticles/nitrogen-doped graphene nanohybrid scrolls and their electrocatalytic oxidation of methanol. 2015 , 21, 1287-1294	6	

1478	Effect of boronBitrogen bonding on oxygen reduction reaction activity of BN Co-doped activated porous carbons. 2015 , 5, 24661-24669	29
1477	Enhanced electrocatalytic activity of PANI and CoFe 2 O 4 /PANI composite supported on graphene for fuel cell applications. 2015 , 284, 383-391	45
1476	Copper nanoparticles stabilized by reduced graphene oxide for CO2 reduction reaction. 2015 , 4, 1	49
1475	Silver/iron oxide/graphitic carbon composites as bacteriostatic catalysts for enhancing oxygen reduction in microbial fuel cells. 2015 , 283, 74-83	64
1474	CHAPTER 9:Nanostructured Carbon Materials for Energy Conversion and Storage. 2015 , 445-506	
1473	Monolithic nitrogen-doped graphene frameworks as ultrahigh-rate anodes for lithium ion batteries. 2015 , 3, 15738-15744	25
1472	Synthesis and electrochemical properties of tube-like nitrogen-doped graphene/manganese oxide composite for supercapacitors. 2015 , 10, 282-286	2
1471	Polydopamine-graphene oxide derived mesoporous carbon nanosheets for enhanced oxygen reduction. 2015 , 7, 12598-605	96
1470	Carbon-Supported Spinel Nanoparticle MnCo2O4 as a Cathode Catalyst towards Oxygen Reduction Reaction in Dual-Chamber Microbial Fuel Cell. 2015 , 68, 987	11
1469	Oxygen reduction reaction activity of nitrogen, oxygen and sulphur containing carbon derived from low-temperature pyrolysis of poultry featherfiber. 2015 , 176, 1054-1064	25
1468	In Situ Self-Sacrificed Template Synthesis of Fe-N/G Catalysts for Enhanced Oxygen Reduction. 2015 , 7, 18170-8	46
1467	Hydrothermal synthesis of Fe 2 O 3 /polypyrrole/graphene oxide composites as highly efficient electrocatalysts for oxygen reduction reaction in alkaline electrolyte. 2015 , 178, 179-189	48
1466	Heteroatom-Doped Graphene-Based Materials for Energy-Relevant Electrocatalytic Processes. 2015 , 5, 5207-5234	675
1465	In situ synthesis of mesoporous manganese oxide/sulfur-doped graphitized carbon as a bifunctional catalyst for oxygen evolution/reduction reactions. 2015 , 94, 1028-1036	62
1464	An atom-scale interfacial coordination strategy to prepare hierarchically porous Fe3O4-graphene frameworks and their application in charge and size selective dye removal. 2015 , 51, 14405-8	28
1463	M3C (M: Fe, Co, Ni) Nanocrystals Encased in Graphene Nanoribbons: An Active and Stable Bifunctional Electrocatalyst for Oxygen Reduction and Hydrogen Evolution Reactions. 2015 , 9, 7407-18	376
1462	The preparation and study of fluorescence properties of Y2O3:Tb3+, Yb3+ doped with silver nanoparticles. 2015 , 41, 12644-12650	8
1461	Electrodeposition of micro-nano size Fe3O4 crystals anchored on flexible buckypaper. 2015 , 19, 3053-3058	9

146	Sodium-ion Batteries and Oxygen Reduction Reaction. 2015 , 176, 670-678	18
145	One-step preparation of N-doped graphene/Co nanocomposite as an advanced oxygen reduction electrocatalyst. 2015 , 176, 280-284	27
145	Multifunctional Iron Oxide Nanoflake/Graphene Composites Derived from Mechanochemical Synthesis for Enhanced Lithium Storage and Electrocatalysis. 2015 , 7, 14446-55	62
145	General synthesis of binary PtM and ternary PtM1M2 alloy nanoparticles on graphene as advanced electrocatalysts for methanol oxidation. 2015 , 3, 15882-15888	28
145	One Pot Synthesis of Nickel Nanoparticles Stabilized on rGO/Polyethyleneimine Aerogel for the Catalytic Hydrogen Generation. 2015 , 145, 1798-1807	10
145	Hybrid of Fe@Fe3O4 core-shell nanoparticle and iron-nitrogen-doped carbon material as an efficient electrocatalyst for oxygen reduction reaction. 2015 , 174, 933-939	32
145	Novel VN/C nanocomposites as methanol-tolerant oxygen reduction electrocatalyst in alkaline electrolyte. 2015 , 5, 11351	35
145	Self-assembled and pyrolyzed carbon aerogels: an overview of their preparation mechanisms, properties and applications. 2015 , 7, 14139-58	51
145	Morphology-tunable ultrafine metal oxide nanostructures uniformly grown on graphene and their applications in the photo-Fenton system. 2015 , 7, 14254-63	58
145	Recent Advances on the Design of Group VIII Base-Metal Catalysts with Encapsulated Structures. 2015, 5, 4959-4977	123
145	Self-Assembled Hierarchical Formation of Conjugated 3D Cobalt Oxide Nanobead-CNT-Graphene Nanostructure Using Microwaves for High-Performance Supercapacitor Electrode. 2015 , 7, 15042-51	133
144	Topotactical conversion of carbon coated Fe-based electrodes on graphene aerogels for lithium ion storage. 2015 , 3, 14741-14749	42
144	Sustainable seaweed-based one-dimensional (1D) nanofibers as high-performance electrocatalysts for fuel cells. 2015 , 3, 14188-14194	64
144	Facile preparation of 3D MoS2/MoSe2 nanosheetgraphene networks as efficient electrocatalysts for the hydrogen evolution reaction. 2015 , 3, 16337-16347	127
144	High-throughput fabrication of strutted graphene by ammonium-assisted chemical blowing for high-performance supercapacitors. 2015 , 16, 81-90	71
144	Spinel LiMn2O4 nanoparticles dispersed on nitrogen-doped reduced graphene oxide nanosheets as an efficient electrocatalyst for aluminium-air battery. 2015 , 40, 9225-9234	42
144	Oxygen Reduction in Alkaline Media: From Mechanisms to Recent Advances of Catalysts. 2015 , 5, 4643-4667	748
144	Facile preparation of a three-dimensional Fe3O4/macroporous graphene composite for high-performance Li storage. 2015 , 3, 12031-12037	47

1442	Nitrogen-Doped Carbon Nanotube Aerogels for High-Performance ORR Catalysts. 2015, 11, 3903-8	78
1441	Oxidized carbon nanotubes as an efficient metal-free electrocatalyst for the oxygen reduction reaction. 2015 , 5, 41901-41904	27
1440	Highly efficient oxygen reduction on porous nitrogen-doped nanocarbons directly synthesized from cellulose nanocrystals and urea. 2015 , 170, 234-241	30
1439	Ultrasmall metal oxide nanoparticles anchored on three-dimensional hierarchical porous gaphene-like networks as anode for high-performance lithium ion batteries. 2015 , 13, 563-572	70
1438	Observation of different charge transport regimes and large magnetoresistance in graphene oxide layers. 2015 , 89, 188-196	35
1437	Nitrogen doped mesoporous carbon derived from copolymer and supporting cobalt oxide for oxygen reduction reaction in alkaline media. 2015 , 40, 6072-6084	23
1436	Nitrogen, phosphorus and iron doped carbon nanospheres with high surface area and hierarchical porous structure for oxygen reduction. 2015 , 288, 253-260	44
1435	Oxygen-deficient BaTiO3[perovskite as an efficient bifunctional oxygen electrocatalyst. 2015 , 13, 423-432	168
1434	Flexible, Highly Graphitized Carbon Aerogels Based on Bacterial Cellulose/Lignin: Catalyst-Free Synthesis and its Application in Energy Storage Devices. 2015 , 25, 3193-3202	219
1433	Unusual high oxygen reduction performance in all-carbon electrocatalysts. 2014 , 4, 6289	59
1432	Sulfur-doped graphene-supported Ag nanoparticles for nonenzymatic hydrogen peroxide detection. 2015 , 17, 1	16
1431	MoS2/Nitrogen-doped graphene as efficient electrocatalyst for oxygen reduction reaction. 2015 , 169, 142-149	59
1430	Polybenzoxazine aerogels with controllable pore structures. 2015 , 5, 26801-26805	22
1429	Conductive resilient graphene aerogel via magnesiothermic reduction of graphene oxide assemblies. 2015 , 8, 1710-1717	19
1428	Mesoporous N-doped carbons prepared with thermally removable nanoparticle templates: an efficient electrocatalyst for oxygen reduction reaction. <i>Journal of the American Chemical Society</i> , 2015 , 137, 5555-62	543
1427	3D flower-structured graphene from CO2 for supercapacitors with ultrahigh areal capacitance at high current density. 2015 , 3, 10183-10187	67
1426	Tuning three-dimensional textures with graphene aerogels for ultra-light flexible graphene/texture composites of effective electromagnetic shielding. 2015 , 93, 151-160	171
1425	Highly dual-doped multilayer nanoporous graphene: efficient metal-free electrocatalysts for the hydrogen evolution reaction. 2015 , 3, 12642-12645	67

1424	Graphene oxide aerogel-supported Pt electrocatalysts for methanol oxidation. 2015 , 285, 76-79	29
1423	Stabilization of silicon nanoparticles in graphene aerogel framework for lithium ion storage. 2015 , 5, 30624-30630	30
1422	Review on application of PEDOTs and PEDOT:PSS in energy conversion and storage devices. 2015 , 26, 4438-4462	347
1421	Electrospun materials for lithium and sodium rechargeable batteries: from structure evolution to electrochemical performance. 2015 , 8, 1660-1681	326
1420	Self-Sensing, Ultralight, and Conductive 3D Graphene/Iron Oxide Aerogel Elastomer Deformable in a Magnetic Field. 2015 , 9, 3969-77	226
1419	Fluorescence analysis of 6-mercaptopurine with the use of a nano-composite consisting of BSA-capped Au nano-clusters and core-shell Fe3O4-SiO2 nanoparticles. 2015 , 70, 246-53	43
1418	Oxygen reduction to hydrogen peroxide on Fe3O4 nanoparticles supported on Printex carbon and Graphene. 2015 , 162, 263-270	95
1417	Efficient approach to iron/nitrogen co-doped graphene materials as efficient electrochemical catalysts for the oxygen reduction reaction. 2015 , 3, 7767-7772	70
1416	Self-assembled macro porous ZnSgraphene aerogels for photocatalytic degradation of contaminants in water. 2015 , 5, 18342-18351	99
1415	An Fe/N co-doped graphitic carbon bulb for high-performance oxygen reduction reaction. 2015 , 51, 7516-9	103
1415	An Fe/N co-doped graphitic carbon bulb for high-performance oxygen reduction reaction. 2015 , 51, 7516-9 One-step synthesis of cobalt and nitrogen co-doped carbon nanotubes and their catalytic activity for the oxygen reduction reaction. 2015 , 3, 12718-12722	103
	One-step synthesis of cobalt and nitrogen co-doped carbon nanotubes and their catalytic activity	
1414	One-step synthesis of cobalt and nitrogen co-doped carbon nanotubes and their catalytic activity for the oxygen reduction reaction. 2015 , 3, 12718-12722 Confining MoS2 nanodots in 3D porous nitrogen-doped graphene with amendable ORR	44
1414	One-step synthesis of cobalt and nitrogen co-doped carbon nanotubes and their catalytic activity for the oxygen reduction reaction. 2015 , 3, 12718-12722 Confining MoS2 nanodots in 3D porous nitrogen-doped graphene with amendable ORR performance. 2015 , 3, 7616-7622 Fe3O4 nanoflakes in an N-doped carbon matrix as high-performance anodes for lithium ion	44 52
1414 1413 1412	One-step synthesis of cobalt and nitrogen co-doped carbon nanotubes and their catalytic activity for the oxygen reduction reaction. 2015, 3, 12718-12722 Confining MoS2 nanodots in 3D porous nitrogen-doped graphene with amendable ORR performance. 2015, 3, 7616-7622 Fe3O4 nanoflakes in an N-doped carbon matrix as high-performance anodes for lithium ion batteries. 2015, 7, 10123-9 Highly Hydrophobic, Compressible, and Magnetic Polystyrene/Fe3O4/Graphene Aerogel	445254
1414 1413 1412	One-step synthesis of cobalt and nitrogen co-doped carbon nanotubes and their catalytic activity for the oxygen reduction reaction. 2015, 3, 12718-12722 Confining MoS2 nanodots in 3D porous nitrogen-doped graphene with amendable ORR performance. 2015, 3, 7616-7622 Fe3O4 nanoflakes in an N-doped carbon matrix as high-performance anodes for lithium ion batteries. 2015, 7, 10123-9 Highly Hydrophobic, Compressible, and Magnetic Polystyrene/Fe3O4/Graphene Aerogel Composite for OilWater Separation. 2015, 54, 5460-5467 High rate SnO2©raphene Dual Aerogel anodes and their kinetics of lithiation and sodiation. 2015,	445254113
1414 1413 1412 1411 1410	One-step synthesis of cobalt and nitrogen co-doped carbon nanotubes and their catalytic activity for the oxygen reduction reaction. 2015, 3, 12718-12722 Confining MoS2 nanodots in 3D porous nitrogen-doped graphene with amendable ORR performance. 2015, 3, 7616-7622 Fe3O4 nanoflakes in an N-doped carbon matrix as high-performance anodes for lithium ion batteries. 2015, 7, 10123-9 Highly Hydrophobic, Compressible, and Magnetic Polystyrene/Fe3O4/Graphene Aerogel Composite for OilWater Separation. 2015, 54, 5460-5467 High rate SnO2@raphene Dual Aerogel anodes and their kinetics of lithiation and sodiation. 2015, 15, 369-378 Three dimensional graphene based materials: Synthesis and applications from energy storage and conversion to electrochemical sensor and environmental remediation. 2015, 221, 41-59	445254113114

1406	Facile fabrication of sandwich-structured Co3O4/N-rGO/AB hybrid with enhanced ORR electrocatalytic performances for metallir batteries. 2015 , 5, 9057-9063	16
1405	Metal-free catalysts for oxygen reduction reaction. 2015 , 115, 4823-92	1763
1404	Ethylenediamine-assisted preparation of carbon nanofiber supported nickel oxide electrocatalysts for sensitive and durable detection of insulin. 2015 , 5, 41317-41323	13
1403	StBer-like method to synthesize ultralight, porous, stretchable Fe2O3/graphene aerogels for excellent performance in photo-Fenton reaction and electrochemical capacitors. 2015 , 3, 12820-12827	92
1402	Multiple roles of graphene in heterogeneous catalysis. 2015 , 44, 3023-35	271
1401	Polypyrrole/silver coaxial nanowire aero-sponges for temperature-independent stress sensing and stress-triggered Joule heating. 2015 , 9, 4244-51	127
1400	Meso/macroporous nitrogen-doped carbon architectures with iron carbide encapsulated in graphitic layers as an efficient and robust catalyst for the oxygen reduction reaction in both acidic and alkaline solutions. 2015 , 27, 2521-7	461
1399	Carbon-Based Sorbents with Three-Dimensional Architectures for Water Remediation. 2015 , 11, 3319-36	136
1398	Three-Dimensional Nitrogen-Doped Graphene/MnO Nanoparticle Hybrids as a High-Performance Catalyst for Oxygen Reduction Reaction. 2015 , 119, 8032-8037	82
1397	One-step synthesis of three-dimensional graphene/multiwalled carbon nanotubes/Pd composite hydrogels: an efficient recyclable catalyst for Suzuki coupling reactions. 2015 , 3, 10368-10377	63
1396	Hydrothermal synthesis of 3D Ni Co1B2 particles/graphene composite hydrogels for high performance supercapacitors. 2015 , 90, 44-52	60
1395	Manganese dioxide-anchored three-dimensional nitrogen-doped graphene hybrid aerogels as excellent anode materials for lithium ion batteries. 2015 , 3, 10403-10412	84
1394	Potterylof Porous Graphene Materials. 2015, 1, 1500004	10
1393	Selective electrochemical detection of dopamine using nitrogen-doped graphene/manganese monoxide composites. 2015 , 5, 85065-85072	27
1392	Structure-activity relationship in high-performance iron-based electrocatalysts for oxygen reduction reaction. 2015 , 300, 279-284	56
1391	Oxygen reduction electrocatalysts based on spatially confined cobalt monoxide nanocrystals on holey N-doped carbon nanowires: the enlarged interfacial area for performance improvement. 2015 , 3, 21647-21654	17
1390	Review R ecent Progress in Electrocatalysts for Oxygen Reduction Suitable for Alkaline Anion Exchange Membrane Fuel Cells. 2015 , 162, F1504-F1539	119
1389	Magnetic graphene-carbon nanotube iron nanocomposites as adsorbents and antibacterial agents for water purification. 2015 , 225, 229-40	123

1388	Nb 2 O 5 nanoparticles supported on reduced graphene oxide sheets as electrocatalyst for the H 2 O 2 electrogeneration. 2015 , 332, 51-61	45
1387	Graphene Quantum Dots-Supported Palladium Nanoparticles for Efficient Electrocatalytic Reduction of Oxygen in Alkaline Media. 2015 , 3, 3315-3323	58
1386	Improved oxygen reduction activity on silver-modified LaMnO3graphene via shortens the conduction path of adsorbed oxygen. 2015 , 5, 92096-92106	33
1385	Defective titanium dioxide single crystals exposed by high-energy {001} facets for efficient oxygen reduction. 2015 , 6, 8696	203
1384	Easy fabrication of ultralight CNx foams with application as absorbents and continuous flow oilWater separation. 2015 , 4, 116-123	7
1383	MoS2 graphene fiber based gas sensing devices. 2015 , 95, 34-41	106
1382	Insights into N-doping in single-walled carbon nanotubes for enhanced activation of superoxides: a mechanistic study. 2015 , 51, 15249-52	195
1381	Bimetallic porous porphyrin polymer-derived non-precious metal electrocatalysts for oxygen reduction reactions. 2015 , 3, 23799-23808	82
1380	Nitrogen-doped graphene aerogel-supported spinel CoMn2O4 nanoparticles as an efficient catalyst for oxygen reduction reaction. 2015 , 299, 492-500	67
1379	An introduction to the chemistry of graphene. 2015 , 17, 28484-504	91
1378	Tunable ternary (P, S, N)-doped graphene as an efficient electrocatalyst for oxygen reduction reaction in an alkaline medium. 2015 , 5, 86746-86753	34
1377	Oxide-based nanostructures for photocatalytic and electrocatalytic applications. 2015 , 17, 8978-9001	45
1376	Preparation of flexible reduced graphene oxide/poly(vinyl alcohol) film with superior microwave absorption properties. 2015 , 5, 88958-88964	48
1375	Facile fabrication of multilayer films of graphene oxide/copper phthalocyanine with high dielectric properties. 2015 , 5, 88306-88310	10
1374	Facile fabrication of 3D SnO2/nitrogen-doped graphene aerogels for superior lithium storage. 2015 , 5, 68822-68828	4
1373	Carbon-Free Electrocatalyst for Oxygen Reduction and Oxygen Evolution Reactions. 2015 , 7, 20607-11	31
1372	Graphene Oxide: A Convenient Metal-Free Carbocatalyst for Facilitating Aerobic Oxidation of 5-Hydroxymethylfurfural into 2, 5-Diformylfuran. 2015 , 5, 5636-5646	125
1371	Electrochemical growth of octahedral Fe3O4 with high activity and stability toward the oxygen reduction reaction. 2015 , 3, 19273-19276	30

1370	Exfoliation of graphene via wet chemical routes. 2015 , 210, 123-132	100
1369	Ultrafast solgel synthesis of graphene aerogel materials. 2015 , 95, 616-624	57
1368	Copper(II) phthalocyanine supported on a three-dimensional nitrogen-doped graphene/PEDOT-PSS nanocomposite as a highly selective and sensitive sensor for ammonia detection at room temperature. 2015 , 5, 79729-79737	29
1367	A bio-inspired Co3O4-polypyrrole-graphene complex as an efficient oxygen reduction catalyst in one-step ball milling. 2015 , 8, 3461-3471	38
1366	Nonstoichiometric Oxides as Low-Cost and Highly-Efficient Oxygen Reduction/Evolution Catalysts for Low-Temperature Electrochemical Devices. 2015 , 115, 9869-921	631
1365	Chitosan assisted synthesis of 3D graphene@Au nanosheet composites: catalytic reduction of 4-nitrophenol. 2015 , 5, 79456-79462	11
1364	Layer-by-layer motif hybridization: nanoporous nickel oxide flakes wrapped into graphene oxide sheets toward enhanced oxygen reduction reaction. 2015 , 51, 16409-12	27
1363	Facile synthesis of structure-controllable, N-doped graphene aerogels and their application in supercapacitors. 2015 , 5, 77130-77137	18
1362	From supramolecular hydrogels to functional aerogels: a facile strategy to fabricate Fe3O4/N-doped graphene composites. 2015 , 5, 77296-77302	10
1361	Three-dimensional N,B-doped graphene aerogel as a synergistically enhanced metal-free catalyst for the oxygen reduction reaction. 2015 , 17, 25440-8	67
1360	Growth mechanism and active site probing of Fe3C@N-doped carbon nanotubes/C catalysts: guidance for building highly efficient oxygen reduction electrocatalysts. 2015 , 3, 21451-21459	60
1359	Fabrication of mesoporous graphene electrodes with enhanced capacitive deionization. 2015 , 182, 183-191	47
1358	A novel magnetic NiFe2O4@graphene P d multifunctional nanocomposite for practical catalytic application. 2015 , 5, 79548-79555	24
1357	One-Pot Self-Assembled, Reduced Graphene Oxide/Palladium Nanoparticle Hybrid Aerogels for Electrocatalytic Applications. 2015 , 180, 902-908	17
1356	The performance and mechanism of modified activated carbon air cathode by non-stoichiometric nano Fe3O4 in the microbial fuel cell. 2015 , 74, 989-95	60
1355	N-doped porous carbon derived from biomass as an advanced electrocatalyst for aqueous aluminium/air battery. 2015 , 40, 16230-16237	42
1354	In Situ Integration of Anisotropic SnOIHeterostructures inside Three-Dimensional Graphene Aerogel for Enhanced Lithium Storage. 2015 , 7, 26085-93	23
1353	Three-dimensional graphene-based composites for energy applications. 2015 , 7, 6924-43	211

1352	Ionic liquids as precursors for efficient mesoporous iron-nitrogen-doped oxygen reduction electrocatalysts. 2015 , 54, 1494-8	156
1351	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. 2015 , 3, 3559-3567	103
1350	Direct electrochemical analysis of glucose oxidase on a graphene aerogel/gold nanoparticle hybrid for glucose biosensing. 2015 , 19, 307-314	30
1349	Metal-free graphene-based catalystIhsight into the catalytic activity: A short review. 2015 , 492, 1-9	107
1348	Low Pt content catalyst supported on nitrogen and phosphorus-codoped carbon nanotubes for electrocatalytic O2 reaction in acidic medium. 2015 , 142, 115-118	12
1347	Enhanced catalytic activity for the oxygen reduction reaction with co-doping of phosphorus and iron in carbon. 2015 , 277, 161-168	38
1346	Ionic Liquids as Precursors for Efficient Mesoporous Iron-Nitrogen-Doped Oxygen Reduction Electrocatalysts. 2015 , 127, 1514-1518	19
1345	Fe/N/C hollow nanospheres by Fe(iii)-dopamine complexation-assisted one-pot doping as nonprecious-metal electrocatalysts for oxygen reduction. 2015 , 7, 1501-9	196
1344	Exceptional electrochemical performance of nitrogen-doped porous carbon for lithium storage. 2015 , 82, 116-123	90
1343	Nitrogen-doped graphene supported highly dispersed palladium-lead nanoparticles for synergetic enhancement of ethanol electrooxidation in alkaline medium. 2015 , 152, 68-74	71
1342	A three-dimensional carbon nano-network for high performance lithium ion batteries. 2015 , 11, 500-509	41
1341	Carbon nanofiber aerogels for emergent cleanup of oil spillage and chemical leakage under harsh conditions. 2014 , 4, 4079	190
1340	New approach of nitrogen and sulfur-doped graphene synthesis using dipyrrolemethane and their electrocatalytic activity for oxygen reduction in alkaline media. 2015 , 275, 73-79	88
1339	Preparation and application of iron oxide/graphene based composites for electrochemical energy storage and energy conversion devices: Current status and perspective. 2015 , 11, 277-293	118
1338	Stable silver nanoclusters electrochemically deposited on nitrogen-doped graphene as efficient electrocatalyst for oxygen reduction reaction. 2015 , 274, 1173-1179	62
1337	Three-dimensional nitrogen-doped graphene nanoribbons aerogel as a highly efficient catalyst for the oxygen reduction reaction. 2015 , 11, 1423-9	105
1336	A novel electrochemical sensor based on zirconia/ordered macroporous polyaniline for ultrasensitive detection of pesticides. 2015 , 140, 560-6	43
1335	Co3O4 nanocrystals coupled with O- and N-doped carbon nanoweb as a synergistic catalyst for hybrid Li-air batteries. 2015 , 12, 852-860	86

1334	Three-dimensional graphene networks: synthesis, properties and applications. 2015 , 2, 40-53	229
1333	Graphene-based transition metal oxide nanocomposites for the oxygen reduction reaction. 2015 , 7, 1250-69	249
1332	Noble metal-free electrocatalysts for the oxygen reduction reaction based on iron and nitrogen-doped porous graphene. 2015 , 3, 1058-1067	35
1331	Emerging methanol-tolerant AlN nanowire oxygen reduction electrocatalyst for alkaline direct methanol fuel cell. 2014 , 4, 6013	47
1330	Preparation of porous graphene using cuprous oxide microspheres as sacrificial templates for enriching proteins and peptides. 2015 , 82, 579-589	17
1329	Activation of peroxymonosulfate with magnetic Fe3O4MnO2 coreShell nanocomposites for 4-chlorophenol degradation. 2015 , 262, 854-861	187
1328	Facile fabrication of molybdenum dioxide/nitrogen-doped graphene hybrid as high performance anode material for lithium ion batteries. 2015 , 274, 142-148	51
1327	The performance of activated carbon treated with H3PO4 at 80°C in the air-cathode microbial fuel cell. 2015 , 259, 820-826	32
1326	Strengthening of graphene aerogels with tunable density and high adsorption capacity towards Pb2+. 2014 , 4, 5025	49
1325	Molecularly engineered graphene surfaces for sensing applications: A review. 2015 , 859, 1-19	169
1324	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. 2015 , 7, 4598-810	2015
1323	Nitrogen-induced surface area and conductivity modulation of carbon nanohorn and its function as an efficient metal-free oxygen reduction electrocatalyst for anion-exchange membrane fuel cells. 2015 , 11, 352-60	74
1322	Electrocatalytic Applications of GrapheneMetal Oxide Nanohybrid Materials. 2016 ,	12
1321	Magnetic-Graphene-Based Nanocomposites and Respective Applications. 2016,	3
1320	Nitrogen-Doped Carbon Composites as Metal-Free Catalysts. 2016 , 273-311	
1319	Core-Shell Co/CoO Integrated on 3D Nitrogen Doped Reduced Graphene Oxide Aerogel as an Enhanced Electrocatalyst for the Oxygen Reduction Reaction. 2016 , 4, 36	14
1318	Recent Progress in Multifunctional Graphene Aerogels. 2016 , 3,	19
1317	Pyridinic-Nitrogen-Dominated Graphene Aerogels with FeNC Coordination for Highly Efficient Oxygen Reduction Reaction. 2016 , 26, 5708-5717	301

1316	Efficient Oxygen Reduction Electrocatalysts Based on Gold Nanocluster G raphene Composites. 2016 , 3, 1253-1260	18
1315	Graphene-Supported Mesoporous Carbons Prepared with Thermally Removable Templates as Efficient Catalysts for Oxygen Electroreduction. 2016 , 12, 1900-8	50
1314	Cumulative effect of transition metals on nitrogen and fluorine co-doped graphite nanofibers: an efficient and highly durable non-precious metal catalyst for the oxygen reduction reaction. 2016 , 8, 14650-64	44
1313	3D Printing of Graphene Aerogels. 2016 , 12, 1702-8	316
1312	Facile Synthesis of Fe C@Graphene Hybrid Nanorods as an Efficient and Robust Catalyst for Oxygen Reduction Reaction. 2016 , 81, 646-651	9
1311	Three-Dimensional Electrocatalysts for Sustainable Water Splitting Reactions. 2016 , 2016, 1916-1923	37
1310	Scalable and Cost-Effective Synthesis of Highly Efficient Fe2N-Based Oxygen Reduction Catalyst Derived from Seaweed Biomass. 2016 , 12, 1295-301	131
1309	Flexible Ru/Graphene Aerogel with Switchable Surface Chemistry: Highly Efficient Catalyst for Room-Temperature CO Oxidation. 2016 , 3, 1500711	12
1308	CoreBhelled Low-Oxidation State Oxides@Reduced Graphene Oxides Cubes via Pressurized Reduction for Highly Stable Lithium Ion Storage. 2016 , 26, 2959-2965	33
1307	Low-Temperature Chemical Vapor Deposition Synthesis of Pt-Co Alloyed Nanoparticles with Enhanced Oxygen Reduction Reaction Catalysis. 2016 , 28, 7115-22	122
1306	Fe/Fe C/N-Doped Carbon Materials from Metal-Organic Framework Composites as Highly Efficient Oxygen Reduction Reaction Electrocatalysts. 2016 , 81, 718-723	21
1305	Fabrication of electrocatalyst based on nitrogen doped graphene as highly efficient and durable support for using in polymer electrolyte fuel cell. 2016 , 325, 808-815	26
1304	A bi-functional catalyst for oxygen reduction and oxygen evolution reactions from used baby diapers: #e2O3 wrapped in P and S dual doped graphitic carbon. 2016 , 6, 64258-64265	16
1303	Metal-Organic Framework-Templated Porous Carbon for Highly Efficient Catalysis: The Critical Role of Pyrrolic Nitrogen Species. 2016 , 22, 3470-3477	72
1302	Carbon Aerogels Derived from Bacterial Cellulose/Polyimide Composites as Versatile Adsorbents and Supercapacitor Electrodes. 2016 , 2, 212-219	41
1301	Platinfreie Nanomaterialien fādie Sauerstoffreduktion. 2016 , 128, 2698-2726	78
1300	Earth-Abundant Nanomaterials for Oxygen Reduction. 2016 , 55, 2650-76	760
1299	A binder-free sulfur/reduced graphene oxide aerogel as high performance electrode materials for lithium sulfur batteries. 2016 , 6, 39615	29

1298	Napkin Paper Derived Nitrogen-Doped Carbon Sheets: A High-Performance Electrocatalyst for Oxygen Reduction Reaction. 2016 , 163, H1204-H1209	3
1297	Boron doped graphene wrapped silver nanowires as an efficient electrocatalyst for molecular oxygen reduction. 2016 , 6, 37731	17
1296	Interaction Induced High Catalytic Activities of CoO Nanoparticles Grown on Nitrogen-Doped Hollow Graphene Microspheres for Oxygen Reduction and Evolution Reactions. 2016 , 6, 27081	69
1295	One-step synthesis of nitrogen-iron coordinated carbon nanotube catalysts for oxygen reduction reaction. 2016 , 313, 128-133	14
1294	Bifunctional Perovskite Oxide Catalysts for Oxygen Reduction and Evolution in Alkaline Media. 2016 , 11, 10-21	155
1293	Cu and Cu-Based Nanoparticles: Synthesis and Applications in Catalysis. 2016 , 116, 3722-811	1452
1292	Ni-doped CoFe2O4 Hollow Nanospheres as Efficient Bi-functional Catalysts. 2016 , 201, 172-178	82
1291	Free-Standing 3D Hierarchical Carbon Foam-Supported PtCo Nanowires with P t Skinl a s Advanced Electrocatalysts. 2016 , 199, 218-226	27
1290	Nitrogen-doped carbon nanofibers derived from polypyrrole coated bacterial cellulose as high-performance electrode materials for supercapacitors and Li-ion batteries. 2016 , 210, 130-137	46
1289	Incorporating Graphene into Fuel Cell Design. 2016 , 293-312	
1288	Modified iron oxide nanomaterials: Functionalization and application. 2016 , 416, 117-133	74
1287	Synthesis and Properties of Luminescent Silicon Nanocrystal/Silica Aerogel Hybrid Materials. 2016 , 28, 3877-3886	25
1286	ZnO-promoted dechlorination for hierarchically nanoporous carbon as superior oxygen reduction electrocatalyst. 2016 , 26, 241-247	60
1285	Ba0.5Sr0.5Co0.8Fe0.2O3Ibn N-doped mesoporous carbon derived from organic waste as a	46
	bi-functional oxygen catalyst. 2016 , 41, 10744-10754	·
1284	Dual-doped mesoporous carbon synthesized by a novel nanocasting method with superior catalytic activity for oxygen reduction. 2016 , 26, 131-138	57
1284 1283	Dual-doped mesoporous carbon synthesized by a novel nanocasting method with superior catalytic	
ŕ	Dual-doped mesoporous carbon synthesized by a novel nanocasting method with superior catalytic activity for oxygen reduction. 2016 , 26, 131-138 Fe/Fe2O3 nanoparticles anchored on Fe-N-doped carbon nanosheets as bifunctional oxygen	57

1280 Is reduced graphene oxide favorable for nonprecious metal oxygen-reduction catalysts?. **2016**, 102, 346-356 40 Co-N Decorated Hierarchically Porous Graphene Aerogel for Efficient Oxygen Reduction Reaction 136 in Acid. 2016, 8, 6488-95 1278 Graphene and its nanocomposites used as an active materials for supercapacitors. 2016, 20, 1509-1526 14 Effects of Fe3O4 loading on the cycling performance of Fe3O4/rGO composite anode material for 36 lithium ion batteries. 2016, 678, 80-86 Electrocatalytic performance of commercial vanadium carbide for oxygen reduction reaction. 2016, 1276 29 41.4150-4158 Facile fabrication of FeN nanoparticles/nitrogen-doped graphene core-shell hybrid and its use as a 39 platform for NADH detection in human blood serum. 2016, 83, 68-76 Shrimp-shell derived carbon nanodots as precursors to fabricate Fe,N-doped porous graphitic 1274 20 carbon electrocatalysts for efficient oxygen reduction in zinclir batteries. 2016, 3, 910-918 Facile fabrication of Co3O4/nitrogen-doped graphene hybrid materials as high performance anode 18 1273 materials for lithium ion batteries. 2016, 18, 3383-3388 Graphene aerogel based monolith for effective solid-phase extraction of trace environmental 1272 49 pollutants from water samples. 2016, 1447, 39-46 Synthesis of polyvinyl alcohol/cellulose nanofibril hybrid aerogel microspheres and their use as 1271 70 oil/solvent superabsorbents. 2016, 148, 300-8 An efficient CoNC oxygen reduction catalyst with highly dispersed Co sites derived from a ZnCo 1270 55 bimetallic zeolitic imidazolate framework. 2016, 6, 37965-37973 Rational design of graphitic carbon based nanostructures for advanced electrocatalysis. 2016, 4, 8497-8511 66 1269 Nitrogen-Deficient ORR Active Sites Formation by Iron-Assisted Water Vapor Activation of 1268 43 Electrospun Carbon Nanofibers. 2016, 120, 7705-7714 MoS 2 coated hollow carbon spheres for anodes of lithium ion batteries. 2016, 3, 024001 33 Toward highly compressible graphene aerogels of enhanced mechanical performance with 1266 14 polymer. **2016**, 6, 43007-43015 Gamma-ray irradiation-induced reduction and self-assembly of graphene oxide into 1265 31 three-dimensional graphene aerogel. 2016, 177, 76-79 Facile synthesis of nitrogen-doped carbon nanosheets as metal-free catalyst with excellent oxygen 1264 18 reduction performance in alkaline and acidic media. 2016, 20, 1469-1479 Nitrogen-doped hierarchically porous carbon foam: A free-standing electrode and mechanical 1263 229 support for high-performance supercapacitors. 2016, 25, 193-202

1262	Facilely prepared Fe3O4/nitrogen-doped graphene quantum dot hybrids as a robust nonenzymatic catalyst for visual discrimination of phenylenediamine isomers. 2016 , 8, 10814-22	54
1261	Photo-thermal oxidation of single layer graphene. 2016 , 6, 42545-42553	26
1260	Highly Efficient Oxygen Reduction Catalysts by Rational Synthesis of Nanoconfined Maghemite in a Nitrogen-Doped Graphene Framework. 2016 , 6, 3558-3568	67
1259	Synthesis of functionalized N-doped graphene DNA hybrid material in a deep eutectic solvent. 2016 , 18, 4297-4302	8
1258	Graphene aerogel-supported and graphene quantum dots-modified EMnOOH nanotubes as a highly efficient electrocatalyst for oxygen reduction reaction. 2016 , 6, 43116-43126	19
1257	Functionalization of chemically derived graphene for improving its electrocapacitive energy storage properties. 2016 , 9, 1891-1930	181
1256	3D MoS2 Composition Aerogels as Chemosensors and Adsorbents for Colorimetric Detection and High-Capacity Adsorption of Hg2+. 2016 , 4, 3398-3408	103
1255	Nitrogen-doped graphene prepared by pyrolysis of graphene oxide/polyaniline composites as supercapacitor electrodes. 2016 , 120, 27-36	23
1254	Metal-organic frameworks@graphene hybrid aerogels for solid-phase extraction of non-steroidal anti-inflammatory drugs and selective enrichment of proteins. 2016 , 141, 4219-26	70
1253	Preparation of Cobalt Sulfide Nanoparticle-Decorated Nitrogen and Sulfur Co-Doped Reduced Graphene Oxide Aerogel Used as a Highly Efficient Electrocatalyst for Oxygen Reduction Reaction. 2016 , 12, 5920-5926	61
1252	Ultrafine Co2P nanoparticles encapsulated in nitrogen and phosphorus dual-doped porous carbon nanosheet/carbon nanotube hybrids: high-performance bifunctional electrocatalysts for overall water splitting. 2016 , 4, 15501-15510	75
1251	Graphene Network. 2016 , 67-88	
1250	Novel Hydrogel-Derived Bifunctional Oxygen Electrocatalyst for Rechargeable Air Cathodes. 2016 , 16, 6516-6522	192
1249	Electrochemical catalysis at low dimensional carbons: Graphene, carbon nanotubes and beyond A review. 2016 , 5, 134-141	66
1248	Novel assembly and electrochemical properties of anatase TiO2-graphene aerogel 3D hybrids as lithium-ion battery anodes. 2016 , 662, 214-220	10
1247	Nanostructured Bifunctional Redox Electrocatalysts. 2016 , 12, 5656-5675	134
1246	Shaping electrocatalysis through tailored nanomaterials. 2016 , 11, 587-600	114
1245	Iron functionalization on graphene nanoflakes using thermal plasma for catalyst applications. 2016 , 528, 36-43	6

1244 Effect of amine-modified boron nitride (BN) on ammonium perchlorate decomposition. 2016, 6, 89635-89641 9 Fe3C nanoparticle decorated Fe/N doped graphene for efficient oxygen reduction reaction 1243 79 electrocatalysis. 2016, 332, 305-311 Spinel CoMn2O4 nanoparticles supported on a nitrogen and phosphorus dual doped graphene 1242 17 aerogel as efficient electrocatalysts for the oxygen reduction reaction. 2016, 6, 96436-96444 Synthesis of nitrogen-doped reduced graphene oxide as metal-free electrocatalyst for oxygen 1241 reduction reactions. 2016, 12, 252 The effect of the internal magnetism of ferromagnetic catalysts on their catalytic activity toward 1240 15 oxygen reduction reaction under an external magnetic field. 2016, 22, 2195-2202 Biomass-Derived Activated Carbon Supported Fe3O4 Nanoparticles as Recyclable Catalysts for 91 Reduction of Nitroarenes. 2016, 4, 6772-6782 Edge-rich and (N, S)-doped 3D porous graphene as an efficient metal-free electrocatalyst for the 1238 22 oxygen reduction reaction. **2016**, 6, 90384-90387 Silver nanoparticles supported on a nitrogen-doped graphene aerogel composite catalyst for an 26 1237 oxygen reduction reaction in aluminum air batteries. 2016, 6, 99179-99183 Controllable localization of carbon nanotubes on the holey edge of graphene: an efficient oxygen 1236 27 reduction electrocatalyst for ZnBir batteries. 2016, 4, 18240-18247 Functionalized-Graphene Composites: Fabrication and Applications in Sustainable Energy and 1235 151 Environment. 2016, 28, 8082-8118 Hybrid of Fe3O4 nanorods and N-doped carbon as efficient oxygen reduction electrocatalyst. 2016, 1234 16 41, 16858-16864 Large scale fabrication of graphene for oil and organic solvent absorption. 2016, 26, 319-323 11 Self-assembly of CeO2 nanostructures/reduced graphene oxide composite aerogels for efficient 1232 113 photocatalytic degradation of organic pollutants in water. 2016, 688, 527-536 3D graphene-based hybrid materials: synthesis and applications in energy storage and conversion. 105 2016, 8, 15414-47 Facile synthesis and excellent electrochemical performance of reduced graphene oxide 10304 1230 103 yolk-shell nanocages as a catalyst for oxygen evolution reaction. 2016, 4, 13534-13542 The direct growth of highly dispersed CoO nanoparticles on mesoporous carbon as a 1229 10 high-performance electrocatalyst for the oxygen reduction reaction. 2016, 6, 70763-70769 Nitrogen-doped Multi-walled Carbon Nanotubes-MnCo 2 O 4 microsphere as electrocatalyst for 1228 44 efficient oxygen reduction reaction. 2016, 41, 15199-15207 Integrated Carbon/Red Phosphorus/Graphene Aerogel 3D Architecture via Advanced 182 1227 Vapor-Redistribution for High-Energy Sodium-Ion Batteries. 2016, 6, 1601037

1226	Biosensors for liquid biopsy: circulating nucleic acids to diagnose and treat cancer. 2016, 408, 7255-64	49
1225	Highly efficient iron phthalocyanine based porous carbon electrocatalysts for the oxygen reduction reaction. 2016 , 6, 78737-78742	13
1224	A self-template and KOH activation co-coupling strategy to synthesize ultrahigh surface area nitrogen-doped porous graphene for oxygen reduction. 2016 , 6, 73292-73300	24
1223	Ultra-fine Pt nanoparticles supported on 3D porous N-doped graphene aerogel as a promising electro-catalyst for methanol electrooxidation. 2016 , 86, 46-50	34
1222	Nano ceria supported nitrogen doped graphene as a highly stable and methanol tolerant electrocatalyst for oxygen reduction. 2016 , 6, 77100-77104	19
1221	Cobalt silicate hierarchical hollow spheres for lithium-ion batteries. 2016 , 27, 365401	16
1220	A three-dimensional nitrogen-doped graphene aerogel-activated carbon composite catalyst that enables low-cost microfluidic microbial fuel cells with superior performance. 2016 , 4, 15913-15919	61
1219	A facile method for the synthesis of transfer-free graphene from co-deposited nickeldarbon layers. 2016 , 109, 154-162	8
1218	Is Ammonium Peroxydisulate Indispensable for Preparation of Aniline-Derived Iron-Nitrogen-Carbon Electrocatalysts?. 2016 , 9, 2301-6	14
1217	Modications of Electronic Properties of Graphene by Boron (B) and Nitrogen (N) Substitution. 2016 , 249-264	
1216	Boosting Power Density of Microbial Fuel Cells with 3D Nitrogen-Doped Graphene Aerogel Electrode. 2016 , 3, 1600097	69
1215	Size fractionation of graphene oxide sheets assisted by circular flow and their graphene aerogels with size-dependent adsorption. 2016 , 6, 74053-74060	12
1214	Recent Progress in Synthesis, Characterization and Evaluation of Non-Precious Metal Catalysts for the Oxygen Reduction Reaction. 2016 , 16, 4-22	93
1213	Ultrasmall Fe2O3 Nanoparticles Anchored on Three-Dimensional Hierarchical Porous Graphene-like	
	Networks for High Rate Capability Supercapacitors. 2016 , 3, 1820-1826	12
1212		12 27
1212 1211	Networks for High Rate Capability Supercapacitors. 2016 , 3, 1820-1826 Nitrogen-Doped Porous Carbon/Graphene Aerogel with Much Enhanced Capacitive Behaviors. 2016	27
	Networks for High Rate Capability Supercapacitors. 2016 , 3, 1820-1826 Nitrogen-Doped Porous Carbon/Graphene Aerogel with Much Enhanced Capacitive Behaviors. 2016 , 215, 100-107	27

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1208	oxygen reduction reaction. 2016 , 215, 388-397	46
1207	Highly Active and Stable Graphene Tubes Decorated with FeCoNi Alloy Nanoparticles via a Template-Free Graphitization for Bifunctional Oxygen Reduction and Evolution. 2016 , 6, 1601198	183
1206	3D Graphene Aerogels Decorated with Cobalt Phosphide Nanoparticles as Electrocatalysts for the Hydrogen Evolution Reaction. 2016 , 9, 3049-3053	45
1205	Noncovalent Immobilization of a Pyrene-Modified Cobalt Corrole on Carbon Supports for Enhanced Electrocatalytic Oxygen Reduction and Oxygen Evolution in Aqueous Solutions. 2016 , 6, 6429-6437	132
1204	Functionalization of Graphene and Applications. 2016 , 1-29	10
1203	Defective-Activated-Carbon-Supported Mn-Co Nanoparticles as a Highly Efficient Electrocatalyst for Oxygen Reduction. 2016 , 28, 8771-8778	139
1202	Fabrication of functionalized 3D graphene with controllable micro/meso-pores as a superior electrocatalyst for enhanced oxygen reduction in both acidic and alkaline solutions. 2016 , 6, 79459-79469	2
1201	Phase-Controlled Iron Oxide Nanobox Deposited on Hierarchically Structured Graphene Networks for Lithium Ion Storage and Photocatalysis. 2016 , 6, 19959	23
1200	Nitrogen Doping in Oxygen-Deficient CaFeO: A Strategy for Efficient Oxygen Reduction Oxide Catalysts. 2016 , 8, 34387-34395	37
1199	Active Site Structures in Nitrogen-Doped Carbon-Supported Cobalt Catalysts for the Oxygen Reduction Reaction. 2016 , 8, 32875-32886	95
1198	Ultrafine N-doped carbon nanoparticles with controllable size to enhance electrocatalytic activity for oxygen reduction reaction. 2016 , 6, 110758-110764	10
1197	Nitrogen-doped carbon-embedded TiO2 nanofibers as promising oxygen reduction reaction electrocatalysts. 2016 , 330, 292-303	68
1196	Vanadium Carbide Based Composite for High Performance Oxygen Reduction Reaction and Lithium Ion Batteries. 2016 , 1, 2682-2686	10
1195	Enhanced electrocatalytic performance of perovskite supported iron oxide nanoparticles for oxygen reduction reaction. 2016 , 6, 94826-94832	13
1194	Facile Synthesis of Mesoporous Reduced Graphene Oxide Microspheres with Well-Distributed Fe2O3 Nanoparticles for Photochemical Catalysis. 2016 , 55, 10591-10599	17
1193	MnOBitrogen doped graphene as a durable non-precious hybrid catalyst for the oxygen reduction reaction in anion exchange membrane fuel cells. 2016 , 6, 95590-95600	16
1192	Graphene and Graphene Sheets Based Nanocomposites. 2016 , 107-150	1
1191	Development of MOF-Derived Carbon-Based Nanomaterials for Efficient Catalysis. 2016 , 6, 5887-5903	810

1190	Cobalt Ferrite Bearing Nitrogen-Doped Reduced Graphene Oxide Layers Spatially Separated with Microporous Carbon as Efficient Oxygen Reduction Electrocatalyst. 2016 , 8, 20730-40	33
1189	Three-dimensional macro-structures of two-dimensional nanomaterials. 2016 , 45, 5541-5588	231
1188	The Effect of KOH Treatment on the Chemical Structure and Electrocatalytic Activity of Reduced Graphene Oxide Materials. 2016 , 22, 11435-40	5
1187	One-pot hydrothermal synthesis of platinum nanoparticle-decorated three-dimensional nitrogen-doped graphene aerogel as a highly efficient electrocatalyst for methanol oxidation. 2016 , 6, 69973-69976	9
1186	An Efficient Electrocatalyst Derived from Bamboo Leaves for the Oxygen Reduction Reaction. 2016 , 3, 1466-1470	12
1185	Cobalt oxide nanosheets wrapped onto nickel foam for non-enzymatic detection of glucose. 2016 , 27, 344001	29
1184	Computational electrochemistry of doped graphene as electrocatalytic material in fuel cells. 2016 , 116, 1623-1640	18
1183	Oxygen reduction on SILAR deposited iron oxide onto graphite felt electrode. 2016 , 212, 254-259	5
1182	CarbonBoron coreBhell microspheres for the oxygen reduction reaction. 2016 , 4, 12987-12994	8
1181	Three dimensional Graphene aerogels as binder-less, freestanding, elastic and high-performance electrodes for lithium-ion batteries. 2016 , 6, 27365	45
1180	General Solvent-dependent Strategy toward Enhanced Oxygen Reduction Reaction in Graphene/Metal Oxide Nanohybrids: Effects of Nitrogen-containing Solvent. 2016 , 6, 37174	18
1179	Nitrogen-doped 3D porous carbons with iron carbide nanoparticles encapsulated in graphitic layers derived from functionalized MOF as an efficient noble-metal-free oxygen reduction electrocatalysts in both acidic and alkaline media. 2016 , 6, 110820-110830	20
1178	Microwave-Assisted Synthesis of Highly Dispersed PtCu Nanoparticles on Three-Dimensional Nitrogen-Doped Graphene Networks with Remarkably Enhanced Methanol Electrooxidation. 2016 , 8, 33673-33680	63
1177	Cellular graphene aerogel combines ultralow weight and high mechanical strength: A highly efficient reactor for catalytic hydrogenation. 2016 , 6, 25830	40
1176	Biomass-Derived Porous FeC/Tungsten Carbide/Graphitic Carbon Nanocomposite for Efficient Electrocatalysis of Oxygen Reduction. 2016 , 8, 32307-32316	73
1175	Thermally Annealed Anisotropic Graphene Aerogels and Their Electrically Conductive Epoxy Composites with Excellent Electromagnetic Interference Shielding Efficiencies. 2016 , 8, 33230-33239	198
1174	Energy gels: A bio-inspired material platform for advanced energy applications. 2016 , 11, 738-762	112
1173	Hollow hemisphere-shaped macroporous graphene/tungsten carbide/platinum nanocomposite as an efficient electrocatalyst for the oxygen reduction reaction. 2016 , 221, 31-40	18

1172	S and N codoped three-dimensional graphene-MnS hybrids with high electrocatalytic activity for oxygen reduction reaction. 2016 , 221, 55-60	19
1171	Migration behavior, oxidation state of iron and graphitization of carbon nanofibers for enhanced electrochemical performance of composite anodes. 2016 , 222, 385-392	22
1170	A General Approach to Preferential Formation of Active Fe-N Sites in Fe-N/C Electrocatalysts for Efficient Oxygen Reduction Reaction. <i>Journal of the American Chemical Society</i> , 2016 , 138, 15046-15056 16.4	523
1169	Ultradispersed Cobalt Ferrite Nanoparticles Assembled in Graphene Aerogel for Continuous Photo-Fenton Reaction and Enhanced Lithium Storage Performance. 2016 , 6, 29099	59
1168	Elastic Carbon Aerogels Reconstructed from Electrospun Nanofibers and Graphene as Three-Dimensional Networked Matrix for Efficient Energy Storage/Conversion. 2016 , 6, 31541	32
1167	High-performance oxygen reduction catalyst derived from porous, nitrogen-doped carbon nanosheets. 2016 , 27, 405401	8
1166	Coral-Like MoS2/Cu2O Porous Nanohybrid with Dual-Electrocatalyst Performances. 2016 , 3, 1600658	29
1165	Fluorescence Probe Based on an Amino-Functionalized Fluorescent Magnetic Nanocomposite for Detection of Folic Acid in Serum. 2016 , 8, 31832-31840	37
1164	Ice-templated synthesis of multifunctional three dimensional graphene/noble metal nanocomposites and their mechanical, electrical, catalytic, and electromagnetic shielding properties. 2015 , 5, 17726	48
1163	Encapsulation of Fe3O4 Nanoparticles into N, S co-Doped Graphene Sheets with Greatly Enhanced Electrochemical Performance. 2016 , 6, 27957	38
1162	Rationally Designed 3D Fe and N Codoped Graphene with Superior Electrocatalytic Activity toward Oxygen Reduction. 2016 , 12, 2549-53	28
1161	Nanoporous Graphene Enriched with Fe/Co-N Active Sites as a Promising Oxygen Reduction Electrocatalyst for Anion Exchange Membrane Fuel Cells. 2016 , 26, 2150-2162	245
1160	Manganese Oxide Nanorod-Decorated Mesoporous ZSM-5 Composite as a Precious-Metal-Free Electrode Catalyst for Oxygen Reduction. 2016 , 9, 1010-9	10
1159	A Catalyst-Based Self-Sufficient System with Durable Self-Healing Functionality . 2016 , 18, 923-931	8
1158	Nitrogen-Doped Porous Carbon Nanosheets Templated from g-C3 N4 as Metal-Free Electrocatalysts for Efficient Oxygen Reduction Reaction. 2016 , 28, 5080-6	573
1157	Earth-Rich Transition Metal Phosphide for Energy Conversion and Storage. 2016 , 6, 1600087	354
1156	Theoretical Studies of Oxygen Reactivity of Free-Standing and Supported Boron-Doped Graphene. 2016 , 9, 1061-77	11
1155	N-Doped carbon supported Co3O4 nanoparticles as an advanced electrocatalyst for the oxygen reduction reaction in Allir batteries. 2016 , 6, 55552-5559	29

1154	Determination of the Electron Transfer Number for the Oxygen Reduction Reaction: From Theory to Experiment. 2016 , 6, 4720-4728	327
1153	Modeling of adsorption behavior of the amine-rich GOPEI aerogel for the removal of As(III) and As(V) from aqueous media. 2016 , 6, 56684-56697	20
1152	Functionalized graphene aerogel with p-phenylenediamine and its composite with porous MnO2: investigating the effect of functionalizing agent on supercapacitive performance. 2016 , 27, 10163-10172	20
1151	Hydrothermal assisted morphology designed MoS2 material as alternative cathode catalyst for PEM electrolyser application. 2016 , 41, 13331-13340	29
1150	Conducting collagen-polypyrrole hybrid aerogels made from animal skin waste. 2016 , 6, 63071-63077	12
1149	Manganous oxide nanoparticles encapsulated in few-layer carbon as an efficient electrocatalyst for oxygen reduction in alkaline media. 2016 , 4, 11775-11781	20
1148	Multimetal-MOF-derived transition metal alloy NPs embedded in an N-doped carbon matrix: highly active catalysts for hydrogenation reactions. 2016 , 4, 10254-10262	98
1147	Activated carbon becomes active for oxygen reduction and hydrogen evolution reactions. 2016 , 52, 8156-9	114
1146	Interface-mediated extremely low thermal conductivity of graphene aerogel. 2016 , 98, 381-390	86
1145	Effect of External Electric Fields on the Multifunctional Applications of Graphene. 2016 , 253-272	
1144	Tuning shape of three dimensional graphene sheets. 2016 , 274, 99-102	6
1143	Facile synthesis of Co-based selenides for oxygen reduction reaction in acidic medium. 2016 , 41, 8863-8870	14
1142	Three dimensional iron oxide/graphene aerogel hybrids as all-solid-state flexible supercapacitor electrodes. 2016 , 6, 58994-59000	57
1141	Synthesis and in-situ functionalization of graphene films through graphite charging in aqueous Fe2(SO4)3. 2016 , 107, 379-387	11
1140	A Bonded Double-Doped Graphene Nanoribbon Framework for Advanced Electrocatalysis. 2016 , 8, 16649-55	12
1139	Structural diversity of graphene materials and their multifarious roles in heterogeneous photocatalysis. 2016 , 11, 351-372	247
1138	The synergy reduction and self-assembly of graphene oxide via gamma-ray irradiation in an ethanediamine aqueous solution. 2016 , 27, 1	8
1137	One-Step Scalable Production of Co1fk S/Graphene Nanocomposite as High-Performance	16

1136	Graphene Emerges as a Versatile Template for Materials Preparation. 2016 , 12, 2674-88	46
1135	Solution-Processed Ultraelastic and Strong Air-Bubbled Graphene Foams. 2016 , 12, 3229-34	71
1134	Synergetic adsorption and photocatalytic degradation of pollutants over 3D TiO2-graphene aerogel composites synthesized via a facile one-pot route. 2016 , 15, 1012-9	41
1133	Photoassisted Deposition of Palladium Nanoparticles on Carbon Nitride for Efficient Oxygen Reduction. 2016 , 120, 14467-14473	35
1132	Porous Core-Shell Fe3C Embedded N-doped Carbon Nanofibers as an Effective Electrocatalysts for Oxygen Reduction Reaction. 2016 , 8, 4118-25	210
1131	Deep eutectic solvent promoted one step sustainable conversion of fresh seaweed biomass to functionalized graphene as a potential electrocatalyst. 2016 , 18, 2819-2826	69
1130	New Electro-Fenton Gas Diffusion Cathode based on Nitrogen-doped Graphene@Carbon Nanotube Composite Materials. 2016 , 194, 228-238	84
1129	Synergistic effect between strongly coupled CoAl layered double hydroxides and graphene for the electrocatalytic reduction of oxygen. 2016 , 192, 196-204	22
1128	Electrochemical aptasensor for tetracycline using a screen-printed carbon electrode modified with an alginate film containing reduced graphene oxide and magnetite (Fe3O4) nanoparticles. 2016 , 183, 723-729	62
1127	Nitrogen-doped graphene nanosheets as metal-free catalysts for dehydrogenation reaction of ethanol. 2016 , 6, 13450-13455	23
1126	Ultralight, compressible and multifunctional carbon aerogels based on natural tubular cellulose. 2016 , 4, 2069-2074	113
1125	Small-sized tungsten nitride anchoring into a 3D CNT-rGO framework as a superior bifunctional catalyst for the methanol oxidation and oxygen reduction reactions. 2016 , 9, 329-343	57
1124	Mesoporous NiCoO Nanoplates on Three-Dimensional Graphene Foam as an Efficient Electrocatalyst for the Oxygen Reduction Reaction. 2016 , 8, 28274-28282	90
1123	Self-Assembled Graphene/Polyaniline/Co3O4 Ternary Hybrid Aerogels for Supercapacitors. 2016 , 191, 444-451	90
1122	Self-Assembly Method To Fabricate Reduced Graphene Oxide Aerogels Loaded with Nickel Hydroxyl Nanoparticles and Their Excellent Properties in Absorbing and Supercapacitors. 2016 , 55, 6553-6562	8
1121	Catalytic activities enhanced by abundant structural defects and balanced N distribution of N-doped graphene in oxygen reduction reaction. 2016 , 306, 85-91	54
1120	Oxygen reduction catalyzed by nanocomposites based on graphene quantum dots-supported copper nanoparticles. 2016 , 41, 1559-1567	30
1119	Highly efficient nonprecious metal catalysts towards oxygen reduction reaction based on three-dimensional porous carbon nanostructures. 2016 , 45, 517-31	665

1118	Self-assembled flower-like FeS2/graphene aerogel composite with enhanced electrochemical properties. 2016 , 42, 5053-5061	57
1117	Towards high-efficiency nanoelectrocatalysts for oxygen reduction through engineering advanced carbon nanomaterials. 2016 , 45, 1273-307	510
1116	Graphene oxide-polydopamine derived N, S-codoped carbon nanosheets as superior bifunctional electrocatalysts for oxygen reduction and evolution. 2016 , 19, 373-381	499
1115	A hybrid-assembly approach towards nitrogen-doped graphene aerogel supported cobalt nanoparticles as high performance oxygen reduction electrocatalysts. 2016 , 464, 83-8	24
1114	Gold nanoparticle decoration of insulating boron nitride nanosheet on inert gold electrode toward an efficient electrocatalyst for the reduction of oxygen to water. 2016 , 66, 53-57	30
1113	Dechlorination of Trichloroacetic Acid Using a Noble Metal-Free Graphene-Cu Foam Electrode via Direct Cathodic Reduction and Atomic H. 2016 , 50, 3829-37	103
1112	Engineering Reduced Graphene Oxide Aerogel Produced by Effective Fray Radiation-Induced Self-Assembly and Its Application for Continuous Oil Water Separation. 2016 , 55, 3775-3781	51
1111	Iron oxide/oxyhydroxide decorated graphene oxides for oxygen reduction reaction catalysis: a comparison study. 2016 , 6, 29848-29854	31
1110	Three-dimensional graphene aerogel-supported iron oxide nanoparticles as an efficient adsorbent for magnetic solid phase extraction of organophosphorus pesticide residues in fruit juices followed by gas chromatographic determination. 2016 , 1443, 43-53	126
1109	Seaweed biomass derived (Ni,Co)/CNT nanoaerogels: efficient bifunctional electrocatalysts for oxygen evolution and reduction reactions. 2016 , 4, 6376-6384	135
1108	One-step electrochemical synthesis of nitrogen and sulfur co-doped, high-quality graphene oxide. 2016 , 52, 5714-7	47
1107	Vertically aligned graphitic carbon nanosheet arrays fabricated from graphene oxides for supercapacitors and Li-O2 batteries. 2016 , 52, 6403-6	3
1106	Nitrogen and sulphur co-doped crumbled graphene for the oxygen reduction reaction with improved activity and stability in acidic medium. 2016 , 4, 6014-6020	39
1105	Three-dimensional nitrogen-doped graphene hydrogels prepared via hydrothermal synthesis as high-performance supercapacitor materials. 2016 , 194, 136-142	84
1104	Hydrothermal self-assembly of graphene foams with controllable pore size. 2016 , 6, 20843-20849	24
1103	Bio-inspired graphene foam decorated with Pt nanoparticles for hydrogen storage at room temperature. 2016 , 41, 5019-5027	23
1102	One-pot synthesis of triazine-framework derived catalysts with high performance for polymer electrolyte membrane fuel cells. 2016 , 6, 21617-21623	1
1101	Nitrogen and sulfur co-doped graphene aerogels as an efficient metal-free catalyst for oxygen reduction reaction in an alkaline solution. 2016 , 6, 22781-22790	37

1100	Porous Fe-Nx/C hybrid derived from bi-metal organic frameworks as high efficient electrocatalyst for oxygen reduction reaction. 2016 , 311, 137-143	62
1099	Surfactant-Assisted Hydrothermal Synthesis of Cobalt Oxide/Nitrogen-Doped Graphene Framework for Enhanced Anodic Performance in Lithium Ion Batteries. 2016 , 194, 310-316	32
1098	High-Performance Pd3Pb Intermetallic Catalyst for Electrochemical Oxygen Reduction. 2016 , 16, 2560-6	114
1097	Graphene oxide/carbon nanotubes⊞e3O4 supported Pd nanoparticles for hydrogenation of nitroarenes and Cℍ activation. 2016 , 6, 16911-16916	21
1096	Graphene-based materials with tailored nanostructures for energy conversion and storage. 2016 , 102, 1-72	189
1095	Hollow Structured Micro/Nano MoSispheres for High Electrocatalytic Activity Hydrogen Evolution Reaction. 2016 , 8, 5517-25	147
1094	Self-Assembled Mace-Like Fe3O4 Nanostructures as a LithiumAir Battery Cathode Material. 2016 , 69, 683	3
1093	Facile synthesis of Fe3O4 nanoparticles decorated on 3D graphene aerogels as broad-spectrum sorbents for water treatment. 2016 , 369, 11-18	58
1092	Hierarchical MnO2/rGO hybrid nanosheets as an efficient electrocatalyst for the oxygen reduction reaction. 2016 , 41, 5260-5268	38
1091	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. 2016 , 102, 10-17	71
1090	Graphene frameworks supported cobalt oxide with tunable morphologies for enhanced lithium storage behaviors. 2016 , 51, 4856-4863	4
1089	Biomass-derived multifunctional TiO2/carbonaceous aerogel composite as a highly efficient photocatalyst. 2016 , 6, 25255-25266	29
1088	Nanostructuring of nanoporous iron carbide spheres via thermal degradation of triple-shelled Prussian blue hollow spheres for oxygen reduction reaction. 2016 , 6, 10341-10351	27
1087	Understanding the High Activity of Fe-N-C Electrocatalysts in Oxygen Reduction: Fe/Fe3C Nanoparticles Boost the Activity of Fe-N(x). <i>Journal of the American Chemical Society</i> , 2016 , 138, 3570-8 ^{16.4}	1219
1086	Hydrothermal preparation of fluorinated graphene hydrogel for high-performance supercapacitors. 2016 , 312, 146-155	111
1085	Seaweed-Derived Route to Fe2O3 Hollow Nanoparticles/N-Doped Graphene Aerogels with High Lithium Ion Storage Performance. 2016 , 8, 7047-53	157
1084	An iron porphyrin-based conjugated network wrapped around carbon nanotubes as a noble-metal-free electrocatalyst for efficient oxygen reduction reaction. 2016 , 3, 821-827	27
1083	Highly Functional Bioinspired Fe/N/C Oxygen Reduction Reaction Catalysts: Structure-Regulating Oxygen Sorption. 2016 , 8, 6464-71	40

1082	Preparation of graphene foam with high performance by modified self-assembly method. 2016 , 122, 1	9
1081	Strongly Coupled Ternary Hybrid Aerogels of N-deficient Porous Graphitic-C3N4 Nanosheets/N-Doped Graphene/NiFe-Layered Double Hydroxide for Solar-Driven Photoelectrochemical Water Oxidation. 2016 , 16, 2268-77	215
1080	Towards high potential and ultra long-life cathodes for sodium ion batteries: freestanding 3D hybrid foams of Na7V4(P2O7)4(PO4) and Na7V3(P2O7)4@biomass-derived porous carbon. 2016 , 4, 5719-572	9 ⁶²
1079	Nitrogen/sulfur dual-doped 3D reduced graphene oxide networks-supported CoFe2O4 with enhanced electrocatalytic activities for oxygen reduction and evolution reactions. 2016 , 99, 195-202	122
1078	Rational synthesis of Pd nanoparticle-embedded reduced graphene oxide frameworks with enhanced selective catalysis in water. 2016 , 8, 2787-94	22
1077	Porous and single-crystalline-like molybdenum nitride nanobelts as a non-noble electrocatalyst for alkaline fuel cells and electrode materials for supercapacitors. 2016 , 41, 996-1001	42
1076	Graphene decorated with multiple nanosized active species as dual function electrocatalysts for lithium-oxygen batteries. 2016 , 188, 718-726	10
1075	Hybrid of carbon-supported Pt nanoparticles and three dimensional graphene aerogel as high stable electrocatalyst for methanol electrooxidation. 2016 , 189, 175-183	51
1074	Catalytic performance and mechanism of N-CoTi@CoTiO 3 catalysts for oxygen reduction reaction. 2016 , 20, 134-143	29
1073	Synergistic combination of cyclodextrin edge-functionalized graphene and multiwall carbon nanotubes as conductive bridges toward enhanced sensing response of supramolecular recognition. 2016 , 187, 364-374	26
1072	Electrochemically formed 3D hierarchical thin films of cobalthanganese (CoMn) hexacyanoferrate hybrids for electrochemical applications. 2016 , 305, 249-258	43
1071	Atomic-layer-deposited iron oxide on arrays of metal/carbon spheres and their application for electrocatalysis. 2016 , 20, 244-253	58
1070	One-pot synthesis of monodispersed porous CoFe2O4 nanospheres on graphene as an efficient electrocatalyst for oxygen reduction and evolution reactions. 2016 , 6, 307-313	36
1069	A large-scale synthesis of heteroatom (N and S) co-doped hierarchically porous carbon (HPC) derived from polyquaternium for superior oxygen reduction reactivity. 2016 , 18, 2699-2709	61
1068	StBer-like method to synthesize ultradispersed Fe 3 O 4 nanoparticles on graphene with excellent Photo-Fenton reaction and high-performance lithium storage. 2016 , 183, 216-223	106
1067	Macroscopic-scale synthesis of nitrogen-doped carbon nanofiber aerogels by template-directed hydrothermal carbonization of nitrogen-containing carbohydrates. 2016 , 19, 117-127	99
1066	In-situ preparation of three-dimensional Ni@graphene-Cu composites for ultrafast reduction of Cr(VI) at room temperature. 2016 , 75, 13-17	33
1065	Self-assembly of 2D MnO nanosheets into high-purity aerogels with ultralow density. 2016 , 7, 1926-1932	36

1064	Morphological Transformations during In Situ Electrochemical Generation of 2-Dimensional Co3O4Hexagonal Nanoplates. 2016 , 163, A150-A155	12
1063	Silicon carbide-supported iron nanoparticles encapsulated in nitrogen-doped carbon for oxygen reduction reaction. 2016 , 6, 2949-2954	13
1062	Metal-catalyst-free and controllable growth of high-quality monolayer and AB-stacked bilayer graphene on silicon dioxide. 2016 , 96, 203-211	41
1061	High utilization efficiency of NiCo2O4 supported on porous graphene as noble metal-free catalysts for oxygen reduction reaction. 2016 , 655, 229-237	20
1060	Repercussion of the carbon matrix for the activity and stability of Fe/N/C electrocatalysts for the oxygen reduction reaction. 2016 , 183, 185-196	53
1059	The application of graphene and its composites in oxygen reduction electrocatalysis: a perspective and review of recent progress. 2016 , 9, 357-390	387
1058	Self-assembled three-dimensional graphene/Fe3O4 hydrogel for efficient pollutant adsorption and electromagnetic wave absorption. 2016 , 73, 401-408	27
1057	On the structural composition and stability of FeNII catalysts prepared by an intermediate acid leaching. 2016 , 20, 969-981	33
1056	Ultrafine Pt nanoparticle-decorated robust 3D N-doped porous graphene as an enhanced electrocatalyst for methanol oxidation. 2016 , 52, 382-5	75
1055	Construction of efficient counter electrodes for dye-sensitized solar cells: Fe2O3 nanoparticles anchored onto graphene frameworks. 2016 , 96, 947-954	45
1054	Synthesis of halogen-doped reduced graphene oxide nanosheets as highly efficient metal-free electrocatalyst for oxygen reduction reaction. 2016 , 463, 46-54	63
1053	One - Step synthesis of nitrogen doped reduced graphene oxide with NiCo nanoparticles for ethanol oxidation in alkaline media. 2016 , 462, 148-53	35
1052	Nanocarbon-intercalated and FeN-codoped graphene as a highly active noble-metal-free bifunctional electrocatalyst for oxygen reduction and evolution. 2017 , 5, 1930-1934	78
1051	Construction of specific magnetic resonance imaging/optical dual-modality molecular probe used for imaging angiogenesis of gastric cancer. 2017 , 45, 399-403	9
1050	Controlled Fabrication of Hierarchically Structured Nitrogen-Doped Carbon Nanotubes as a Highly Active Bifunctional Oxygen Electrocatalyst. 2017 , 27, 1605717	62
1049	Tuning the Surface Properties of Graphene Oxide by Surface-Initiated Polymerization of Epoxides: An Efficient Method for Enhancing Gas Separation. 2017 , 9, 4998-5005	38
1048	A facile strategy to fabricate nitrogen-doped graphene aerogel-supported Fe3N nanoparticles as efficient electrocatalysts for the oxygen reduction reaction. 2017 , 41, 1755-1764	18
1047	A novel composite of W18O49 nanorods on reduced graphene oxide sheets based on in situ synthesis and catalytic performance for oxygen reduction reaction. 2017 , 7, 2051-2057	16

1046	Polymerizable ionic liquid-derived carbon for oxygen reduction and evolution. 2017 , 47, 351-359	6
1045	Nitrogen-doped graphene aerogels-supported cobaltosic oxide nanocrystals as high-performance bi-functional electrocatalysts for oxygen reduction and evolution reactions. 2017 , 787, 46-54	21
1044	Microwave-assisted synthesis and prototype oxygen reduction electrocatalyst application of N-doped carbon-coated FeO nanorods. 2017 , 28, 095707	21
1043	Green synthesis of silver nanoparticle-decorated porous reduced graphene oxide for antibacterial non-enzymatic glucose sensors. 2017 , 23, 1525-1532	27
1042	Co/NL nanotubes with increased coupling sites by space-confined pyrolysis for high electrocatalytic activity. 2017 , 2, 23-29	9
1041	Exploring metal decorated Porphyrin-like Porous Fullerene as catalyst for oxygen reduction reaction: A DFT study. 2017 , 42, 2278-2287	30
1040	Three-dimensional graphene/polyimide composite-derived flexible high-performance organic cathode for rechargeable lithium and sodium batteries. 2017 , 5, 2710-2716	89
1039	A simple strategy to refine CuO photocatalytic capacity for refractory pollutants removal: Roles of oxygen reduction and Fe(II) chemistry. 2017 , 330, 9-17	13
1038	2D Layered non-precious metal mesoporous electrocatalysts for enhanced oxygen reduction reaction. 2017 , 5, 4868-4878	45
1037	Moderne Anorganische Aerogele. 2017 , 129, 13380-13403	10
<i>,</i>	Moderne Anorganische Aerogele. 2017 , 129, 13380-13403 Modern Inorganic Aerogels. 2017 , 56, 13200-13221	10
<i>,</i>		
1036	Modern Inorganic Aerogels. 2017 , 56, 13200-13221 Addition of Sulphur to Graphene Nanoflakes Using Thermal Plasma for Oxygen Reduction Reaction	200
1036	Modern Inorganic Aerogels. 2017, 56, 13200-13221 Addition of Sulphur to Graphene Nanoflakes Using Thermal Plasma for Oxygen Reduction Reaction in Alkaline Medium. 2017, 37, 841-856 Electrocatalysis of oxygen reduction by iron-containing nitrogen-doped carbon aerogels in alkaline	200
1036	Modern Inorganic Aerogels. 2017, 56, 13200-13221 Addition of Sulphur to Graphene Nanoflakes Using Thermal Plasma for Oxygen Reduction Reaction in Alkaline Medium. 2017, 37, 841-856 Electrocatalysis of oxygen reduction by iron-containing nitrogen-doped carbon aerogels in alkaline solution. 2017, 230, 81-88 Electrosorption of Toxic Heavy Metal Ions by Mono S- or N-Doped and S, N-Codoped 3D Graphene	200
1036 1035 1034	Modern Inorganic Aerogels. 2017, 56, 13200-13221 Addition of Sulphur to Graphene Nanoflakes Using Thermal Plasma for Oxygen Reduction Reaction in Alkaline Medium. 2017, 37, 841-856 Electrocatalysis of oxygen reduction by iron-containing nitrogen-doped carbon aerogels in alkaline solution. 2017, 230, 81-88 Electrosorption of Toxic Heavy Metal Ions by Mono S- or N-Doped and S, N-Codoped 3D Graphene Aerogels. 2017, 164, E17-E22 Pt nanoparticles grown on 3D RuO2-modified graphene architectures for highly efficient methanol	200 3 46
1036 1035 1034 1033	Modern Inorganic Aerogels. 2017, 56, 13200-13221 Addition of Sulphur to Graphene Nanoflakes Using Thermal Plasma for Oxygen Reduction Reaction in Alkaline Medium. 2017, 37, 841-856 Electrocatalysis of oxygen reduction by iron-containing nitrogen-doped carbon aerogels in alkaline solution. 2017, 230, 81-88 Electrosorption of Toxic Heavy Metal Ions by Mono S- or N-Doped and S, N-Codoped 3D Graphene Aerogels. 2017, 164, E17-E22 Pt nanoparticles grown on 3D RuO2-modified graphene architectures for highly efficient methanol oxidation. 2017, 5, 4560-4567 Highly microporous-graphene aerogel monolith of unidirectional honeycomb macro-textures. 2017,	200 3 46 12

1028	One-Step Hydrothermal Fabrication of Three-dimensional MoS Nanoflower using Polypyrrole as Template for Efficient Hydrogen Evolution Reaction. 2017 , 7, 42309	73
1027	Ionic-Liquid-Functionalized Graphene Nanoribbons for Anion Exchange Membrane Fuel Cells. 2017 , 164, F433-F440	6
1026	Fabrication of Holey Graphene: Catalytic Oxidation by Metalloporphyrin-Based Covalent Organic Framework Immobilized on Highly Ordered Pyrolytic Graphite. 2017 , 23, 5652-5657	15
1025	Synthesis of Three-Dimensional Nitrogen and Sulfur Dual-Doped Graphene Aerogels as an Efficient Metal-Free Electrocatalyst for the Oxygen Reduction Reaction. 2017 , 4, 1885-1890	19
1024	Hierarchical porous MnO/graphene composite aerogel as high-performance anode material for lithium ion batteries. 2017 , 7, 15857-15863	18
1023	A robust, superhydrophobic graphene aerogel as a recyclable sorbent for oils and organic solvents at various temperatures. 2017 , 500, 63-68	56
1022	Roles of Fe-N and Fe-FeC@C Species in Fe-N/C Electrocatalysts for Oxygen Reduction Reaction. 2017 , 9, 9567-9575	115
1021	Zn-MOF-74 Derived N-Doped Mesoporous Carbon as pH-Universal Electrocatalyst for Oxygen Reduction Reaction. 2017 , 27, 1606190	182
1020	Secondary Interactions of Graphene Oxide on Liquid Crystal Formation and Stability. 2017, 34, 1600383	9
1019	Retracted Article: A facile strategy to fabricate nitrogen-doped graphene aerogel supported Fe3N nanoparticles as efficient electrocatalysts for the oxygen reduction reaction. 2017 ,	
1018	Design and Application of Foams for Electrocatalysis. 2017 , 9, 1721-1743	202
1017	Hollow Nitrogen-Doped Carbon Spheres with FeO Nanoparticles Encapsulated as a Highly Active Oxygen-Reduction Catalyst. 2017 , 9, 10610-10617	102
1016	One-pot synthesis of rice-like TiO2/graphene hydrogels as advanced electrodes for supercapacitors and the resulting aerogels as high-efficiency dye adsorbents. 2017 , 229, 239-252	52
1015	General synthesis of zeolitic imidazolate framework-derived planar-N-doped porous carbon nanosheets for efficient oxygen reduction. 2017 , 7, 181-188	22
1014	Reactive template synthesis of nitrogen-doped graphene-like carbon nanosheets derived from hydroxypropyl methylcellulose and dicyandiamide as efficient oxygen reduction electrocatalysts. 2017 , 345, 120-130	24
1013	Localized Synthesis of Iron Oxide Nanowires and Fabrication of High Performance Nanosensors Based on a Single Fe O Nanowire. 2017 , 13, 1602868	76
1012	Cobalt nanoparticle decorated graphene aerogel for efficient oxygen reduction reaction electrocatalysis. 2017 , 42, 5930-5937	18
1011	Polyaniline silver nanoparticle coffee waste extracted porous graphene oxide nanocomposite structures as novel electrode material for rechargeable batteries. 2017 , 4, 035501	12

1010 Facile Synthesis of Co-N4-Doped Mesoporous Carbon for Oxygen Reduction Reaction. **2017**, 164, F412-F417 9

1009	Nanotechnologies for Environmental Remediation. 2017,	14
1008	Ultrafine palladium nanoparticle-bonded to polyetheylenimine grafted reduced graphene oxide nanosheets: Highly active and recyclable catalyst for degradation of dyes and pigments. 2017 , 34, 609-618	8
1007	Highly efficient and stable MoP-RGO nanoparticles as electrocatalysts for hydrogen evolution. 2017 , 232, 254-261	61
1006	Tiny crystalline grain nanocrystal NiCo 2 O 4 /N-doped graphene composite for efficient oxygen reduction reaction. 2017 , 345, 41-49	20
1005	Self-Assembly-Directed Aerogel and Membrane Formation from a Magnetic Composite: An Approach to Developing Multifunctional Materials. 2017 , 9, 7619-7628	9
1004	Facile Synthesis of a Carbon Nitride/Reduced Graphene Oxide/Nickel Hydroxide Nanocomposite for Oxygen Reduction in Alkaline Media. 2017 , 4, 997-1001	6
1003	Superiority of boron, nitrogen and iron ternary doped carbonized graphene oxide-based catalysts for oxygen reduction in microbial fuel cells. 2017 , 9, 3537-3546	38
1002	Recent Advances in Atomic Metal Doping of Carbon-based Nanomaterials for Energy Conversion. 2017 , 13, 1700191	235
1001	Graphene oxide/black phosphorus nanoflake aerogels with robust thermo-stability and significantly enhanced photothermal properties in air. 2017 , 9, 8096-8101	183
1000	Ice-Assisted Assembly of Liquid Crystalline Cellulose Nanocrystals for Preparing Anisotropic Aerogels with Ordered Structures. 2017 , 29, 3980-3988	52
999	Highly exposed nickel cobalt sulfideEGO nanoporous structures: an advanced energy-storage electrode material. 2017 , 5, 9991-9997	40
998	One-Pot Synthesis of Co/Co3O4/Co(OH)2/N-Doped Mesoporous Carbon for Both Oxygen Reduction Reactions and Oxygen Evolution Reactions. 2017 , 2, 3191-3199	14
997	Three dimensional few-layer porous carbon nanosheets towards oxygen reduction. 2017 , 211, 148-156	79
996	Fe7Se8@C coreShell nanoparticles encapsulated within a three-dimensional graphene composite as a high-performance flexible anode for lithium-ion batteries. 2017 , 41, 5121-5124	22
995	The role of iron nitrides in the Fe-N-C catalysis system towards the oxygen reduction reaction. 2017 , 9, 7641-7649	73
994	Architecture of CoN single clusters on nanocarbon as excellent oxygen reduction catalysts with high-efficient atomic utilization. 2017 , 9, 8341-8348	42
993	Hierarchically porous nitrogen-doped carbon nanotubes derived from coreEhell ZnO@zeolitic imidazolate framework nanorods for highly efficient oxygen reduction reactions. 2017 , 5, 12322-12329	75

Ultralight Multifunctional Carbon-Based Aerogels by Combining Graphene Oxide and Bacterial Cellulose. 2017 , 13, 1700453	60
Co3O4@Co Nanoparticles Embedded Porous N-Rich Carbon Matrix for Efficient Oxygen Reduction. 2017 , 34, 1700074	11
A hybrid composite catalyst of Fe3O4 nanoparticles-based carbon for electrochemical reduction of oxygen. 2017 , 41, 4959-4965	11
ZIF-derived graphene coated/Co9S8 nanoparticles embedded in nitrogen doped porous carbon polyhedrons as advanced catalysts for oxygen reduction reaction. 2017 , 42, 12978-12988	30
Nitrogen-Doped Graphitic Porous Carbon Nanosheets Derived from In Situ Formed g-C N Templates for the Oxygen Reduction Reaction. 2017 , 12, 1816-1823	35
Thermal conductivity of aerogel composites with oriented nitrogen-doped graphene. 2017 , 146, 198-202	9
Core-Bishell Fe-Ni@Fe3O4@C Nanoparticles as an Advanced Anode for Rechargeable Nickel-Iron Battery. 2017 , 164, A1333-A1338	6
Multifunctional bio carbon: a coir pith waste derived electrode for extensive energy storage device applications. 2017 , 7, 23663-23670	19
Constructing multifunctional MOF@rGO hydro-/aerogels by the self-assembly process for customized water remediation. 2017 , 5, 11873-11881	147
Cu, Co-Embedded N-Enriched Mesoporous Carbon for Efficient Oxygen Reduction and Hydrogen Evolution Reactions. 2017 , 7, 1700193	339
Aerogel microspheres based on cellulose nanofibrils as potential cell culture scaffolds. 2017 , 24, 2791-2799	24
Oxidation-mediated chitosan as additives for creation of chitosan aerogels with diverse three-dimensional interconnected skeletons. 2017 , 396, 1220-1225	8
CoN embedded graphene, a potential catalyst for the oxygen reduction reaction from a theoretical perspective. 2017 , 19, 17670-17676	31
Cobalt-Based Active Species Molecularly Immobilized on Carbon Nanotubes for the Oxygen Reduction Reaction. 2017 , 10, 3473-3481	16
Magnetic nanoparticles supported Schiff-base/copper complex: An efficient nanocatalyst for preparation of biologically active 3,4-dihydropyrimidinones. 2017 , 504, 268-275	33
Sm2O3 embedded in nitrogen doped carbon with mosaic structure: An effective catalyst for oxygen reduction reaction. 2017 , 133, 115-120	29
Recent Progress in Nonnoble Metal Electrocatalysts for Oxygen Reduction for Alkaline Fuel Cells. 2017 , 267-316	
OneBtep Synthesis of MnO/Ni Nanoparticles Anchored on Porous NitrogenBoped Carbons from Melamine Foam and Electrocatalytic Study towards Oxygen Reduction Reaction. 2017 , 2, 4234-4240	10
	Cellulose. 2017, 13, 1700453 Co3O4@Co Nanoparticles Embedded Porous N-Rich Carbon Matrix for Efficient Oxygen Reduction. 2017, 34, 1700074 A hybrid composite catalyst of Fe3O4 nanoparticles-based carbon for electrochemical reduction of oxygen. 2017, 41, 4959-4965 ZIF-derived graphene coated/Co9S8 nanoparticles embedded in nitrogen doped porous carbon polyhedrons as advanced catalysts for oxygen reduction reaction. 2017, 42, 12978-12988 Nitrogen-Doped Graphitic Porous Carbon Nanosheets Derived from In Situ Formed g-C N Templates for the Oxygen Reduction Reaction. 2017, 12, 1816-1823 Thermal conductivity of aerogel composites with oriented nitrogen-doped graphene. 2017, 146, 198-202 Core-Bishell Fe-Ni@Fe3O4@C Nanoparticles as an Advanced Anode for Rechargeable Nickel-Iron Battery. 2017, 164, A1333-A1338 Multifunctional bio carbon: a coir pith waste derived electrode for extensive energy storage device applications. 2017, 7, 23663-23670 Constructing multifunctional MOF@rGO hydro-/aerogels by the self-assembly process for customized water remediation. 2017, 5, 11873-11881 Cu, Co-Embedded N-Enriched Mesoporous Carbon for Efficient Oxygen Reduction and Hydrogen Evolution Reactions. 2017, 7, 1700193 Aerogel microspheres based on cellulose nanofibrils as potential cell culture scaffolds. 2017, 24, 2791-2799 Oxidation-mediated chitosan as additives for creation of chitosan aerogels with diverse three-dimensional interconnected skeletons. 2017, 396, 1220-1225 CoN embedded graphene, a potential catalyst for the oxygen reduction reaction from a theoretical perspective. 2017, 19, 17670-17676 Cobalt-Based Active Species Molecularly Immobilized on Carbon Nanotubes for the Oxygen Reduction Reaction. 2017, 10, 3473-3481 Magnetic nanoparticles supported Schiff-base/copper complex: An efficient nanocatalyst for preparation of biologically active 3,4-dihydropyrimidinones. 2017, 504, 268-275 Sm2O3 embedded in nitrogen doped carbon with mosaic structure: An effective catalyst for oxygen reduction reaction. 2017, 133,

974	Ultra-high surface area and mesoporous N-doped carbon derived from sheep bones with high electrocatalytic performance toward the oxygen reduction reaction. 2017 , 21, 2947-2954	17
973	In situ, facile synthesis of La0.8Sr0.2MnO3/nitrogen-doped graphene: a high-performance catalyst for rechargeable Li-O2 batteries. 2017 , 23, 2241-2250	9
972	Graphene aerogels: a review. 2017 , 4, 032001	130
971	Carbon-encapsulated heazlewoodite nanoparticles as highly efficient and durable electrocatalysts for oxygen evolution reactions. 2017 , 10, 3522-3533	23
970	Pyrrolic-N-doped graphene oxide/Fe2O3 mesocrystal nanocomposite: Efficient charge transfer and enhanced photo-Fenton catalytic activity. 2017 , 422, 607-615	30
969	Mesoporous nanostructured spinel-type MFe2O4 (M = Co, Mn, Ni) oxides as efficient bi-functional electrocatalysts towards oxygen reduction and oxygen evolution. 2017 , 245, 829-838	82
968	Robust three dimensional N-doped graphene supported Pd nanocomposite as efficient electrocatalyst for methanol oxidation in alkaline medium. 2017 , 42, 15107-15114	23
967	Role of Catalyst Supports: Graphene Based Novel Electrocatalysts. 2017 , 241-266	
966	An ultralight and highly compressible anode for Li-ion batteries constructed from nitrogen-doped carbon enwrapped Fe3O4 nanoparticles confined in a porous 3D nitrogen-doped graphene network. 2017 , 326, 151-161	28
965	3D-hierarchically structured Co3O4/graphene hydrogel for catalytic oxidation of Orange II solutions by activation of peroxymonosulfate. 2017 , 76, 101-108	24
964	Ice-templating synthesis of macroporous noble metal/3D-graphene nanocomposites: their fluorescence lifetimes and catalytic study. 2017 , 41, 7861-7869	18
963	RGO/ZnWO 4 /Fe 3 O 4 nanocomposite as an efficient electrocatalyst for oxygen reduction reaction. 2017 , 799, 102-110	15
962	Three-dimensional hybrid aerogels built from graphene and polypyrrole-derived nitrogen-doped carbon nanotubes as a high-efficiency Pt-based catalyst support. 2017 , 121, 518-526	22
961	Self-assembly of 3D neat porous carbon aerogels with NaCl as template and flux for sodium-ion batteries. 2017 , 359, 529-538	41
960	Sb-doped SnO2/graphene-CNT aerogels for high performance Li-ion and Na-ion battery anodes. 2017 , 9, 85-95	65
959	Three-dimensional nanoarchitectures of Co nanoparticles inlayed on N-doped macroporous carbon as bifunctional electrocatalysts for glucose fuel cells. 2017 , 5, 14763-14774	34
958	High surface hierarchical carbon nanowalls synthesized by plasma deposition using an aromatic precursor. 2017 , 118, 578-587	16
957	Fe/N co-doped carbon materials with controllable structure as highly efficient electrocatalysts for oxygen reduction reaction in Al-air batteries. 2017 , 8, 49-58	56

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956	Graphene Like Sheets and Its Electro-Catalytic Activity toward Oxygen Reduction Reaction. 2017 , 164, F568-F576	19
955	Metal-organic gel-derived Fe-Fe2O3@nitrogen-doped-carbon nanoparticles anchored on nitrogen-doped carbon nanotubes as a highly effective catalyst for oxygen reduction reaction. 2017 , 232, 114-122	21
954	Self-Assembled Manganese Sulfide Nanostructures on Graphene as an Oxygen Reduction Catalyst for Anion Exchange Membrane Fuel Cells. 2017 , 4, 1544-1553	16
953	Synthesis of Zn(II)-Doped Magnetite Leaf-Like Nanorings for Efficient Electromagnetic Wave Absorption. 2017 , 7, 45480	6
952	Polylysine Functionalized Graphene Aerogel for the Enhanced Removal of Cr(VI) through Adsorption: Kinetic, Isotherm, and Thermodynamic Modeling of the Process. 2017 , 62, 1732-1742	51
951	NiO-Fe2O3 based graphene aerogel as urea electrooxidation catalyst. 2017 , 237, 171-176	48
950	The effect of titanium nickel nitride decorated carbon nanotubes-reduced graphene oxide hybrid support for methanol oxidation. 2017 , 410, 70-78	15
949	Metallic State FeS Anchored (Fe)/FeO/N-Doped Graphitic Carbon with Porous Spongelike Structure as Durable Catalysts for Enhancing Bioelectricity Generation. 2017 , 9, 10777-10787	25
948	3D Hierarchically Porous Graphitic Carbon Nitride Modified Graphene-Pt Hybrid as Efficient Methanol Oxidation Catalysts. 2017 , 4, 1601219	17
947	Efficient gaseous thermal insulation aerogels from 2-dimension nitrogen-doped graphene sheets. 2017 , 109, 1026-1030	11
946	Graphene/cellulose nanocrystals hybrid aerogel with tunable mechanical strength and hydrophilicity fabricated by ambient pressure drying technique. 2017 , 7, 16467-16473	30
945	Rechargeable zinc⊞ir batteries: a promising way to green energy. 2017, 5, 7651-7666	323
944	N-Doped 3D Carbon Aerogel with Trace Fe as an Efficient Catalyst for the Oxygen Reduction Reaction. 2017 , 4, 514-520	36
943	Cobalt nanoparticles/nitrogen-doped graphene with high nitrogen doping efficiency as noble metal-free electrocatalysts for oxygen reduction reaction. 2017 , 490, 576-586	25
942	Electrochemically exfoliating graphite into N-doped graphene and its use as a high efficient electrocatalyst for oxygen reduction reaction. 2017 , 21, 1287-1295	13
941	Hierarchical hybrid of Ni 3 N/N-doped reduced graphene oxide nanocomposite as a noble metal free catalyst for oxygen reduction reaction. 2017 , 400, 245-253	22
940	Fe/N decorated mulberry-like hollow mesoporous carbon fibers as efficient electrocatalysts for oxygen reduction reaction. 2017 , 114, 706-716	32
939	Facile synthesis of three-dimensional porous nitrogen doped carbon supported Co 3 O 4 for oxygen reduction reaction and oxygen evolution reaction. 2017 , 190, 169-172	20

938	ZIF-67 incorporated with carbon derived from pomelo peels: A highly efficient bifunctional catalyst for oxygen reduction/evolution reactions. 2017 , 205, 55-67	125
937	Low-temperature thermal reduction of suspended graphene oxide film for electrical sensing of DNA-hybridization. 2017 , 72, 62-68	7
936	Ultrafine Co-doped ZnO nanoparticles on reduced graphene oxide as an efficient electrocatalyst for oxygen reduction reaction. 2017 , 224, 561-570	31
935	1D Co- and N-Doped Hierarchically Porous Carbon Nanotubes Derived from Bimetallic Metal Organic Framework for Efficient Oxygen and Tri-iodide Reduction Reactions. 2017 , 7, 1601979	163
934	Enhanced performance stability of carbon/titania hybrid electrodes during capacitive deionization of oxygen saturated saline water. 2017 , 224, 314-328	73
933	Tuning the Electronic Bandgap: An Efficient Way To Improve the Electrocatalytic Activity of Carbon-Supported Co O Nanocrystals for Oxygen Reduction Reactions. 2017 , 23, 2599-2609	32
932	Nanostructured biogel templated synthesis of Fe3O4 nanoparticles and its application for catalytic degradation of xylenol orange. 2017 , 7, 758-763	3
931	Efficient electrocatalytic O reduction at copper complexes grafted onto polyvinylimidazole coated carbon nanotubes. 2017 , 53, 1514-1517	32
930	Engineered Graphene Materials: Synthesis and Applications for Polymer Electrolyte Membrane Fuel Cells. 2017 , 29, 1601741	118
929	Polypyrrole-assisted oxygen electrocatalysis on perovskite oxides. 2017 , 10, 523-527	53
928	Non-noble bimetallic alloy encased in nitrogen-doped nanotubes as a highly active and durable electrocatalyst for oxygen reduction reaction. 2017 , 114, 347-355	80
927	Synthesis of Cobalt Sulfide-Graphene as an Efficient Oxygen Reduction Catalyst in Alkaline Medium and Its Application in Anion Exchange Membrane Fuel Cells. 2017 , 164, F71-F80	24
926	Uniform FeO/Nitrogen-Doped Mesoporous Carbon Spheres Derived from Ferric Citrate-Bonded Melamine Resin as an Efficient Synergistic Catalyst for Oxygen Reduction. 2017 , 9, 335-344	63
925	Cyanide bridged coordination polymer nanoflakes thermally derived Ni3C and fcc-Ni nanoparticles for electrocatalysts. 2017 , 41, 14890-14897	14
924	Graphene aerogel prepared through double hydrothermal reduction as high-performance oil adsorbent. 2017 , 226, 141-150	27
923	3D Porous Fe/N/C Spherical Nanostructures As High-Performance Electrocatalysts for Oxygen Reduction in Both Alkaline and Acidic Media. 2017 , 9, 36944-36954	70
922	From covalent triazine-based frameworks to N-doped porous carbon/reduced graphene oxide nanosheets: efficient electrocatalysts for oxygen reduction. 2017 , 5, 23170-23178	47
921	Active Fe-Nx Sites in Carbon Nanosheets as Oxygen Reduction Electrocatalyst for Flexible All-Solid-State ZincAir Batteries. 2017 , 1, 1700085	31

920	Direct Laser Writing of Low-Density Interdigitated Foams for Plasma Drive Shaping. 2017, 27, 1702425	31
919	Heteroatom-Doped Carbon Nanotube and Graphene-Based Electrocatalysts for Oxygen Reduction Reaction. 2017 , 13, 1702002	138
918	Synthesis of dimethyl carbonate on single Cu atom embedded in N-doped graphene: Effect of nitrogen species. 2017 , 443, 1-13	11
917	Recent Advances in Sensing Applications of Graphene Assemblies and Their Composites. 2017 , 27, 1702891	161
916	A novel Ni Coordination Supramolecular Network hybrid monolith of 3D graphene as electrode materials for supercapacitors. 2017 , 6, 164-172	9
915	Thermal treated 3D graphene as a highly efficient metal-free electrocatalyst toward oxygen reduction reaction. 2017 , 42, 28278-28286	12
914	N-doped-carbon-coated Fe3O4 from metal-organic framework as efficient electrocatalyst for ORR. 2017 , 40, 462-470	158
913	Nanoporous PtFe Nanoparticles Supported on N-Doped Porous Carbon Sheets Derived from Metal-Organic Frameworks as Highly Efficient and Durable Oxygen Reduction Reaction Catalysts. 2017 , 9, 32106-32113	38
912	One-Step Electrochemical Synthesis of Cobalt-Doped Fe2O2CO3-Reduced Graphene Oxide Nanocomposites and Their Application for H2O2Electro-Catalytic Reduction. 2017 , 164, H579-H583	2
911	Metal-free nitrogen-doped carbon nanoribbons as highly efficient electrocatalysts for oxygen reduction reaction. 2017 , 124, 34-41	32
910	N implantation induce cytocompatibility of shape-controlled three-dimensional self-assembly graphene. 2017 , 12, 2245-2255	4
909	Molecular-Level Insights into Oxygen Reduction Catalysis by Graphite-Conjugated Active Sites. 2017 , 7, 7680-7687	25
908	3D Nanostructured Palladium-Functionalized Graphene-Aerogel-Supported FeO for Enhanced Ru(bpy)-Based Electrochemiluminescent Immunosensing of Prostate Specific Antigen. 2017 , 9, 35260-35267	111
907	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. 2017 , 5, 21709-21714	43
906	Multiscale design of nanofibrous carbon aerogels: Synthesis, properties and comparisons with other low-density carbon materials. 2017 , 124, 588-598	4
905	Activity Tuning of Cobalt Ferrite Nanoparticles Anchored on N-Doped Reduced Graphene Oxide as a Potential Oxygen Reduction Electrocatalyst by Zn Substitution in the Spinel Matrix. 2017 , 2, 7845-7853	6
904	Conformal Coating of Co/N-Doped Carbon Layers into Mesoporous Silica for Highly Efficient Catalytic Dehydrogenation-Hydrogenation Tandem Reactions. 2017 , 13, 1702243	42
903	FeNi2Se4 R educed Graphene Oxide Nanocomposite: Enhancing Bifunctional Electrocatalytic Activity for Oxygen Evolution and Reduction through Synergistic Effects. 2017 , 1, 1700086	23

902	A facile template approach for the synthesis of mesoporous Fe3C/Fe-N-doped carbon catalysts for efficient and durable oxygen reduction reaction. 2017 , 28, 2159-2163	15
901	Electrochemical dopamine sensor based on P-doped graphene: Highly active metal-free catalyst and metal catalyst support. 2017 , 81, 452-458	32
900	From Food Waste to Efficient Bifunctional Nonprecious Electrocatalyst. 2017 , 23, 15283-15288	6
899	High performance electrochemical glucose sensor based on three-dimensional MoS/graphene aerogel. 2017 , 506, 379-385	51
898	N-(4-Aminobutyl)-N-ethylisoluminol/CoFe2O4/graphene hybrids with unique chemiluminescence and magnetism. 2017 , 5, 7612-7620	10
897	Edge-Abundant Porous Fe3O4 Nanoparticles Docking in Nitrogen-Rich Graphene Aerogel as Efficient and Durable Electrocatalyst for Oxygen Reduction. 2017 , 4, 2442-2447	28
896	Designed synthesis of LaCoO3/N-doped reduced graphene oxide nanohybrid as an efficient bifunctional electrocatalyst for ORR and OER in alkaline medium. 2017 , 725, 260-269	48
895	Tuning the morphologies of fluorine-doped tin oxides in the three-dimensional architecture of graphene for high-performance lithium-ion batteries. 2017 , 28, 395404	15
894	A novel sandwich-type immunosensor based on three-dimensional graphene aerogels and quaternary chalcogenide nanocrystals for the detection of carcino embryonic antigen. 2017 , 41, 9008-9013	4
893	Graphene/graphitic carbon nitride hybrids for catalysis. 2017 , 4, 832-850	130
892	SnS nanoparticles electrostatically anchored on three-dimensional N-doped graphene as an active and durable anode for sodium-ion batteries. 2017 , 10, 1757-1763	345
891	Coassembly and high ORR performance of monodisperse Pt nanocrystals with a mesopore-rich nitrogen-doped graphene aerogel. 2017 , 5, 17544-17548	25
0		
890	Facile and scalable preparation of nitrogen, phosphorus codoped nanoporous carbon as oxygen reduction reaction electrocatalyst. 2017 , 248, 11-19	22
890		54
	reduction reaction electrocatalyst. 2017 , 248, 11-19 Three-dimensional graphene-based macrostructures for sustainable energy applications and	
889	reduction reaction electrocatalyst. 2017 , 248, 11-19 Three-dimensional graphene-based macrostructures for sustainable energy applications and climate change mitigation. 2017 , 90, 224-275 Self-supported porous 2D AuCu triangular nanoprisms as model electrocatalysts for ethylene glycol	54
889	reduction reaction electrocatalyst. 2017, 248, 11-19 Three-dimensional graphene-based macrostructures for sustainable energy applications and climate change mitigation. 2017, 90, 224-275 Self-supported porous 2D AuCu triangular nanoprisms as model electrocatalysts for ethylene glycol and glycerol oxidation. 2017, 5, 15932-15939 Hierarchical 3D Cobalt-Doped Fe O Nanospheres@NG Hybrid as an Advanced Anode Material for	54 8 ₇

884	Graphene as a flexible electrode: review of fabrication approaches. 2017 , 5, 17777-17803		80
883	Confined-Space-Assisted Preparation of Fe3O4-Nanoparticle-Modified Fe N C Catalysts Derived from a Covalent Organic Polymer for Oxygen Reduction. 2017 , 5, 7871-7877		47
882	3D polymer hydrogel for high-performance atomic iron-rich catalysts for oxygen reduction in acidic media. 2017 , 219, 629-639		94
881	Co,N-codoped graphene as efficient electrocatalyst for hydrogen evolution reaction: Insight into the active centre. 2017 , 363, 260-268		43
880	Ascorbic acid-tailored synthesis of carbon-wrapped nanocobalt encapsulated in graphene aerogel as electrocatalysts for highly effective oxygen-reduction reaction. 2017 , 21, 3641-3648		6
879	Spinels: Controlled Preparation, Oxygen Reduction/Evolution Reaction Application, and Beyond. 2017 , 117, 10121-10211		789
878	Reversible 3D self-assembly of graphene oxide and stimuli-responsive polymers for high-performance graphene-based supercapacitors. 2017 , 5, 19098-19106		25
877	Simultaneous Preparation of Mesoporous/Macroporous Graphene Aerogels and Bright Green Photoluminescent Graphene Quantum Dots by a Simple Solvothermal Method. 2017 , 56, 10028-10035		7
876	Spinel cobaltthanganese oxide supported on non-oxidized carbon nanotubes as a highly efficient oxygen reduction/evolution electrocatalyst. 2017 , 4, 1628-1633		27
875	Mussel-Inspired Self-Healing of Ultralight Magnetic Frameworks. 2017 , 5, 7905-7911		10
874	Enhancing electrochemical performance of Fe3O4/graphene hybrid aerogel with hydrophilic polymer. 2017 , 134, 45566		15
873	Synergistic effects of nitrogen-doped graphene and Fe2O3 nanocomposites in catalytic oxidization of aldehyde with O2. 2017 , 330, 880-889		16
872	Co,N,S-Codoped Three-Dimensional Graphene as Efficient Bi-Functional Electrocatalyst for Oxygen Reduction/Hydrogen Evolution Reaction. 2017 , 164, F1110-F1114		7
871	Preparation of carbon aerogels from TEMPO-oxidized cellulose nanofibers for organic solvents absorption. 2017 , 7, 38220-38230		26
870	Visible-light-enhanced power generation in microbial fuel cells coupling with 3D nitrogen-doped graphene. 2017 , 53, 9967-9970		14
869	Noble metal-free catalysts for oxygen reduction reaction. 2017 , 60, 1494-1507		35
868	Facile synthesis of reduced graphene oxide/trimethyl chlorosilane-coated cellulose nanofibres aerogel for oil absorption. 2017 , 11, 929-934		20
867	In Situ Detection of the Adsorbed Fe(II) Intermediate and the Mechanism of Magnetite Electrodeposition by Scanning Electrochemical Microscopy. <i>Journal of the American Chemical</i> Society, 2017 , 139, 15891-15899	5.4	16

866	Unexpected catalytic performance of Fe-M-C (M = N, P, and S) electrocatalysts towards oxygen reduction reaction: surface heteroatoms boost the activity of FeM/graphene nanocomposites. 2017 , 46, 16885-16894	11
865	Atomic Fe Embedded in Carbon Nanoshells@raphene Nanomeshes with Enhanced Oxygen Reduction Reaction Performance. 2017 , 29, 9915-9922	51
864	Nitrogen and phosphorus co-doped hierarchically porous carbons derived from cattle bones as efficient metal-free electrocatalysts for the oxygen reduction reaction. 2017 , 5, 24329-24334	74
863	MnFe2O4@nitrogen-doped reduced graphene oxide nanohybrid: an efficient bifunctional electrocatalyst for anodic hydrazine oxidation and cathodic oxygen reduction. 2017 , 7, 5920-5931	24
862	Three-Dimensional Framework of Graphene Nanomeshes Shell/CoO Synthesized as Superior Bifunctional Electrocatalyst for Zinc-Air Batteries. 2017 , 9, 41273-41283	34
861	Boosting oxygen reduction activity of spinel CoFe2O4 by strong interaction with hierarchical nitrogen-doped carbon nanocages. 2017 , 62, 1365-1372	13
860	The physics and chemistry of graphene-on-surfaces. 2017 , 46, 4417-4449	247
859	Enhancement in kinetics of the oxygen reduction on a silver catalyst by introduction of interlaces and defect-rich facets. 2017 , 5, 15390-15394	18
858	Efficient synthesis of nitrogen-doped carbon with flower-like tungsten nitride nanosheets for improving the oxygen reduction reactions. 2017 , 7, 33921-33928	10
857	In-situ growth of Co3O4 nanoparticles on mesoporous carbon nanofibers: a new nanocomposite for nonenzymatic amperometric sensing of H2O2. 2017 , 184, 3689-3695	34
856	Ultrathin Ni-Co double hydroxide nanosheets with conformal graphene coating for highly active oxygen evolution reaction and lithium ion battery anode materials. 2017 , 327, 9-17	66
855	Different types of nitrogen species in nitrogen-doped carbon material: The formation mechanism and catalytic role on oxygen reduction reaction. 2017 , 245, 957-966	34
854	A comprehensive review on recent progress in aluminum ir batteries. 2017, 2, 246-277	171
853	Graphene-based materials for capacitive deionization. 2017 , 5, 13907-13943	189
852	Microwave absorption properties of SiC@SiO2@Fe3O4 hybrids in the 2🛮 8 GHz range. 2017, 24, 804-813	16
851	Rational Design of Three-Dimensional Hierarchical Nanomaterials for Asymmetric Supercapacitors. 2017 , 4, 2428-2441	26
850	Solid ion transition route to 3D SN-codoped hollow carbon nanosphere/graphene aerogel as a metal-free handheld nanocatalyst for organic reactions. 2017 , 10, 3486-3495	9
849	Tungsten Nitride-Cobalt Anchored in N-Doped Ordered Porous Carbon as an Efficient Oxygen Reduction Reaction Electrocatalyst. 2017 , 12, 60-66	14

(2017-2017)

848	Enhancing the cyclability of Little 2 batteries using PdM alloy nanoparticles anchored on nitrogen-doped reduced graphene as the cathode catalyst. 2017 , 337, 173-179	34
847	Graphene-based materials for high-voltage and high-energy asymmetric supercapacitors. 2017 , 6, 70-97	201
846	Synthesis of Graphene Magnetite Nanoparticle Composite Using Mechanical Milling and Electrochemical Exfoliation. 2017 , 69, 1143-1148	5
845	3D cobalt-embedded nitrogen-doped graphene xerogel as an efficient electrocatalyst for oxygen reduction reaction in an alkaline medium. 2017 , 47, 13-23	5
844	A one-step way to novel carbon-niobium nitride nanoparticles for efficient oxygen reduction. 2017 , 100, 638-646	2
843	Design of active and stable oxygen reduction reaction catalysts by embedding Co x O y nanoparticles into nitrogen-doped carbon. 2017 , 10, 97-107	21
842	Micro-/Mesoporous ZincManganese Oxide/Graphene Hybrids with High Specific Surface Area: A High-Capacity, Superior-Rate, and Ultralong-Life Anode for Lithium Storage. 2017 , 4, 230-235	8
841	A Prussian blue route to nitrogen-doped graphene aerogels as efficient electrocatalysts for oxygen reduction with enhanced active site accessibility. 2017 , 10, 1213-1222	66
840	Fast assembly of Ag3PO4 nanoparticles within three-dimensional graphene aerogels for efficient photocatalytic oxygen evolution from water splitting under visible light. 2017 , 200, 666-672	66
839	Comparative study of different carbon-supported FeO-Pt catalysts for oxygen reduction reaction. 2017 , 24, 25682-25692	5
838	NiCoMnO4 nanoparticles on N-doped graphene: Highly efficient bifunctional electrocatalyst for oxygen reduction/evolution reactions. 2017 , 201, 241-252	166
837	Colloidal nanocrystals for electrochemical reduction reactions. 2017 , 485, 308-327	14
836	Synthesizing nitrogen-doped porous carbon@sulfur cathode for high-performance and stable cycling Li-S batteries. 2017 , 691, 613-618	16
835	Ni3Fe-N Doped Carbon Sheets as a Bifunctional Electrocatalyst for Air Cathodes. 2017 , 7, 1601172	305
834	Cobalt/Nitrogen-Doped Porous Carbon Nanosheets Derived from Polymerizable Ionic Liquids as Bifunctional Electrocatalyst for Oxygen Evolution and Oxygen Reduction Reaction. 2017 , 9, 1601-1609	60
833	A novel multiple signal amplifying immunosensor based on the strategy of in situ-produced electroactive substance by ALP and carbon-based Ag-Au bimetallic as the catalyst and signal enhancer. 2017 , 92, 457-464	32
832	Highly Efficient Reusable Sponge-Type Catalyst Carriers Based on Short Electrospun Fibers. 2017 , 38, 1600511	34
831	Controllable magnetic 3D nitrogen-doped graphene gel: Synthesis, characterization, and catalytic performance. 2017 , 204, 316-323	41

830	Promotion of oxygen reduction performance by Fe3O4 nanoparticles support nitrogen-doped three dimensional meso/macroporous carbon based electrocatalyst. 2017 , 42, 4133-4145	15
829	Retained Carrier-Mobility and Enhanced Plasmonic-Photovoltaics of Graphene via ring-centered [] Functionalization and Nanointerfacing. 2017 , 17, 4381-4389	32
828	Highly efficient electrocatalysts with CoO/CoFe2O4 composites embedded within N-doped porous carbon materials prepared by hard-template method for oxygen reduction reaction. 2017 , 7, 56375-56381	7
827	Ag/Fe3O4-N-Doped Ketjenblack Carbon Composite as Highly Efficient Oxygen Reduction Catalyst in Al-Air Batteries. 2017 , 164, A3595-A3601	14
826	Group VIII Base Metal Nanocatalysts with Encapsulated Structures as an Area of Green Chemistry. 2017 , 57, 1259-1276	2
825	. 2017,	20
824	Adsorbable and self-supported 3D AgNPs/G@Ni foam as cut-and-paste highly-sensitive SERS substrates for rapid in situ detection of residuum. 2017 , 25, 16437-16451	16
823	A Unique 3D Nitrogen-Doped Carbon Composite as High-Performance Oxygen Reduction Catalyst. 2017 , 10,	13
822	Synthesis of graphene-transition metal oxide hybrid nanoparticles and their application in various fields. 2017 , 8, 688-714	76
821	A Facile Approach to Tune the Electrical and Thermal Properties of Graphene Aerogels by Including Bulk MoSII 2017 , 7,	21
820	The New Graphene Family Materials: Synthesis and Applications in Oxygen Reduction Reaction. 2017 , 7, 1	175
819	Transition Metal-Modified Zirconium Phosphate Electrocatalysts for the Oxygen Evolution Reaction. 2017 , 7, 132	25
818	Study of Dielectric Breakdown Performance of Transformer Oil Based Magnetic Nanofluids. 2017 , 10, 1025	32
817	Graphitization and Pore Structure Adjustment of Graphene for Energy Storage and Conversion. 2017 , 1,	2
816	Self-Assembly of Graphene Derivatives: Methods, Structures, and Applications. 2017, 47-74	6
815	. 2017,	
814	Nitrogen doped carbon nano-onions as efficient and robust electrocatalysts for oxygen reduction reactions. 2018 , 18, 417-423	21
813	Characteristics tuning of graphene-oxide-based-graphene to various end-uses. 2018 , 14, 8-21	31

812	Nanocarbon-Based Electrocatalysts for Rechargeable Aqueous Li/Zn-Air Batteries. 2018, 5, 1745-1763	20
811	Stability and Reactivity: Positive and Negative Aspects for Nanoparticle Processing. 2018 , 118, 3209-3250	173
810	A Polycarboxyl-Decorated Fe -Based Xerogel-Derived Multifunctional Composite (Fe O /Fe/C) as an Efficient Electrode Material towards Oxygen Reduction Reaction and Supercapacitor Application. 2018 , 24, 6586-6594	8
809	AuPd Nanoparticles Anchored on Nitrogen-Decorated Carbon Nanosheets with Highly Efficient and Selective Catalysis for the Dehydrogenation of Formic Acid. 2018 , 122, 4792-4801	18
808	Polydopamine-Derived, In Situ N-Doped 3D Mesoporous Carbons for Highly Efficient Oxygen Reduction. 2018 , 4, 417-422	15
807	Anisotropic N-Graphene-diffused CoO nanocrystals with dense upper-zone top-on-plane exposure facets as effective ORR electrocatalysts. 2018 , 8, 3740	47
806	Aerogels and metalBrganic frameworks for environmental remediation and energy production. 2018 , 16, 797-820	44
805	Highly stretchable carbon aerogels. 2018 , 9, 881	136
804	Cobalt-Doped BainO Brownmillerites: An Efficient Electrocatalyst for Oxygen Reduction in Alkaline Medium. 2018 , 3, 1710-1717	10
803	Highly dispersed Ni M n bimetallic nanoparticles embedded in 3D nitrogen-doped graphene as an efficient catalyst for the thermal decomposition of ammonium perchlorate. 2018 , 42, 5889-5899	17
802	Carbon nanospheres obtained from carbonization of bio-resource: A catalyst free synthesis. 2018 , 5, 2907-2911	7
801	Reduced Graphene Oxide-Hybridized Polymeric High-Internal Phase Emulsions for Highly Efficient Removal of Polycyclic Aromatic Hydrocarbons from Water Matrix. 2018 , 34, 3661-3668	37
800	VN Quantum Dots Anchored Uniformly onto Nitrogen-Doped Graphene as Efficient Electrocatalysts for Oxygen Reduction Reaction. 2018 , 13, 1850041	4
799	Critical Impact of Graphene Functionalization for Transition Metal Oxide/Graphene Hybrids on Oxygen Reduction Reaction. 2018 , 122, 10017-10026	17
798	Probing Molecular-Scale Catalytic Interactions between Oxygen and Cobalt Phthalocyanine Using Tip-Enhanced Raman Spectroscopy. <i>Journal of the American Chemical Society</i> , 2018 , 140, 5948-5954	50
797	Nanomaterials in Proton Exchange Membrane Fuel Cells. 2018 , 199-226	
796	Enhanced hydrogen evolution reaction activity of hydrogen-annealed vertical MoS nanosheets 2018 , 8, 14369-14376	20
795	Three-Dimensional Boron- and Nitrogen-Codoped Graphene Aerogel-Supported Pt Nanoparticles as Highly Active Electrocatalysts for Methanol Oxidation Reaction. 2018 , 6, 6644-6653	39

794	Catalytic Conversion of Carbohydrates into 5-Ethoxymethylfurfural by a Magnetic Solid Acid Using EValerolactone as a Co-Solvent. 2018 , 6, 1951-1958	19
793	One-step electrochemical strategy for in-situ synthesis of S,N-codoped graphene as metal-free catalyst for oxygen reduction reaction. 2018 , 134, 316-325	48
792	Cubic CeO implanted reduced graphene oxide-based highly sensitive biosensor for non-invasive oral cancer biomarker detection. 2018 , 6, 3000-3012	46
791	Multiple Metal (Cu, Mn, Fe) Centered Species Simultaneously Combined Nitrogen-doped Graphene as an Electrocatalyst for Oxygen Reduction in Alkaline and Neutral Solutions. 2018 , 10, 2471-2480	7
790	A phenylenediamine-mediated organic electrolyte for high performance graphene-hydrogel based supercapacitors. 2018 , 273, 495-501	11
789	Characterization, antibacterial and cytotoxicity studies of graphene-Fe 3 O 4 nanocomposites and Fe 3 O 4 nanoparticles synthesized by a facile solvothermal method. 2018 , 213, 285-294	27
788	Functional integration and self-template synthesis of hollow core-shell carbon mesoporous spheres/FeO/nitrogen-doped graphene to enhance catalytic activity in DSSCs. 2018 , 10, 7946-7956	42
787	Crab Shell-Templated Fe and N Co D oped Mesoporous Carbon Nanofibers as a Highly Efficient Oxygen Reduction Reaction Electrocatalyst. 2018 , 3, 3722-3730	4
786	Review on synthesis of 3D graphene-based configurations and their adsorption performance for hazardous water pollutants. 2018 , 116, 262-286	77
785	Selective liquid phase oxidation of cyclohexene over magnetic Fe 3 O 4/graphene oxide nanocomposite. 2018 , 211, 23-33	11
784	Ammonia modification of high-surface-area activated carbons as metal-free electrocatalysts for oxygen reduction reaction. 2018 , 263, 465-473	22
783	The preparation of reduced graphene oxide-encapsulated Fe2O3 hybrid and its outstanding NO2 gas sensing properties at room temperature. 2018 , 261, 252-263	71
782	Self-Assembled Graphene Nanostructures and Their Applications. 2018, 39-74	
781	Ultrathin Alumina Mask-Assisted Nanopore Patterning on Monolayer MoS for Highly Catalytic Efficiency in Hydrogen Evolution Reaction. 2018 , 10, 8026-8035	41
7 ⁸ 0	Phosphorus-doped 3D carbon nanofiber aerogels derived from bacterial-cellulose for highly-efficient capacitive deionization. 2018 , 130, 377-383	145
779	Monodisperse Pd nanoparticles assembled on reduced graphene oxide-Fe 3 O 4 nanocomposites as lelectrocatalysts for borohydride fuel cells. 2018 , 43, 10686-10697	18
778	Cost-effective nitrogen-doped carbon black supported PdCu alloy nanocatalyst for green Suzuki-Miyaura reactions under mild conditions. 2018 , 209, 86-94	13
777	Recent progress and perspectives of bifunctional oxygen reduction/evolution catalyst development for regenerative anion exchange membrane fuel cells. 2018 , 47, 172-198	98

(2018-2018)

776	Enhanced oxygen reduction of multi-FeO@carbon core-shell electrocatalysts through a nanoparticle/polymer co-assembly strategy. 2018 , 10, 5882-5887	39
775	Coral-like CoO Decorated N-doped Carbon Particles as active Materials for Oxygen Reduction Reaction and Supercapacitor. 2018 , 8, 1802	35
774	Advanced Phosphorus-Based Materials for Lithium/Sodium-Ion Batteries: Recent Developments and Future Perspectives. 2018 , 8, 1703058	119
773	Encapsulation of Ni/FeO heterostructures inside onion-like N-doped carbon nanorods enables synergistic electrocatalysis for water oxidation. 2018 , 10, 3997-4003	61
772	One-Pot Biosynthesis of Reduced Graphene Oxide/Prussian Blue Microcubes Composite and Its Sensitive Detection of Prophylactic Drug Dimetridazole. 2018 , 165, B27-B33	27
771	Prussian Blue-Derived Iron Phosphide Nanoparticles in a Porous Graphene Aerogel as Efficient Electrocatalyst for Hydrogen Evolution Reaction. 2018 , 13, 679-685	28
770	Chitosan-Derived NiO-Mn2O3/C Nanocomposites as Non-Precious Catalysts for Enhanced Oxygen Reduction Reaction. 2018 , 3, 922-932	12
769	Nitrogen-doped graphene-supported molybdenum dioxide electrocatalysts for oxygen reduction reaction. 2018 , 53, 6124-6134	7
768	Recent advances in three-dimensional graphene based materials for catalysis applications. 2018 , 47, 2165-2216	326
767	Hydrothermal-microwave synthesis of cobalt oxide incorporated nitrogen-doped graphene composite as an efficient catalyst for oxygen reduction reaction in alkaline medium. 2018 , 29, 6750-6762	8
766	High-performance non-enzymatic catalysts based on 3D hierarchical hollow porous CoO nanododecahedras in situ decorated on carbon nanotubes for glucose detection and biofuel cell application. 2018 , 410, 2019-2029	10
765	Coupled s-p-d Exchange in Facet-Controlled Pd3Pb Tripods Enhances Oxygen Reduction Catalysis. 2018 , 4, 359-371	68
764	Effect of annealing temperature on oxygen reduction reaction of reduced graphene oxide incorporated cobalt oxide nanocomposites for fuel cell applications. 2018 , 449, 705-711	11
763	Multidimensional Assemblies of Graphene. 2018 , 27-72	
762	Co- and defect-rich carbon nanofiber films as a highly efficient electrocatalyst for oxygen reduction. 2018 , 435, 1159-1167	9
761	Electron transfer-induced catalytic enhancement over bismuth nanoparticles supported by N-doped graphene. 2018 , 334, 1691-1698	33
760	A cross-disciplinary overview of naturally derived materials for electrochemical energy storage. 2018 , 7, 58-79	34
759	Nitrogen/sulfur dual-doped reduced graphene oxide supported CuFeS2 as an efficient electrocatalyst for the oxygen reduction reaction. 2018 , 42, 2081-2088	8

758	In Situ Self-Template Synthesis of Fe-N-Doped Double-Shelled Hollow Carbon Microspheres for Oxygen Reduction Reaction. 2018 , 12, 208-216	180
757	Highly Compressible, Anisotropic Aerogel with Aligned Cellulose Nanofibers. 2018, 12, 140-147	215
756	P25/Black phosphorus/Graphene hybrid for enhanced photocatalytic activity. 2018, 29, 4441-4448	O
755	Nanosheets/Mesopore Structured Co3O4@CMK-3 Composite as an Electrocatalyst for the Oxygen Reduction Reaction. 2018 , 10, 1321-1329	13
754	Enhanced cycle stability of iron(II, III) oxide nanoparticles encapsulated with nitrogen-doped carbon and graphene frameworks for lithium battery anodes. 2018 , 129, 621-630	22
753	Fabrication of 3D heteroatom-doped porous carbons from self-assembly of chelate foams via a solid state method. 2018 , 5, 656-664	11
752	Control of the microstructure and surface chemistry of graphene aerogels via pH and time manipulation by a hydrothermal method. 2018 , 10, 3526-3539	42
751	Improvement of O adsorption for EMnO as an oxygen reduction catalyst by Zr doping 2018 , 8, 2963-2970	21
75°	Long-life sodium/carbon fluoride batteries with flexible, binder-free fluorinated mesocarbon microbead film electrodes. 2018 , 54, 2341-2344	6
749	Graphene aerogels for efficient energy storage and conversion. 2018 , 11, 772-799	272
749 748	Graphene aerogels for efficient energy storage and conversion. 2018, 11, 772-799 Patterning Graphene Surfaces with Iron-Oxide-Embedded Mesoporous Polypyrrole and Derived N-Doped Carbon of Tunable Pore Size. 2018, 14, 1702755	272
	Patterning Graphene Surfaces with Iron-Oxide-Embedded Mesoporous Polypyrrole and Derived	
748	Patterning Graphene Surfaces with Iron-Oxide-Embedded Mesoporous Polypyrrole and Derived N-Doped Carbon of Tunable Pore Size. 2018 , 14, 1702755 Developing new adsorptive membrane by modification of support layer with iron oxide	61
74 ⁸	Patterning Graphene Surfaces with Iron-Oxide-Embedded Mesoporous Polypyrrole and Derived N-Doped Carbon of Tunable Pore Size. 2018 , 14, 1702755 Developing new adsorptive membrane by modification of support layer with iron oxide microspheres for arsenic removal. 2018 , 514, 760-768 Fe-N-Doped Mesoporous Carbon with Dual Active Sites Loaded on Reduced Graphene Oxides for	61 47
748 747 746	Patterning Graphene Surfaces with Iron-Oxide-Embedded Mesoporous Polypyrrole and Derived N-Doped Carbon of Tunable Pore Size. 2018, 14, 1702755 Developing new adsorptive membrane by modification of support layer with iron oxide microspheres for arsenic removal. 2018, 514, 760-768 Fe-N-Doped Mesoporous Carbon with Dual Active Sites Loaded on Reduced Graphene Oxides for Efficient Oxygen Reduction Catalysts. 2018, 10, 2423-2429 Novel in-situ redox synthesis of Fe3O4/rGO composites with superior electrochemical performance	61 47 77
748 747 746 745	Patterning Graphene Surfaces with Iron-Oxide-Embedded Mesoporous Polypyrrole and Derived N-Doped Carbon of Tunable Pore Size. 2018, 14, 1702755 Developing new adsorptive membrane by modification of support layer with iron oxide microspheres for arsenic removal. 2018, 514, 760-768 Fe-N-Doped Mesoporous Carbon with Dual Active Sites Loaded on Reduced Graphene Oxides for Efficient Oxygen Reduction Catalysts. 2018, 10, 2423-2429 Novel in-situ redox synthesis of Fe3O4/rGO composites with superior electrochemical performance for lithium-ion batteries. 2018, 262, 233-240 Nitrogen-doped graphene supported copper catalysts for methanol oxidative carbonylation:	61 47 77 41
748 747 746 745 744	Patterning Graphene Surfaces with Iron-Oxide-Embedded Mesoporous Polypyrrole and Derived N-Doped Carbon of Tunable Pore Size. 2018, 14, 1702755 Developing new adsorptive membrane by modification of support layer with iron oxide microspheres for arsenic removal. 2018, 514, 760-768 Fe-N-Doped Mesoporous Carbon with Dual Active Sites Loaded on Reduced Graphene Oxides for Efficient Oxygen Reduction Catalysts. 2018, 10, 2423-2429 Novel in-situ redox synthesis of Fe3O4/rGO composites with superior electrochemical performance for lithium-ion batteries. 2018, 262, 233-240 Nitrogen-doped graphene supported copper catalysts for methanol oxidative carbonylation: Enhancement of catalytic activity and stability by nitrogen species. 2018, 130, 185-195 Strategies for Enhancing the Electrocatalytic Activity of MN/C Catalysts for the Oxygen Reduction	61 47 77 41 60

740	Electrocatalytic Oxygen Reduction by Dopant-free, Porous Graphene Aerogel. 2018, 30, 1472-1478	6
739	Electricity from Microbial Fuel Cells. 2018 , 391-433	1
738	N-doped and N/Fe-codoped porous carbon spheres derived from tetrazine-based polypyrrole as efficient electrocatalysts for the oxygen reduction reaction. 2018 , 559, 102-111	13
737	MP(M = Co/Ni)@carbon core-shell nanoparticles embedded in 3D cross-linked graphene aerogel derived from seaweed biomass for hydrogen evolution reaction. 2018 , 10, 9698-9706	42
736	Functionalization of Graphene Aerogels and their Applications in Energy Storage and Conversion. 2018 , 232, 1647-1674	4
735	Synergism of molybdenum nitride and palladium for high-efficiency formic acid electrooxidation. 2018 , 6, 7623-7630	33
734	Taming transition metals on N-doped CNTs by a one-pot method for efficient oxygen reduction reaction. 2018 , 43, 7893-7902	36
733	3D carbon quantum dots/graphene aerogel as a metal-free catalyst for enhanced photosensitization efficiency. 2018 , 233, 11-18	79
732	Robust Nanofibrillated Cellulose Hydro/Aerogels from Benign Solution/Solvent Exchange Treatment. 2018 , 6, 6624-6634	22
731	Pd supported on NC@SiC as an efficient and stable catalyst for 4-carboxybenzaldehyde hydrogenation. 2018 , 110, 79-82	3
730	Facile synthesis of mesoporous 3D CoO/nitrogen-doped graphene aerogel as high-performance anode materials for lithium storage. 2018 , 267, 93-99	16
729	Parallelized Reaction Pathway and Stronger Internal Band Bending by Partial Oxidation of Metal Sulfide©raphene Composites: Important Factors of Synergistic Oxygen Evolution Reaction Enhancement. 2018 , 8, 4091-4102	79
728	Three-Dimensional GrapheneMagnetic Palladium Nanohybrid: A Highly Efficient and Reusable Catalyst for Promoting Organic Reactions. 2018 , 148, 1549-1561	17
727	Sulfonated Fe3O4@SiO2 nanorods incorporated sPVdF nanocomposite membranes for DMFC applications. 2018 , 555, 497-506	48
726	Functionalization of graphene materials by heteroatom-doping for energy conversion and storage. 2018 , 28, 121-132	100
7 2 5	Bimetallic Mnto Oxide Nanoparticles Anchored on Carbon Nanofibers Wrapped in Nitrogen-Doped Carbon for Application in Zntir Batteries and Supercapacitors. 2018 , 1, 1612-1625	33
724	Three-Dimensional Networks of S-Doped Fe/N/C with Hierarchical Porosity for Efficient Oxygen Reduction in Polymer Electrolyte Membrane Fuel Cells. 2018 , 10, 14602-14613	40
723	Oxygen Species on Nitrogen-Doped Carbon Nanosheets as Efficient Active Sites for Multiple Electrocatalysis. 2018 , 10, 11678-11688	42

722	Heterogeneous liquid phase oxidation of ethylbenzene to acetophenone with graphene carbon-based catalyst. 2018 , 72, 2203-2214	3
721	Liquid nitrogen driven assembly of nanomaterials into spongy millispheres for various applications. 2018 , 6, 5984-5992	10
720	Ferroelectric solid solution Li1IIa1IW O3 as potential photocatalysts in microbial fuel cells: Effect of the W content. 2018 , 26, 1985-1991	7
719	3D heterostructured pure and N-Doped Ni3S2/VS2 nanosheets for high efficient overall water splitting. 2018 , 269, 55-61	91
718	Defect-rich, boron-nitrogen bonds-free and dual-doped graphenes for highly efficient oxygen reduction reaction. 2018 , 521, 11-16	12
717	Incorporation of Fe3C and Pyridinic N Active Sites with a Moderate N/C Ratio in FeN Mesoporous Carbon Materials for Enhanced Oxygen Reduction Reaction Activity. 2018 , 1, 1801-1810	35
716	Highly efficient catalytic systems based on Pd-coated microbeads. 2018, 429, 108-114	5
715	CuO nanoparticles supported on three-dimensional nitrogen-doped graphene as a promising catalyst for thermal decomposition of ammonium perchlorate. 2018 , 32, e3959	36
714	Synthesis of M (Fe3C, Co, Ni)-porous carbon frameworks as high-efficient ORR catalysts. 2018 , 11, 112-117	53
713	Mechanically robust and highly compressible electrochemical supercapacitors from nitrogen-doped carbon aerogels. 2018 , 127, 236-244	75
712	From Two-Phase to Three-Phase: The New Electrochemical Interface by Oxide Electrocatalysts. 2018 , 10, 8	58
711	Hybrids of Fe3O4/CoSe2 as efficient electrocatalysts for oxygen reduction reaction. 2018 , 53, 1123-1134	5
710	One-pot fabrication of N-doped graphene supported dandelion-like PtRu nanocrystals as efficient and robust electrocatalysts towards formic acid oxidation. 2018 , 512, 96-104	18
709	3D-Graphene supports for palladium nanoparticles: Effect of micro/macropores on oxygen electroreduction in Anion Exchange Membrane Fuel Cells. 2018 , 375, 255-264	26
708	A facile and mild route to synthesize ultralight and flexible 3D functionalized graphene. 2018 , 25, 905-911	4
707	An efficient electrocatalyst for oxygen reduction to water - boron nitride nanosheets decorated with small gold nanoparticles (~ 5 nm) of narrow size distribution on gold substrate. 2018 , 819, 107-113	18
706	Covalent Organic Framework Electrocatalysts for Clean Energy Conversion. 2018, 30, 1703646	200
705	Two- and three-dimensional graphene-based hybrid composites for advanced energy storage and conversion devices. 2018 , 6, 702-734	106

704	Self-Assembled Graphene-Based Architectures and Their Applications. 2018, 5, 1700626	50
703	Supporting Pd nanoparticles on riboflavin-derived carbon: an efficient electrocatalyst for ethylene glycol oxidation. 2018 , 24, 1745-1754	5
702	Nitrogen-doped graphene: Synthesis, characterizations and energy applications. 2018, 27, 146-160	163
701	Boosting Bifunctional Oxygen Electrocatalysis with 3D Graphene Aerogel-Supported Ni/MnO Particles. 2018 , 30, 1704609	389
700	Ammonia Defective Etching and Nitrogen-Doping of Porous Carbon toward High Exposure of Heme-Derived FeNx Site for Efficient Oxygen Reduction. 2018 , 6, 551-560	23
699	Assembly of a novel porous 3D graphene oxide-starch architecture by a facile hydrothermal method and its adsorption properties toward metal ions. 2018 , 214, 31-33	37
698	Benchmarking the Oxygen Reduction Electroactivity of First-Row Transition-Metal Oxide Clusters on Carbon Nanotubes. 2018 , 5, 1862-1867	7
697	Enhancement of oxygen reduction reaction performance: The characteristic role of FeN coordinations. 2018 , 260, 264-273	26
696	Multi-scale porous graphene/activated carbon aerogel enables lightweight carbonaceous catalysts for oxygen reduction reaction. 2018 , 33, 1247-1257	6
695	Hydrothermal Synthesis of Platinum-Group-Metal-Free Catalysts: Structural Elucidation and Oxygen Reduction Catalysis. 2018 , 5, 1848-1853	5
694	Fe/Fe3C@C nanoparticles encapsulated in N-doped graphene INTs framework as an efficient bifunctional oxygen electrocatalyst for robust rechargeable Zn ir batteries. 2018 , 6, 516-526	288
693	Graphene stirrer with designed movements: Targeting on environmental remediation and supercapacitor applications. 2018 , 3, 86-96	8
692	Graphene-Based Nanostructures in Electrocatalytic Oxygen Reduction. 2018, 651-659	3
691	Metal-organic frameworks-derived core-shell FeO/FeN@graphite carbon nanocomposites as excellent non-precious metal electrocatalyst for oxygen reduction. 2018 , 47, 16567-16577	22
690	Synergistic effect of adsorption coupled with catalysis based on graphene-supported MOF hybrid aerogel for promoted removal of dyes 2018 , 8, 34552-34559	30
689	A nitrogen and boron co-doped metal-free carbon electrocatalyst for an efficient oxygen reduction reaction. 2018 , 5, 2985-2991	23
688	Tulip-like MoS2 with a single sheet tapered structure anchored on N-doped graphene substrates via CDMo bonds for superior sodium storage. 2018 , 6, 24433-24440	36
687	Discharge Behavior of Water-Activated Magnesium Battery. 2018,	1

686	Carbon Nanodots as Feedstock for a Uniform Hematite-Graphene Nanocomposite. 2018, 14, e1803656	15
685	Fe3O4/Fe3C@Nitrogen-Doped Carbon for Enhancing Oxygen Reduction Reaction. 2018 , 5, 187	6
684	Metal-Free and Ultrasound-Assisted CII and O-Si (O-Protected) Bond Formation in Cyanosilylation of Aldehydes with TMSCN Catalyzed by Functionalized Graphene Oxide Derivatives. 2018 , 3, 12131-12138	4
683	Research on a novel Ni-doped TiN modified N-doped CNTs supported Pt catalysts and their synergistic effect for methanol electrooxidation. 2018 , 43, 22519-22528	6
682	Self-templating synthesis nitrogen and sulfur co-doped hierarchical porous carbons derived from crab shells as a high-performance metal-free oxygen electroreduction catalyst. 2018 , 10, 388-395	9
681	Graphene Oxide/Reduced Graphene Oxide Aerogels. 2018 ,	
680	High-Efficient and Recyclable Magnetic Separable Catalyst for Catalytic Hydrogenolysis of EO-4 Linkage in Lignin. 2018 , 10,	5
679	In situ derived Fe/N/S-codoped carbon nanotubes from ZIF-8 crystals as efficient electrocatalysts for the oxygen reduction reaction and zinc batteries. 2018 , 6, 20093-20099	97
678	Improved BDD anode system in electrochemical degradation of p-nitrophenol by corroding electrode of iron. 2018 , 291, 335-342	9
677	N-doped carbon nanofibers aerogels derived from aramid as efficient electrocatalysts for oxygen reduction reaction in alkaline and acidic media. 2018 , 829, 177-183	17
676	Magnet-assisted rapid and controllable construction of an electroactive biofilm for microbial current generation. 2018 , 403, 97-102	6
675	Enhancement of Oxygen Reduction Performance of Biomass-Derived Carbon through Co-Doping with Early Transition Metal. 2018 , 165, J3148-J3156	9
674	Defects on carbons for electrocatalytic oxygen reduction. 2018 , 47, 7628-7658	282
673	Two-step oxygen reduction on spinel NiFe2O4 catalyst: Rechargeable, aqueous solution- and gel-based, Zn-air batteries. 2018 , 292, 268-275	51
672	Self-assembled three-dimensional double network graphene oxide/polyacrylic acid hybrid aerogel for removal of Cu from aqueous solution. 2018 , 25, 34438-34447	24
671	Comparative Study of the Oxygen Reduction Reaction on Pyrolyzed FePc in Acidic and Alkaline Media. 2018 , 5, 3946-3952	14
670	MoS2 Nanosheets Vertically Aligned on Hierarchically Porous Graphitic Carbon for High-Performance Lithium Storage. 2018 , 165, A2859-A2865	7
669	Bio-inspired FeN5 moieties anchored on a three-dimensional graphene aerogel to improve oxygen reduction catalytic performance. 2018 , 6, 18488-18497	32

668	Defective Carbons for Electrocatalytic Oxygen Reduction. 2018 , 59-75	Ο
667	Carbon-Based Electrochemical Oxygen Reduction and Hydrogen Evolution Catalysts. 2018 , 403-455	1
666	Ultralight and compressible mussel-inspired dopamine-conjugated poly(aspartic acid)/Fe3+-multifunctionalized graphene aerogel. 2018 , 53, 16484-16499	6
665	One-step preparation of FexOy/N-GN/CNTs heterojunctions as a peroxymonosulfate activator for relatively highly-efficient methylene blue degradation. 2018 , 39, 1842-1853	17
664	Oxygen reduction reaction activity and the microbial community in response to magnetite coordinating nitrogen-doped carbon catalysts in bioelectrochemical systems. 2018 , 122, 113-120	13
663	Promoting Oxygen Reduction Reaction Activity of FeN/C Electrocatalysts by Silica-Coating-Mediated Synthesis for Anion-Exchange Membrane Fuel Cells. 2018 , 30, 6684-6701	69
662	Hierarchical Flowerlike Highly Synergistic Three-Dimensional Iron Tungsten Oxide Nanostructure-Anchored Nitrogen-Doped Graphene as an Efficient and Durable Electrocatalyst for Oxygen Reduction Reaction. 2018 , 10, 32220-32232	25
661	The Study on Degradation and Separation of RhB Under UV Light by Magnetically ZnO/Fe2O3 Nanoparticles. 2018 , 215, 1800416	6
660	Emerging core-shell nanostructured catalysts of transition metal encapsulated by two-dimensional carbon materials for electrochemical applications. 2018 , 22, 100-131	59
659	Three-dimensional low-defect carbon nanotube/nitrogen-doped graphene hybrid aerogel-supported Pt nanoparticles as efficient electrocatalysts toward the methanol oxidation reaction. 2018 , 6, 18165-18172	64
658	Surface activation of graphene nanoribbons for oxygen reduction reaction by nitrogen doping and defect engineering: An ab initio study. 2018 , 137, 349-357	10
657	Manganese oxide nanoparticles supported nitrogen-doped graphene: a durable alkaline oxygen reduction electrocatalyst. 2018 , 48, 849-865	11
656	Fluoride ion-mediated morphology control of fluorine-doped CoFe2O4/graphene sheet composites for hybrid supercapacitors with enhanced performance. 2018 , 279, 241-249	16
655	Facile synthesis of functionalized graphene hydrogel for high performance supercapacitor with high volumetric capacitance and ultralong cycling stability. 2018 , 455, 683-695	51
654	Enhanced capacitive deionization by nitrogen-doped porous carbon nanofiber aerogel derived from bacterial-cellulose. 2018 , 822, 81-88	41
653	Heterojunctions of silver-iron oxide on graphene for laser-coupled oxygen reduction reactions. 2018 , 54, 7900-7903	18
652	Novel catalytic micromotor of porous zeolitic imidazolate framework-67 for precise drug delivery. 2018 , 10, 11384-11391	63
651	An efficient and recyclable acidBase bifunctional coreBhell nano-catalyst for the one-pot deacetalizationKnoevenagel tandem reaction. 2018 , 42, 11610-11615	15

650	Laminated Object Manufacturing of 3D-Printed Laser-Induced Graphene Foams. 2018, 30, e1707416	118
649	L-Phenylalanine-Templated Platinum Catalyst with Enhanced Performance for Oxygen Reduction Reaction. 2018 , 10, 21321-21327	12
648	Surface Chemistry and Nano-/Microstructure Engineering on Photocatalytic InS Nanocrystals. 2018 , 34, 6470-6479	12
647	Dicyandiamide and iron-tannin framework derived nitrogen-doped carbon nanosheets with encapsulated iron carbide nanoparticles as advanced pH-universal oxygen reduction catalysts. 2018 , 530, 196-201	18
646	The rise of two-dimensional MoS2 for catalysis. 2018 , 13, 1	62
645	Graphene and Graphene Oxide for Fuel Cell Technology. 2018 , 57, 9333-9350	67
644	MnO Quantum Dots Supported on Nitrogen-Doped Partially Exfoliated Multiwall Carbon Nanotubes as Oxygen Reduction Electrocatalysts for High-Performance Zn-Air Batteries. 2018 , 10, 23900-23	90 9 3
643	Fe Vacancies Induced Surface FeO6 in Nanoarchitectures of N-Doped Graphene Protected FeOOH: Effective Active Sites for pH-Universal Electrocatalytic Oxygen Reduction. 2018 , 28, 1803330	41
642	Pt nanocrystals grown on three-dimensional architectures made from graphene and MoS2 nanosheets: Highly efficient multifunctional electrocatalysts toward hydrogen evolution and methanol oxidation reactions. 2018 , 139, 369-377	58
641	Novel Nanomaterials as Electrocatalysts for Fuel Cells. 2018 , 169-204	2
640	Application of Nanomaterials Prepared by Thermolysis of Metal Chelates. 2018, 459-541	
639	Properties of a granulated nitrogen-doped graphene oxide aerogel. 2018 , 498, 236-243	9
638	Catalyst Support in Oxygen Electrocatalysis: A Case Study with CoFe Alloy Electrocatalyst. 2018 , 122, 15843-15852	27
637	Inner Surface-Functionalized Graphene Aerogel Microgranules with Static Microwave Attenuation and Dynamic Infrared Shielding. 2018 , 34, 9004-9014	10
636	Facile fabrication of polyurethane/epoxy IPNs filled graphene aerogel with improved damping, thermal and mechanical properties 2018 , 8, 27390-27399	5
635	Iron oxide decorated N-doped carbon derived from poly(ferrocene-urethane) interconnects for the oxygen reduction reaction. 2018 , 42, 15629-15638	5
634	Øylon[Aerogels. 2018 , 303, 1800229	6
633	Fe, Cu-Coordinated ZIF-Derived Carbon Framework for Efficient Oxygen Reduction Reaction and ZincAir Batteries. 2018 , 28, 1802596	245

632	Highly Graphitic Mesoporous Fe,N-Doped Carbon Materials for Oxygen Reduction Electrochemical Catalysts. 2018 , 10, 25337-25349	33
631	Porous FeII-codoped carbon microspheres: an efficient and durable electrocatalyst for oxygen reduction reaction. 2018 , 5, 2211-2217	7
630	MOF derived carbon based nanocomposite materials as efficient electrocatalysts for oxygen reduction and oxygen and hydrogen evolution reactions 2018 , 8, 26728-26754	45
629	Study on the solid thermal insulation mechanisms of nitrogen-doped graphene aerogels by molecular dynamics simulations and experiments. 2018 , 133, 162-169	1
628	Mn O /N-Doped Graphite Catalysts from Wastewater for the Degradation of Methylene Blue. 2018 , 24, 14554-14559	6
627	Pyridinic-nitrogen-dominated nitrogen-doped graphene stabilized Cu for efficient selective oxidation of 5-hydroxymethfurfural. 2018 , 458, 24-31	14
626	Seaweed-derived multifunctional nitrogen/cobalt-codoped carbonaceous beads for relatively high-efficient peroxymonosulfate activation for organic pollutants degradation. 2018 , 353, 746-759	50
625	A Roadmap for Achieving Sustainable Energy Conversion and Storage: Graphene-Based Composites Used Both as an Electrocatalyst for Oxygen Reduction Reactions and an Electrode Material for a Supercapacitor. 2018 , 11, 167	16
624	Green Synthesis of Three-Dimensional Hybrid N-Doped ORR Electro-Catalysts Derived from Apricot Sap. 2018 , 11,	6
623	Nitrogen-Doped Wrinkled Carbon Foils Derived from MOF Nanosheets for Superior Sodium Storage. 2018 , 8, 1801515	116
622	Highly Dispersive MoP Nanoparticles Anchored on Reduced Graphene Oxide Nanosheets for an Efficient Hydrogen Evolution Reaction Electrocatalyst. 2018 , 10, 26258-26263	37
621	Microwave-Assisted Synthesis of a Polypyrrole/Graphene Composite Using a Pyrrole-Induced Graphene Oxide Hydrogel for the Selective Determination of Dihydroxybenzenes. 2018 , 3, 7713-7717	2
620	Nitrogen-doped graphene-supported zinc sulfide nanorods as efficient Pt-free for visible-light photocatalytic hydrogen production. 2018 , 43, 14905-14914	28
619	Ultrasonication-assisted synthesis of ternary-component Ni3AlxFe1⊠-layered double hydroxide nanoparticles for the oxygen evolution reaction in a neutral solution. 2018 , 42, 13963-13970	13
618	Nitrogen-doped graphene and graphene quantum dots: A review onsynthesis and applications in energy, sensors and environment. 2018 , 259, 44-64	196
617	Tunable CoFe-based active sites on 3D heteroatom doped graphene aerogel electrocatalysts via annealing gas regulation for efficient water splitting. 2018 , 6, 15728-15737	44
616	Metal-organic framework-derived Fe3C@NC nanohybrids as highly-efficient oxygen reduction electrocatalysts in both acidic and basic media. 2018 , 823, 755-764	13
615	Porous Co3O4 decorated nitrogen-doped graphene electrocatalysts for efficient bioelectricity generation in MFCs. 2018 , 43, 10311-10321	14

614	Flower-like nanostructured V3S4 grown on three-dimensional porous graphene aerogel for efficient oxygen reduction reaction. 2018 , 450, 348-355	16
613	Transition metal oxide-based oxygen reduction reaction electrocatalysts for energy conversion systems with aqueous electrolytes. 2018 , 6, 10595-10626	109
612	Catalyst Support Effect on the Activity and Durability of Magnetic Nanoparticles: toward Design of Advanced Electrocatalyst for Full Water Splitting. 2018 , 10, 31300-31311	45
611	Mesoporous non-noble metal electrocatalyst derived from ZIF-67 and cobalt porphyrin for the oxygen reduction in alkaline solution. 2018 , 825, 65-72	19
610	Cost-Effective and Facile Preparation of Fe2O3 Nanoparticles Decorated N-Doped Mesoporous Carbon Materials: Transforming Mulberry Leaf into a Highly Active Electrocatalyst for Oxygen Reduction Reactions. 2018 , 8, 101	7
609	Coral-like cobaltous sulfide/N,S-codoped carbon with hierarchical pores as highly efficient noble metal-free electrocatalyst for oxygen reduction reactions. 2018 , 769, 801-807	8
608	Tailoring the nano heterointerface of hematite/magnetite on hierarchical nitrogen-doped carbon nanocages for superb oxygen reduction. 2018 , 6, 21313-21319	19
607	Synthesis of 3D N, S Dual-Doped Porous Carbons with Ultrahigh Surface Areas for Highly Efficient Oxygen Reduction Reactions. 2018 , 5, 3506-3513	4
606	Tuning Cobalt and Nitrogen Co-Doped Carbon to Maximize Catalytic Sites on a Superabsorbent Resin for Efficient Oxygen Reduction. 2018 , 11, 3631-3639	16
605	Deterministic, Reversible, and Nonvolatile Low-Voltage Writing of Magnetic Domains in Epitaxial BaTiO/FeO Heterostructure. 2018 , 12, 9558-9567	34
604	Efficient nonenzymatic H2O2 biosensor based on ZIF-67 MOF derived Co nanoparticles embedded N-doped mesoporous carbon composites. 2018 , 276, 142-149	46
603	A novel building material with low thermal conductivity: Rapid synthesis of foam concrete reinforced silica aerogel and energy performance simulation. 2018 , 177, 385-393	42
602	La and Al co-doped CaMnO3 perovskite oxides: From interplay of surface properties to anion exchange membrane fuel cell performance. 2018 , 375, 265-276	14
601	Preparation of magnetic g-C3N4/Fe3O4/TiO2 photocatalyst for visible light photocatalytic application. 2018 , 763, 844-853	23
600	One-step synthesis of 3D reduced graphene oxide supported Pd catalyst with high activity and recovery in the hydrogenation of nitrobenzene. 2018 , 125, 595-603	4
599	Potential Applications and Perspectives. 2018 , 233-249	
598	Enhancing lithium-ion batteries performance via electron-beam irradiation strategies: A case study of graphene aerogels loaded with SnO2 quantum dots. 2018 , 281, 769-776	10
597	Interface-Assisted Synthesis of 2D Materials: Trend and Challenges. 2018 , 118, 6189-6235	358

596	Recent progress in phosphorus based anode materials for lithium/sodium ion batteries. 2019, 16, 290-322	162
595	Preparation and catalytic performance of tungstophosphoric acid anchored to SiO2@graphene aerogel 3D porous catalysts for the synthesis of ethyl levulinate biofuel. 2019 , 26, 723-732	3
594	A 3D free-standing thin film based on N, P-codoped hollow carbon fibers embedded with MoP quantum dots as high efficient oxygen electrode for Li-O2 batteries. 2019 , 17, 226-233	39
593	An intramolecular relay catalysis strategy for Knoevenagel condensation and 1,3-dipolar cycloaddition domino reactions 2019 , 9, 23614-23621	14
592	Single iron atoms stabilized by microporous defects of biomass-derived carbon aerogels as high-performance cathode electrocatalysts for aluminum ir batteries. 2019 , 7, 20840-20846	46
591	An Fe-N co-doped tube-in-tube carbon nanostructure used as an efficient catalyst for the electrochemical oxygen reduction reaction. 2019 , 30, 485705	
590	Highly dispersed Fe2O3 embedded in nitrogen doped carbon for the efficient oxygen reduction reaction. 2019 , 9, 4581-4587	9
589	Magnetic Cathode Stimulates Extracellular Electron Transfer in Bioelectrochemical Systems. 2019 , 7, 15012-15018	8
588	Lead ruthenate nanocrystals on reduced graphene oxides as an efficient bifunctional catalyst for metalBir batteries. 2019 , 79, 409-417	0
587	Ultrathin atomic Mn-decorated formamide-converted N-doped carbon for efficient oxygen reduction reaction. 2019 , 11, 15900-15906	26
586	A novel Boley-LFP / graphene / holey-LFPB and wich nanostructure with significantly improved rate capability for lithium storage. 2019 , 320, 134566	2
585	From Monomers to a Lasagna-like Aerogel Monolith: An Assembling Strategy for Aramid Nanofibers. 2019 , 13, 7811-7824	52
584	Ambient electrocatalytic nitrogen reduction on a MoO2/graphene hybrid: experimental and DFT studies. 2019 , 9, 4248-4254	66
583	Bifunctional catalysts of CoNi nanoparticle-embedded nitrogen-doped carbon nanotubes for rechargeable Zn-air batteries. 2019 , 30, 435701	13
582	3D porous graphitic nanocarbon for enhancing the performance and durability of Pt catalysts: a balance between graphitization and hierarchical porosity. 2019 , 12, 2830-2841	112
581	ZnO Quantum Dots Coupled with Graphene toward Electrocatalytic N Reduction: Experimental and DFT Investigations. 2019 , 25, 11933-11939	54
580	Controlled self-assembly synthesis of CuCo2O4/rGO for improving the morphology-dependent electrochemical oxygen evolution performance. 2019 , 493, 710-718	12
579	3D graphene-based gel photocatalysts for environmental pollutants degradation. 2019 , 253, 365-376	125

578	Three-dimensional interconnected coreShell networks with Ni(Fe)OOH and MNC active species together as high-efficiency oxygen catalysts for rechargeable ZnBir batteries. 2019 , 7, 19045-19059	44
577	Fabrication of double-shell hollow NiO@N-C nanotubes for a high-performance supercapacitor. 2019 , 43, 13457-13462	11
576	Fabricating Nitrogen-Rich FeN/C Electrocatalysts through CeO2-Assisted Pyrolysis for Enhanced Oxygen Reduction Reaction. 2019 , 6, 4040-4048	9
575	Fe-boosting Sn-based dual-shell nanostructures from new covalent porphyrin frameworks as efficient electrocatalysts for oxygen reduction and zinc-air batteries. 2019 , 320, 134593	13
574	Functionalization of graphene layers and advancements in device applications. 2019 , 152, 954-985	61
573	Molecular-Scale Mechanistic Investigation of Oxygen Dissociation and Adsorption on Metal Surface-Supported Cobalt Phthalocyanine. 2019 , 10, 3966-3971	5
572	N-Doped Carbon Aerogel Derived from a Metal-Organic Framework Foam as an Efficient Electrocatalyst for Oxygen Reduction. 2019 , 14, 3642-3647	12
571	Nitrogen and sulfur co-doped three-dimensional graphene@NiO composite as cathode catalyst for the LiD2 and LiDO2 batteries. 2019 , 6, 115616	6
57°	Fe3O4/Nitrogen-Doped Carbon Electrodes from Tailored Thermal Expansion toward Flexible Solid-State Asymmetric Supercapacitors. 2019 , 6, 1901250	5
569	Graphene aerogels for oil absorption. 2019 , 173-197	5
568	Hollow Co3O4/CeO2 Heterostructures in Situ Embedded in N-Doped Carbon Nanofibers Enable Outstanding Oxygen Evolution. 2019 , 7, 17950-17957	63
567	Top-down bottom-up graphene synthesis. 2019 , 3, 042003	12
566	CuSn Alloy Nanoparticles on Nitrogen-Doped Graphene for Electrocatalytic CO2 Reduction. 2019 , 6, 5951-5957	37
565	Cost-effective Co3O4 nanospheres on nitrogen-doped graphene used as highly efficient catalyst for oxygen reduction reaction. 2019 , 44, 30348-30356	7
564	MetalBrganic frameworks: a promising platform for constructing non-noble electrocatalysts for the oxygen-reduction reaction. 2019 , 7, 1964-1988	118
563	Enhanced cycling stability of capacitive deionization via effectively inhibiting H2O2 formation: The role of nitrogen dopants. 2019 , 855, 113488	8
562	Preparation and thermal properties of layered porous carbon nanotube/epoxy resin composite films. 2019 , 13, 382-388	2
561	Size, Composition, and Support-Doping Effects on Oxygen Reduction Activity of Platinum-Alloy and on Non-platinum Metal-Decorated-Graphene Nanocatalysts. 2019 , 7, 610	2

560	Facile fabrication of ultrafine Pt nanoparticles supported on 3D macro-/oversized mesoporous N-doped carbon for efficient methanol oxidation. 2019 , 44, 30388-30400	15
559	Porous Fe, Co, and N-co-doped carbon nanofibers as high-efficiency oxygen reduction catalysts. 2019 , 21, 1	10
558	Electrochemical conversion of CO2 to methanol using a glassy carbon electrode, modified by Pt@histamine-reduced graphene oxide. 2019 , 44, 30820-30831	16
557	3D graphene-containing structures for tissue engineering. 2019 , 14, 100199	17
556	Alkaline Anion-Exchange Membrane Fuel Cells: Challenges in Electrocatalysis and Interfacial Charge Transfer. 2019 , 119, 11945-11979	134
555	Enhanced Electrochemiluminescence Detection for Hydrogen Peroxide Using Peroxidase-Mimetic Fe/N-Doped Porous Carbon. 2019 , 166, B1594-B1601	11
554	Mutually Exclusive p-Type and n-Type Hybrid Electrode of MoS2 and Graphene for Artificial Soft Touch Fingers. 2019 , 29, 1905454	18
553	Harnessing Photoluminescent Properties of Carbon Nitride Nanosheets in a Hierarchical Matrix. 2019 , 29, 1905576	19
552	Simultaneously enhancing interfacial adhesion and pervaporation separation performance of PDMS/ceramic composite membrane via a facile substrate surface grafting approach. 2019 , 65, e16773	12
551	Versatile Aerogels for Sensors. 2019 , 15, e1902826	43
55 ¹	Versatile Aerogels for Sensors. 2019, 15, e1902826 Three-Dimensional Graphene Materials: Synthesis and Applications in Electrocatalysts and Electrochemical Sensors. 2019, 93-145	43
	Three-Dimensional Graphene Materials: Synthesis and Applications in Electrocatalysts and	170
550	Three-Dimensional Graphene Materials: Synthesis and Applications in Electrocatalysts and Electrochemical Sensors. 2019 , 93-145 Graphene Nanoarchitectonics: Recent Advances in Graphene-Based Electrocatalysts for Hydrogen	
550	Three-Dimensional Graphene Materials: Synthesis and Applications in Electrocatalysts and Electrochemical Sensors. 2019 , 93-145 Graphene Nanoarchitectonics: Recent Advances in Graphene-Based Electrocatalysts for Hydrogen Evolution Reaction. 2019 , 31, e1903415 Core-Shell Fe3O4@NCS-Mn Derived from Chitosan-Schiff Based Mn Complex with Enhanced	170
550 549 548	Three-Dimensional Graphene Materials: Synthesis and Applications in Electrocatalysts and Electrochemical Sensors. 2019, 93-145 Graphene Nanoarchitectonics: Recent Advances in Graphene-Based Electrocatalysts for Hydrogen Evolution Reaction. 2019, 31, e1903415 Core-Shell Fe3O4@NCS-Mn Derived from Chitosan-Schiff Based Mn Complex with Enhanced Catalytic Activity for Oxygen Reduction Reaction. 2019, 9, 692 In Situ Decoration of Gold Nanoparticles on Graphene Oxide via Nanosecond Laser Ablation for	170
550549548547	Three-Dimensional Graphene Materials: Synthesis and Applications in Electrocatalysts and Electrochemical Sensors. 2019, 93-145 Graphene Nanoarchitectonics: Recent Advances in Graphene-Based Electrocatalysts for Hydrogen Evolution Reaction. 2019, 31, e1903415 Core-Shell Fe3O4@NCS-Mn Derived from Chitosan-Schiff Based Mn Complex with Enhanced Catalytic Activity for Oxygen Reduction Reaction. 2019, 9, 692 In Situ Decoration of Gold Nanoparticles on Graphene Oxide via Nanosecond Laser Ablation for Remarkable Chemical Sensing and Catalysis. 2019, 9, Solvothermal synthesis of porous superparamagnetic RGO@Fe3O4 nanocomposites for microwave	170 10 20
550 549 548 547 546	Three-Dimensional Graphene Materials: Synthesis and Applications in Electrocatalysts and Electrochemical Sensors. 2019, 93-145 Graphene Nanoarchitectonics: Recent Advances in Graphene-Based Electrocatalysts for Hydrogen Evolution Reaction. 2019, 31, e1903415 Core-Shell Fe3O4@NCS-Mn Derived from Chitosan-Schiff Based Mn Complex with Enhanced Catalytic Activity for Oxygen Reduction Reaction. 2019, 9, 692 In Situ Decoration of Gold Nanoparticles on Graphene Oxide via Nanosecond Laser Ablation for Remarkable Chemical Sensing and Catalysis. 2019, 9, Solvothermal synthesis of porous superparamagnetic RGO@Fe3O4 nanocomposites for microwave absorption. 2019, 30, 17106-17118 Molybdic acid immobilized on mesoporous MCM-41 coated on nano-Fe3O4: preparation,	170 10 20 3

542	Counterion Concentration Profiles at the Graphene Oxide/Water Interface. 2019 , 35, 13469-13479	13
541	Augmentation of hydroxyl groups as electrocatalytic active sites in porous graphene. 2019 , 154, 384-390	4
540	Boosting Oxygen Reduction Performance of Manganese Oxide in Alkaline Media by Three-Dimensional Highly Ordered Conductive Porous Framework. 2019 , 6,	2
539	An assembly of carbon dots and carbon sheets from plant biomass for excellent oxygen reduction reaction. 2019 , 3, 3172-3181	5
538	MOF-derived metal oxide composite Mn2Co1Ox/CN for efficient formaldehyde oxidation at low temperature. 2019 , 9, 5845-5854	18
537	High-Performance Polymer Fiber Membrane Based Direct Methanol Fuel Cell System with Non-Platinum Catalysts. 2019 , 7, 17145-17153	9
536	Ex-Solution Synthesis of Sub-5-nm FeOx Nanoparticles on Mesoporous Hollow N,O-Doped Carbon Nanoshells for Electrocatalytic Oxygen Reduction. 2019 , 2, 6092-6097	20
535	Carbon nanotube-supported bimetallic Cu-Fe catalysts for syngas conversion to higher alcohols. 2019 , 479, 110610	11
534	Recent Progresses in Oxygen Reduction Reaction Electrocatalysts for Electrochemical Energy Applications. 2019 , 2, 518-538	103
533	A review on exfoliation, characterization, environmental and energy applications of graphene and graphene-based composites. 2019 , 273, 102036	41
532	Promising nature-based nitrogen-doped porous carbon nanomaterial derived from borassus flabellifer male inflorescence as superior metal-free electrocatalyst for oxygen reduction reaction. 2019 , 44, 25918-25929	12
531	Rational design and construction of nanoporous iron- and nitrogen-doped carbon electrocatalysts for oxygen reduction reaction. 2019 , 7, 1380-1393	111
530	A facile coprecipitation method to synthesize FeO/Fe decorated graphite sheets with enhanced microwave absorption properties. 2019 , 30, 185704	9
529	Energy efficient electrochemical reduction of CO2 to CO using a three-dimensional porphyrin/graphene hydrogel. 2019 , 12, 747-755	76
528	In situ growth of metallic Ag intercalated CoAl layered double hydroxides as efficient electrocatalysts for the oxygen reduction reaction in alkaline solutions. 2019 , 48, 1084-1094	23
527	Air cathode of zinc-air batteries: a highly efficient and durable aerogel catalyst for oxygen reduction. 2019 , 11, 826-832	36
526	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 2019 , 9, 1151-1164	6
525	Synthesis and applications of three-dimensional graphene network structures. 2019 , 5, 100027	47

524	Poly(vinyl alcohol)-Mediated Graphene Aerogels with Tailorable Architectures and Advanced Properties for Anisotropic Sensing. 2019 , 123, 3781-3789	15
523	Durable Freestanding Hierarchical Porous Electrode for Rechargeable ZincAir Batteries. 2019 , 2, 1505-1516	10
522	Fe2O3 nanoparticles immobilized on N and S codoped C as an efficient multifunctional catalyst for oxygen reduction reaction and overall water electrolysis. 2019 , 44, 4707-4715	13
521	Systematic evaluation of factors influencing electrochemical and morphological characteristics of free-standing 3D graphene hydrogels as electrode material for supercapacitors. 2019 , 301, 421-435	16
520	Functionalized Graphene Aerogel: Structural and Morphological Properties and Applications. 2019 , 157-176	2
519	Enhanced lithium storage performance of graphene nanoribbons doped with high content of nitrogen atoms. 2019 , 30, 225401	5
518	A green and energy-saving microwave-based method to prepare magnetic carbon beads for catalytic wet peroxide oxidation. 2019 , 215, 232-244	12
517	The design of a novel and resistant Zn(PZDC)(ATZ) MOF catalyst for the chemical fixation of CO2 under solvent-free conditions. 2019 , 6, 317-325	32
516	Synergistic interaction of perovskite oxides and N-doped graphene in versatile electrocatalyst. 2019 , 7, 2048-2054	77
515	Novel CdFe Bimetallic Complex-Derived Ultrasmall Fe- and N-Codoped Carbon as a Highly Efficient Oxygen Reduction Catalyst. 2019 , 11, 21481-21488	15
514	Facile fabrication of SiC/FexOy embellished graphite layers with enhanced electromagnetic wave absorption. 2019 , 798, 386-393	8
513	Optimizing the synthesis of Co/Co E e nanoparticles/N-doped carbon composite materials as bifunctional oxygen electrocatalysts. 2019 , 318, 281-289	15
512	g-C3N4 templated synthesis of the Fe3C@NSC electrocatalyst enriched with FeNx active sites for efficient oxygen reduction reaction. 2019 , 7, 16920-16936	53
511	Doping Graphene Oxide Aerogel with Nitrogen during Reduction with Hydrazine and Low Temperature Annealing in Air. 2019 , 93, 296-300	4
510	Fabrication of CoFe/N-doped mesoporous carbon hybrids from Prussian blue analogous as high performance cathodes for lithium-sulfur batteries. 2019 , 44, 20257-20266	12
509	The application of CeO2-based materials in electrocatalysis. 2019 , 7, 17675-17702	62
508	Insights into aqueous reduction of Cr(VI) by Fe3O4@NOM MNPs under irradiation: The role of carbonyl structures. 2019 , 578, 123593	1
507	Fe3O4 encapsulated in porous carbon nanobowls as efficient oxygen reduction reaction catalyst for Zn-air batteries. 2019 , 375, 122058	38

506	Cobalt-containing nanoparticles embedded in flexible carbon aerogel for spilled oil cleanup and oxygen reduction reaction. 2019 , 174, 107039	6
505	Self-supported Ni(OH)2/MnO2 on CFP as a flexible anode towards electrocatalytic urea conversion: The role of composition on activity, redox states and reaction dynamics. 2019 , 318, 32-41	21
504	Fe3C/C nanoparticles encapsulated in N-doped graphene aerogel: an advanced oxygen reduction reaction catalyst for fiber-shaped fuel cells. 2019 , 44, 18393-18402	8
503	Chromium phosphide CrP as highly active and stable electrocatalysts for oxygen electroreduction in alkaline media. 2019 , 256, 117846	13
502	Designed self-assembly of iron encapsulated doped porous carbon as durable electrocatalyst for oxygen reduction reaction in alkaline medium. 2019 , 152, 616-630	3
501	Fe3O4 Nanoparticles Supported on Arc-synthesized Carbon Nanotubes as Advanced Electrocatalyst for Oxygen Reduction Reaction. 2019 , 4, 6227-6232	1
500	Bimetallic Nito composites anchored on a wool ball-like carbon framework as high-efficiency bifunctional electrodes for rechargeable Zniir batteries. 2019 , 9, 3469-3481	7
499	Preparation of tungsten-based material and the effect on oxygen reduction reaction. 2019 , 6, 0850c2	
498	Three-dimensional Composite Catalysts for Al-O Batteries Composed of CoMnO Nanoneedles Supported on Nitrogen-Doped Carbon Nanotubes/Graphene. 2019 , 11, 21526-21535	25
497	Amphiphilic Graphene Aerogel with High Oil and Water Adsorption Capacity and High Contact Area for Interface Reaction. 2019 , 11, 22794-22800	30
496	Improved Anode Two-Phase Mass Transfer Management of Direct Methanol Fuel Cell by the Application of Graphene Aerogel. 2019 , 7, 11653-11661	2
495	Mixed Electron-Proton Conductors Enable Spatial Separation of Bond Activation and Charge Transfer in Electrocatalysis. <i>Journal of the American Chemical Society</i> , 2019 , 141, 11115-11122	13
494	A new approach for the synthesis of electrocatalytically active CoFe2O4 catalyst for oxygen reduction reaction. 2019 , 847, 113183	7
493	MOF-derived porous carbon supported iron-based catalysts with optimized active sites towards oxygen reduction reaction. 2019 , 847, 113191	4
492	Amperometric sarcosine biosensor based on hollow magnetic Pt-FeO@C nanospheres. 2019, 1078, 161-167	34
491	Homogenous Meets Heterogenous and Electro-Catalysis: Iron-Nitrogen Molecular Complexes within Carbon Materials for Catalytic Applications. 2019 , 11, 3602-3625	16
490	Fe2O3 modification promotes the photocatalytic performance of TiO2 nanotube confined Pd nanoparticles. 2019 , 380, 111865	5
489	Polyacrylamide Microspheres-Derived FeC@N-doped Carbon Nanospheres as Efficient Catalyst for Oxygen Reduction Reaction. 2019 , 11,	5

488	Improved performance of microbial fuel cell by using conductive ink printed cathode containing Co3O4 or Fe3O4. 2019 , 310, 173-183	44
487	Lithium Intercalated-Layered Manganese Oxide and Reduced Graphene Oxide Composite as a Bifunctional Electrocatalyst for ORR and OER. 2019 , 166, A1543-A1549	9
486	Nitrogen-Doped Carbon Nanotube@raphene Frameworks with Encapsulated Fe/Fe3N Nanoparticles as Catalysts for Oxygen Reduction. 2019 , 2, 3538-3547	29
485	Carbon-coated MnCo2O4 nanowire as bifunctional oxygen catalysts for rechargeable Zn-air batteries. 2019 , 430, 25-31	35
484	Unique hierarchical mesoporous LaCrO3 perovskite oxides for highly efficient electrochemical energy storage applications. 2019 , 45, 15164-15170	39
483	Synthesis and Evaluation of Graphene Aerogel-Supported MnFeO for Oxygen Reduction in Urea/O Fuel Cells. 2019 , 8, 615-620	4
482	Bottom-up synthesis of iron and nitrogen dual-doped porous carbon nanosheets for efficient oxygen reduction. 2019 , 55, 5789-5792	19
481	Microwave-assisted hydrothermal synthesis of MOFs-derived bimetallic CuCo-N/C electrocatalyst for efficient oxygen reduction reaction. 2019 , 795, 462-470	21
480	Designing bifunctional catalysts for oxygen reduction/evolution reactions for high efficiency and long lifetime. 2019 , 313, 41-47	4
479	Potassium-promoted magnesium ferrite on 3D porous graphene as highly efficient catalyst for CO hydrogenation to lower olefins. 2019 , 374, 24-35	10
478	Bimetal zeolitic imidazolate framework (ZIF-9) derived nitrogen-doped porous carbon as efficient oxygen electrocatalysts for rechargeable Zn-air batteries. 2019 , 427, 299-308	21
477	Insights into the oxidation of organic contaminants by iron nanoparticles encapsulated within boron and nitrogen co-doped carbon nanoshell: Catalyzed Fenton-like reaction at natural pH. 2019 , 128, 77-88	48
476	A room-temperature interfacial approach towards iron/nitrogen co-doped fibrous porous carbons as electrocatalysts for the oxygen reduction reaction and Zn-Air batteries. 2019 , 11, 10257-10265	26
475	Nanofibrous Kevlar Aerogel Threads for Thermal Insulation in Harsh Environments. 2019 , 13, 5703-5711	128
474	Fe2O3 nanocatalysts on N-doped carbon nanomaterial for highly efficient electrochemical hydrogen evolution in alkaline. 2019 , 426, 74-83	29
473	S, N co-doped rod-like porous carbon derived from S, N organic ligand assembled Ni-MOF as an efficient electrocatalyst for oxygen reduction reaction. 2019 , 275, 167-173	14
472	Unraveling the high-activity nature of FeNC electrocatalysts for the oxygen reduction reaction: the extraordinary synergy between FeN4 and Fe4N. 2019 , 7, 11792-11801	55
471	3D cross-linking N-doped graphene framework for high sulfur nanocrystal storage. 2019 , 52, 295502	5

470	Sponge Effect Boosting Oxygen Reduction Reaction at the Interfaces between Mullite SmMnO and Nitrogen-Doped Reduced Graphene Oxide. 2019 , 11, 17482-17490	10
469	A universal route to N-coordinated metals anchored on porous carbon nanosheets for highly efficient oxygen electrochemistry. 2019 , 7, 13591-13601	35
468	rGO/CuO/PEDOT nanocomposite formation, its characterisation and electrochemical performances for supercapacitors. 2019 , 48, 168-184	12
467	Molecular-level design of Fe-N-C catalysts derived from Fe-dual pyridine coordination complexes for highly efficient oxygen reduction. 2019 , 372, 245-257	41
466	Rational design of three-phase interfaces for electrocatalysis. 2019 , 12, 2055-2066	86
465	Importance of Electrocatalyst Morphology for the Oxygen Reduction Reaction. 2019 , 6, 2600-2614	28
464	Copper oxide-graphene oxide nanocomposite: efficient catalyst for hydrogenation of nitroaromatics in water. 2019 , 6, 6	59
463	Prospects and challenges of graphene based fuel cells. 2019 , 39, 217-234	35
462	Investigation on Template Etching Process of SBA-15 Derived Ordered Mesoporous Carbon on Electrocatalytic Oxygen Reduction Reaction. 2019 , 4, 2463-2474	5
461	Synthesis of a porous interconnected nitrogen-doped graphene aerogel matrix incorporated with ytterbium oxide nanoparticles and its application in superior symmetric supercapacitors. 2019 , 306, 480-488	25
460	Mesoporous layered spinel zinc manganese oxide nanocrystals stabilized nitrogen-doped graphene as an effective catalyst for oxygen reduction reaction. 2019 , 545, 43-53	10
459	Green synthesis of nitrogen-doped self-assembled porous carbon-metal oxide composite towards energy and environmental applications. 2019 , 9, 5187	24
458	Selection of graphene dopants for Na3V2(PO4)3 graphene composite as high rate, ultra long-life sodium-ion battery cathodes. 2019 , 306, 558-567	19
457	Graphene wrapped organic nanotube: A promising material for Oxygen Reduction Reaction. 2019 , 248, 8-11	7
456	Controlled Grafting of Colloidal Nanoparticles on Graphene through Tailored Electrostatic Interaction. 2019 , 11, 11824-11833	13
455	Three-Dimensional Pyrene-Fused N-Heteroacenes. <i>Journal of the American Chemical Society</i> , 2019 , 141, 5130-5134	31
454	Methacrylated gelatin-embedded fabrication of 3D graphene-supported CoO nanoparticles for water splitting. 2019 , 11, 6866-6875	11
453	The ORR kinetics of ZIF-derived Fe N C electrocatalysts. 2019 , 372, 174-181	29

452	Ultralightweight Strain-Responsive 3D Graphene Network. 2019 , 123, 9884-9893	4
451	High-conductivity reduced-graphene-oxide/copper aerogel for energy storage. 2019 , 60, 760-767	27
450	Three-dimensional structure made with nitrogen-doped reduced graphene oxide with spherical porous morphology. 2019 , 149, 86-92	14
449	Phosphorus-doped hierarchical porous carbon as efficient metal-free electrocatalysts for oxygen reduction reaction. 2019 , 44, 12941-12951	18
448	A silver wire aerogel promotes hydrogen peroxide reduction for fuel cells and electrochemical sensors. 2019 , 7, 11497-11505	22
447	Stepwise Fabrication of Co-Embedded Porous Multichannel Carbon Nanofibers for High-Efficiency Oxygen Reduction. 2019 , 11, 33	10
446	The role of aerogel-based sorbents in microextraction techniques. 2019 , 147, 948-954	21
445	Pure nitrogen-doped graphene aerogel with rich micropores yields high ORR performance. 2019 , 242, 1-5	17
444	Electrocatalytic activity of ethynylbenzyl phthalocyanines when linked to quantum dots via click chemistry: Towards efficient oxygen reduction reaction and H2O2 oxidation. 2019 , 840, 218-229	7
443	Three-dimensional N-doped graphene aerogel-supported Pd nanoparticles as efficient catalysts for solvent-free oxidation of benzyl alcohol 2019 , 9, 9620-9628	11
442	Composite K2Mo4O13/EMoO3 nanorods: sonochemical preparation and applications for advanced Li+/Na+ pseudocapacitance. 2019 , 7, 10954-10961	4
441	Carbon-based lanthanum nickelate material La2 \square JNdxPryNiO4+ \square x = 0, 0.3, and 0.5; y = 0 and 0.2) as a bifunctional electrocatalyst for oxygen reduction in alkaline media. 2019 , 25, 3809-3822	5
440	Recent Progress of Graphene-Based Photoelectrode Materials for Dye-Sensitized Solar Cells. 2019 , 2019, 1-16	18
439	DES-Fe3O4 composite for rapid extraction of residual plant growth regulators in edible vegetable oil. 2019 , 30, 1182-1185	7
438	Nitrogen-Doped Carbon Nano-Onions as a Metal-Free Electrocatalyst. 2019 , 10, 222-231	8
437	Graphene-Based Planar Microsupercapacitors: Recent Advances and Future Challenges. 2019 , 4, 1800200	40
436	Facile and efficient protocols for CL and CN bond formation reactions using a superparamagnetic palladium complex as reusable catalyst. 2019 , 45, 2605-2639	4
435	Applied potential-dependent performance of the nickel cobalt oxysulfide nanotube/nickel molybdenum oxide nanosheet corellhell structure in energy storage and oxygen evolution. 2019 , 7, 4626-4639	37

434	Application of magnetic adsorbents based on iron oxide nanoparticles for oil spill remediation: A review. 2019 , 97, 227-236	61
433	Ultrathin CoS nanosheets vertically aligned on N,S/rGO for low voltage electrolytic water in alkaline media. 2019 , 9, 1951	25
432	Three-dimensional hierarchical frameworks based on molybdenum disulfide-graphene oxide-supported magnetic nanoparticles for enrichment fluoroquinolone antibiotics in water. 2019 , 1593, 1-8	24
431	A few-layered MoS nanosheets/nitrogen-doped graphene 3D aerogel as a high performance and long-term stability supercapacitor electrode. 2019 , 11, 4318-4327	34
430	Interior engineering of seaweed-derived N-doped versatile carbonaceous beads with Co O for universal organic pollutant degradation 2019 , 9, 5009-5024	7
429	Synthesis of a synergistic catalyst for oxygen reduction and a ZnEir battery by the in situ coupling of hemin-derived Fe3O4/N-doped graphitic carbon. 2019 , 6, 065019	2
428	Biotemplate derived three dimensional nitrogen doped graphene@MnO as bifunctional material for supercapacitor and oxygen reduction reaction catalyst. 2019 , 544, 155-163	49
427	Metal-organic framework-derived core-shell-structured nitrogen-doped CoCx/FeCo@C hybrid supported by reduced graphene oxide sheets as high performance bifunctional electrocatalysts for ORR and OER. 2019 , 371, 185-195	52
426	Efficient oxygen reduction electrocatalysis on Mn3O4 nanoparticles decorated N-doped carbon with hierarchical porosity and abundant active sites. 2019 , 44, 26387-26395	11
425	Recent advances in carbon quantum dot (CQD)-based two dimensional materials for photocatalytic applications. 2019 , 9, 5882-5905	45
424	Iron Sulfide Nanoparticles Embedded Into a Nitrogen and Sulfur Co-doped Carbon Sphere as a Highly Active Oxygen Reduction Electrocatalyst. 2019 , 7, 855	15
423	Catalytic trends of nitrogen doped carbon nanotubes for oxygen reduction reaction. 2019 , 11, 18683-18690	18
422	Atomic interface effect of a single atom copper catalyst for enhanced oxygen reduction reactions. 2019 , 12, 3508-3514	146
421	3D defective graphenes with subnanometric porosity obtained by soft-templating following zeolite procedures. 2019 , 1, 4827-4833	3
420	Carbon network framework derived iron-nitrogen co-doped carbon nanotubes for enhanced oxygen reduction reaction through metal salt-assisted polymer blowing strategy. 2019 , 463, 767-774	17
419	Tuning carbon nanotube-grafted core-shell-structured cobalt selenide@carbon hybrids for efficient oxygen evolution reaction. 2019 , 533, 503-512	30
418	Facile synthesis of 3D sulfur/nitrogen co-doped graphene derived from graphene oxide hydrogel and the simultaneous determination of hydroquinone and catechol. 2019 , 279, 170-176	65
417	Synthesis of carboxymethyl cellulose-reduced graphene oxide aerogel for efficient removal of organic liquids and dyes. 2019 , 54, 1872-1883	29

416	Bifunctional biomass-derived N, S dual-doped ladder-like porous carbon for supercapacitor and oxygen reduction reaction. 2019 , 773, 11-20	52
415	One-step laser direct writing of boron-doped electrolyte as all-solid-state microsupercapacitors. 2019 , 144, 228-234	26
414	Hierarchical 3D electrodes for electrochemical energy storage. 2019 , 4, 45-60	360
413	Co9S8@MoS2 core-shell nanostructure anchored on reduced graphene oxide with improved electrochemical performance for lithium-ion batteries. 2019 , 473, 918-927	17
412	Fe nanoparticles encapsulated in doped graphitic shells as high-performance and stable catalysts for oxygen reduction reaction in an acid medium. 2019 , 370, 130-137	20
411	Reducing oxygen inhibition by Fe3O4@PEI nanoparticles co-initiator. 2019 , 373, 171-175	6
410	Iron oxide and phosphide encapsulated within N,P-doped microporous carbon nanofibers as advanced tri-functional electrocatalyst toward oxygen reduction/evolution and hydrogen evolution reactions and zinc-air batteries. 2019 , 413, 367-375	81
409	A hierarchical porous Fe-N impregnated carbon-graphene hybrid for high-performance oxygen reduction reaction. 2019 , 144, 798-804	44
408	Preparation of manganese monoxide@reduced graphene oxide nanocomposites with superior electrochemical performances for lithium-ion batteries. 2019 , 45, 3425-3434	12
407	Sp2-carbon dominant carbonaceous materials for energy conversion and storage. 2019 , 137, 1-37	18
406	Metal®rganic Frameworks (MOFs) and MOF-Derived Materials for Energy Storage and Conversion. 2019 , 2, 29-104	152
405	Biomass-Derived Multilayer-Graphene-Encapsulated Cobalt Nanoparticles as Efficient Electrocatalyst for Versatile Renewable Energy Applications. 2019 , 7, 1137-1145	23
404	Sulfur, Nitrogen and Fluorine Triple-Doped Metal-Free Carbon Electrocatalysts for the Oxygen Reduction Reaction. 2019 , 6, 741-747	18
403	Three-Dimensional Graphene Foams: Synthesis, Properties, Biocompatibility, Biodegradability, and Applications in Tissue Engineering. 2019 , 5, 193-214	91
402	General Synthesis of Uniform Three-Dimensional Metal Oxides/Reduced Graphene Oxide Aerogels by a Nucleation-Inducing Growth Strategy for High-Performance Lithium Storage. 2019 , 7, 847-857	12
401	Cost-effective preparation of metal-free electrocatalysts by phosphoric acid activation of lignocellulosic materials for oxygen reduction reaction. 2019 , 44, 2811-2822	9
400	Cellulose II aerogels: a review. 2019 , 26, 81-121	108
399	Plasmonic-Enhanced Oxygen Reduction Reaction of Silver/Graphene Electrocatalysts. 2019 , 19, 1371-1378	49

398	Encoding Metal-Cation Arrangements in Metal-Organic Frameworks for Programming the Composition of Electrocatalytically Active Multimetal Oxides. <i>Journal of the American Chemical Society</i> , 2019 , 141, 1766-1774	16.4	22
397	Noble-Metal-Free Iron Nitride/Nitrogen-Doped Graphene Composite for the Oxygen Reduction Reaction. 2019 , 4, 130-139		21
396	Graphene-Modified Electrochemical Sensors. 2019 , 1-41		4
395	Doped-Graphene Modified Electrochemical Sensors. 2019 , 67-87		2
394	Preparation of ZnCo2O4@reduced graphene oxide nanocomposite for high-capacity Li-ion battery anodes. 2019 , 111, 34-42		11
393	Dendron-functionalized Fe3O4 magnetic nanoparticles with palladium catalyzed CN insertion of arylhalide for the synthesis of tetrazoles and benzamide. 2019 , 880, 196-212		11
392	Electrocatalyst Materials for Oxygen Reduction Reaction in Microbial Fuel Cell. 2019 , 451-483		8
391	Janus electrode with simultaneous management on gas and liquid transport for boosting oxygen reduction reaction. 2019 , 12, 177-182		19
390	High performance electrochemical biosensor based on 3D nitrogen-doped reduced graphene oxide electrode and tetrahedral DNA nanostructure. 2019 , 194, 273-281		24
389	Highly conductive doped carbon framework as binder-free cathode for hybrid Li-O2 battery. 2019 , 142, 177-189		11
388	DNA-directed enzyme immobilization on Fe3O4 modified with nitrogen-doped graphene quantum dots as a highly efficient and stable multi-catalyst system. 2019 , 54, 2535-2551		14
387	Promoting Electrocatalysis upon Aerogels. 2019 , 31, e1804881		75
386	Facile Fabrication of Three-Dimensional Hierarchical Nanoarchitectures of VO2/[email[protected]2 Hybrid Aerogel for High-Performance All-Solid-State Asymmetric Supercapacitors with Ultrahigh Energy Density. 2019 , 2, 459-467		15
385	Advanced Electrocatalytic Performance of Ni-Based Materials for Oxygen Evolution Reaction. 2019 , 7, 341-349		27
384	Magnetically Recyclable MoS2/Fe3O4 Hybrid Composite as Visible Light Responsive Photocatalyst with Enhanced Photocatalytic Performance. 2019 , 7, 1673-1682		46
383	Sub-20 nm Carbon Nanoparticles with Expanded Interlayer Spacing for High-Performance Potassium Storage. 2019 , 11, 930-939		46
382	Oxygen Reduction Reaction. 2019 , 27, 203-252		8
381	A general approach for fabricating 3D MFe2O4 (M=Mn, Ni, Cu, Co)/graphitic carbon nitride covalently functionalized nitrogen-doped graphene nanocomposites as advanced anodes for lithium-ion batteries. 2019 , 57, 48-56		59

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380	Robust fused aromatic pyrazine-based two-dimensional network for stably cocooning iron nanoparticles as an oxygen reduction electrocatalyst. 2019 , 56, 581-587	24
379	Deep and fast oxidative desulfurization of fuels using graphene oxide-based phosphotungstic acid catalysts. 2019 , 236, 717-729	67
378	Oxidation of bisphenol A by persulfate via Fe3O4-BMnO2 nanoflower-like catalyst: Mechanism and efficiency. 2019 , 357, 337-347	96
377	Non-noble Iron Group (Fe, Co, Ni)-Based Oxide Electrocatalysts for Aqueous ZincAir Batteries: Recent Progress, Challenges, and Perspectives. 2019 , 38, 1186-1199	29
376	Alloying effects at bicomponent Au-Cu and In-Sn particle arrays formation by vacuum-thermal evaporation. 2019 , 112, 438-444	4
375	Strongly coupled N-doped carbon/Fe3O4/N-doped carbon hierarchical micro/nanostructures for enhanced lithium storage performance. 2019 , 34, 43-51	23
374	3DRGO-NiFe2O4/NiO nanoparticles for fast and simple detection of organophosphorus pesticides. 2020 , 31, 177-180	8
373	Construction of three-dimensional nitrogen-doped graphene aerogel (NGA) supported cobalt catalysts for Fischer-Tropsch synthesis. 2020 , 355, 10-16	4
372	Three-dimensional heterogeneous Electro-Fenton system with a novel catalytic particle electrode for Bisphenol A removal. 2020 , 393, 120448	54
371	A taurine-functionalized 3D graphene-based foam for electrochemical determination of hydrogen peroxide. 2020 , 208, 120356	8
370	High-performance direct hydrogen peroxide fuel cells (DHPFCs) with silver nanowire-graphene hybrid aerogel as highly-conductive mesoporous electrodes. 2020 , 381, 122749	15
369	Few-layer MoS2 dendrites as a highly active humidity sensor. 2020 , 116, 113782	7
368	Cobalt nitride embedded holey N-doped graphene as advanced bifunctional electrocatalysts for Zn-Air batteries and overall water splitting. 2020 , 157, 234-243	75
367	Effect of various Fe/Co ratios and annealing temperatures on a Fe/Co catalyst supported with nitrogen-doped reduced graphene oxide towards the oxygen reduction reaction. 2020 , 816, 152573	16
366	Nanocarbon-Based Hybrids as Electrocatalysts for Hydrogen and Oxygen Evolution From Water Splitting. 2020 , 379-418	2
365	Designing ordered composites with confined CoN/C layers for efficient pollutant degradation: Structure-dependent performance and PMS activation mechanism. 2020 , 293, 109810	16
364	Co nanoparticles supported on three-dimensionally N-doped holey graphene aerogels for electrocatalytic oxygen reduction. 2020 , 559, 143-151	13
363	Novel carbon based Fe-Co oxides derived from Prussian blue analogues activating peroxymonosulfate: Refractory drugs degradation without metal leaching. 2020 , 379, 122274	78

362	Nitrogen-doped carbon nanotubegraphene hybrid stabilizes MxN (M = Fe, Co) nanoparticles for efficient oxygen reduction reaction. 2020 , 268, 118415	27
361	Reduced segregation and integration of structural brain network associated with sympathetic and dorsal penile nerve activity in anejaculation patients: a graph-based connectome study. 2020 , 8, 392-399	5
360	Magnetic HyperthermiaBynergistic H2O2 Self-Sufficient Catalytic Suppression of Osteosarcoma with Enhanced Bone-Regeneration Bioactivity by 3D-Printing Composite Scaffolds. 2020 , 30, 1907071	69
359	Characterization and evaluation of FeNC electrocatalysts for oxygen reduction directly synthesized by reactive spray deposition technology. 2020 , 55, 1673-1691	4
358	Ultrathin nickel phosphide nanosheet aerogel electrocatalysts derived from Ni-alginate for hydrogen evolution reaction. 2020 , 817, 152727	5
357	Facile synthesis of reduced-graphene-oxide/rare-earth-metal-oxide aerogels as a highly efficient adsorbent for Rhodamine-B. 2020 , 504, 144377	28
356	Ultrathin Co3O4 nanosheet clusters anchored on nitrogen doped carbon nanotubes/3D graphene as binder-free cathodes for Al-air battery. 2020 , 381, 122681	29
355	Probing the active sites of site-specific nitrogen doping in metal-free graphdiyne for electrochemical oxygen reduction reactions. 2020 , 65, 45-54	32
354	Electrocatalytic oxygen reduction over Co@Co3O4/N-doped porous carbon derived from pyrolysis of ZIF-8/67 on cellulose nanofibers. 2020 , 27, 2723-2735	6
353	Precise control of versatile microstructure and properties of graphene aerogel via freezing manipulation. 2020 , 12, 4882-4894	24
352	Hierarchical Nanostructured Electrocatalysts for Oxygen Reduction Reaction. 2020, 20, 1085-1097	5
351	Mesoporous CuS nanospheres decorated rGO aerogel for high photocatalytic activity towards Cr(VI) and organic pollutants. 2020 , 246, 125846	32
350	Boron-doped graphene-supported manganese oxide nanotubes as an efficient non-metal catalyst for the oxygen reduction reaction. 2020 , 4, 737-749	9
349	3D graphene nanofluids with high photothermal conversion and thermal transportation properties. 2020 , 4, 1208-1215	10
348	Liquid crystalline 3D printing for superstrong graphene microlattices with high density. 2020 , 159, 166-174	14
347	Insights into in-situ sol-gel conversion in graphene modified polymer-based silica gels for multifunctional aerogels. 2020 , 392, 123813	17
346	Self-Template Synthesis of Atomically Dispersed Fe/N-Codoped Nanocarbon as Efficient Bifunctional Alkaline Oxygen Electrocatalyst. 2020 , 3, 625-634	8
345	Nanorods of cerium oxide as an improved electrocatalyst for enhanced oxygen reduction in single-chambered microbial biofuel cells. 2020 , 7, 015514	4

344 Design and synthesis of carbon-based catalysts for zinclir batteries. **2020**, 161-190

343	Two-Dimensional Hierarchical Fe N C Electrocatalyst for Zn-Air Batteries with Ultrahigh Specific Capacity. 2020 , 2, 35-41	16
342	Anchoring nanosized Pd on three-dimensional boron- and nitrogen-codoped graphene aerogels as a highly active multifunctional electrocatalyst for formic acid and methanol oxidation reactions. 2020 , 7, 700-708	23
341	MetalBrganic frameworks and their derivatives with graphene composites: preparation and applications in electrocatalysis and photocatalysis. 2020 , 8, 2934-2961	93
340	Photocatalytic degradation of phenolic compounds of defect engineered Fe3O4: An alternative approach to solar activation via ligand-to-metal charge transfer. 2020 , 509, 144853	4
339	Nanoelectrochemistry of Adsorption-Coupled Electron Transfer at Carbon Electrodes. 2020 , 1-31	1
338	Sandwich-like Magnetic Graphene Papers Prepared with MOF-Derived Fe3O4th for Absorption-Dominated Electromagnetic Interference Shielding. 2020 , 59, 154-165	33
337	Iron oxide nanoparticles wrapped in graphene aerogel composite: Fabrication and application in electro-fenton at a Wide pH. 2020 , 587, 124269	6
336	Confining Li2S6 catholyte in 3D graphene sponge with ultrahigh total pore volume and oxygen-containing groups for lithium-sulfur batteries. 2020 , 158, 244-255	17
335	Toward Promising Cathode Catalysts for Nonlithium Metal®xygen Batteries. 2020 , 10, 1901997	52
334	Iron oxide@graphitic carbon core-shell nanoparticles embedded in ordered mesoporous N-doped carbon matrix as an efficient cathode catalyst for PEMFC. 2020 , 264, 118468	40
333	A novel strategy for synthesizing Fe, N, and S tridoped graphene-supported Pt nanodendrites toward highly efficient methanol oxidation. 2020 , 381, 275-284	33
332	Fe3O4@SiO2 nanoparticlesfunctionalized Cu(II) Schiff base complex with an imidazolium moiety as an efficient and eco-friendly bifunctional magnetically recoverable catalyst for the Strecker synthesis in aqueous media at room temperature. 2020 , 34, e5388	4
331	An ultralight, supercompressible, superhydrophobic and multifunctional carbon aerogel with a specially designed structure. 2020 , 158, 137-145	34
330	Insight into the catalytic performance of HER catalysis of noble metal/3D-G nanocomposites. 2020 , 333, 135467	5
329	Phosphorus-doped Fe3O4 nanoflowers grown on 3D porous graphene for robust pH-Universal hydrogen evolution reaction. 2020 , 45, 4435-4443	16
328	Nitrogen-Doped Mesoporous Carbons Bearing Fe3O4 as Adsorbent for Effective Ag(I) Removal. 2020 , 15, 2050134	1
327	Shale-oil-based nitrogen-doped porous carbon as efficient metal-free electrocatalyst for oxygen reduction reaction. 2020 , 146, 106131	2

326	3D Graphene-Carbon Nanotube Hybrid Supported Coupled Co-MnO Nanoparticles as Highly Efficient Bifunctional Electrocatalyst for Rechargeable Zn-Air Batteries. 2020 , 15, 3535-3541	1
325	Efficient electrochemical hydrogen evolution reaction and solar activity via bi-functional GO/Co3O4IIiO2 nano hybrid structure. 2020 , 45, 17410-17421	19
324	1D/2D Nanomaterials Synergistic, Compressible, and Response Rapidly 3D Graphene Aerogel for Piezoresistive Sensor. 2020 , 30, 2003618	62
323	Graphene Aerogels with Ultrahigh Pore Volume for Organic Dye Adsorption and High-Energy Lithium Batteries. 2020 , 59, 20719-20729	3
322	Hydroplastic foaming of graphene aerogels and artificially intelligent tactile sensors. 2020, 6,	46
321	Activity boosting of a metal-organic framework by Fe-Doping for electrocatalytic hydrogen evolution. 2020 , 292, 121696	5
320	Energy harvesting for electrochemical OER and solar photocatalysis via dual functional GO/TiO2-NiO nanocomposite. 2020 , 277, 123280	17
319	Highly Compressible, Thermally Stable, Light-Weight, and Robust Aramid Nanofibers/TiAlC MXene Composite Aerogel for Sensitive Pressure Sensor. 2020 , 14, 10633-10647	100
318	NiCoP nanoparticles encapsulated in cross-linked graphene aerogel to efficient hydrogen evolution reaction. 2020 , 31, 13521-13530	1
317	Carbon Anode in Carbon History. 2020 , 25,	2
317	Carbon Anode in Carbon History. 2020, 25, Self-Assembled Three-Dimensional Microporous rGO/PNT/Fe3O4 Hydrogel Sorbent for Magnetic Preconcentration of Multi-Residue Insecticides. 2020, 10, 5665	5
	Self-Assembled Three-Dimensional Microporous rGO/PNT/Fe3O4 Hydrogel Sorbent for Magnetic	
316	Self-Assembled Three-Dimensional Microporous rGO/PNT/Fe3O4 Hydrogel Sorbent for Magnetic Preconcentration of Multi-Residue Insecticides. 2020 , 10, 5665 Functionalized Fe/Ni@g-C3N4 nanostructures for enhanced trichloroethylene dechlorination and	5
316	Self-Assembled Three-Dimensional Microporous rGO/PNT/Fe3O4 Hydrogel Sorbent for Magnetic Preconcentration of Multi-Residue Insecticides. 2020, 10, 5665 Functionalized Fe/Ni@g-C3N4 nanostructures for enhanced trichloroethylene dechlorination and successive oxygen reduction reaction activity. 2020, 7, 3469-3481 The lightest solid meets the lightest gas: an overview of carbon aerogels and their composites for	5
316 315 314	Self-Assembled Three-Dimensional Microporous rGO/PNT/Fe3O4 Hydrogel Sorbent for Magnetic Preconcentration of Multi-Residue Insecticides. 2020, 10, 5665 Functionalized Fe/Ni@g-C3N4 nanostructures for enhanced trichloroethylene dechlorination and successive oxygen reduction reaction activity. 2020, 7, 3469-3481 The lightest solid meets the lightest gas: an overview of carbon aerogels and their composites for hydrogen related applications. 2020, 12, 19536-19556 Nonprecious Bimetallic Sites Coordinated on N-Doped Carbons with Efficient and Durable Catalytic	5 6 19
316 315 314 313	Self-Assembled Three-Dimensional Microporous rGO/PNT/Fe3O4 Hydrogel Sorbent for Magnetic Preconcentration of Multi-Residue Insecticides. 2020, 10, 5665 Functionalized Fe/Ni@g-C3N4 nanostructures for enhanced trichloroethylene dechlorination and successive oxygen reduction reaction activity. 2020, 7, 3469-3481 The lightest solid meets the lightest gas: an overview of carbon aerogels and their composites for hydrogen related applications. 2020, 12, 19536-19556 Nonprecious Bimetallic Sites Coordinated on N-Doped Carbons with Efficient and Durable Catalytic Activity for Oxygen Reduction. 2020, 16, e2000742 Engineering hierarchical MOFs-derived FeN© nanostructure with improved oxygen reduction	5 6 19 28
316 315 314 313 312	Self-Assembled Three-Dimensional Microporous rGO/PNT/Fe3O4 Hydrogel Sorbent for Magnetic Preconcentration of Multi-Residue Insecticides. 2020, 10, 5665 Functionalized Fe/Ni@g-C3N4 nanostructures for enhanced trichloroethylene dechlorination and successive oxygen reduction reaction activity. 2020, 7, 3469-3481 The lightest solid meets the lightest gas: an overview of carbon aerogels and their composites for hydrogen related applications. 2020, 12, 19536-19556 Nonprecious Bimetallic Sites Coordinated on N-Doped Carbons with Efficient and Durable Catalytic Activity for Oxygen Reduction. 2020, 16, e2000742 Engineering hierarchical MOFs-derived FeÑlt nanostructure with improved oxygen reduction activity for zinc-air battery: the role of iron oxide. 2020, 18, 100500 Biomass-derived nitrogen and sulfur co-doped carbon microtubes for the oxygen reduction	5 6 19 28

(2020-2020)

308	A No-Sweat Strategy for Graphene-Macrocycle Co-assembled Electrocatalyst toward Oxygen Reduction and Ambient Ammonia Synthesis. 2020 , 59, 16385-16397	3
307	Recent advances in graphene-based materials for fuel cell applications. 2020 , 9, 958	25
306	Hierarchical Multicavity Nitrogen-Doped Carbon Nanospheres as Efficient Polyselenide Reservoir for Fast and Long-Life Sodium-Selenium Batteries. 2020 , 16, e2005534	14
305	Controllable growth of palladium on gold multipod nanoparticles and their enhanced electrochemical oxygen reduction reaction performances. 2020 , 388, 20-29	4
304	Heteroatom doped graphene engineering for energy storage and conversion. 2020 , 39, 47-65	214
303	Graphene-Modified Composites and Electrodes and Their Potential Applications in the Electro-Fenton Process. 2020 , 13,	15
302	Highly Active Bifunctional Oxygen Electrocatalytic Sites Realized in Ceria Hunctionalized Graphene. 2020 , 4, 2000048	1
301	Single Atoms Anchored on Cobalt-Based Catalysts Derived from Hydrogels Containing Phthalocyanine toward the Oxygen Reduction Reaction. 2020 , 8, 8338-8347	7
300	In situ electro-reduction to modulate the surface electronic structure of Fe3O4 for enhancing oxygen evolution reaction. 2020 , 45, 15476-15482	7
299	Depositing reduced graphene oxide onto tungsten disulfide nanosheets via microwave irradiation: confirmation of four-electron transfer-assisted oxygen reduction and methanol oxidation reaction. 2020 , 44, 10638-10647	13
298	Advanced thermal properties of carbon-based aerogels. 2020 , 221-269	1
297	Core-double shell templated Fe/Co anchored carbon nanospheres for oxygen reduction. 2020 , 399, 125647	7
296	Cu NPs-embedded cross-linked microporous 3D reduced graphene hydrogels as photocatalyst for hydrogen evolution. 2020 , 577, 441-449	9
295	Ultralight Aerogels with Hierarchical Porous Structures Prepared from Cellulose Nanocrystal Stabilized Pickering High Internal Phase Emulsions. 2020 , 36, 6421-6428	20
294	Copper-based electrocatalyst derived from a copper chelate polymer for oxygen reduction reaction in alkaline solutions. 2020 , 388-389, 360-360	O
293	Mn3O4 nanoparticle-decorated hollow mesoporous carbon spheres as an efficient catalyst for oxygen reduction reaction in ZnBir batteries. 2020 , 2, 3367-3374	7
292	Utilization of the graphene aerogel as PEM fuel cell catalyst support: Effect of polypyrrole (PPy) and polydimethylsiloxane (PDMS) addition. 2020 , 45, 34818-34836	13
291	Large, Rapid Swelling of High- Polydicyclopentadiene Aerogels Suitable for Solvent-Responsive Actuators. 2020 , 12,	2

290	Enhanced Hydrogen Evolution Activity and Lithium-Ion Storage of Three-Dimensional Porous MoS2 Hybridized with Graphene Aerogel. 2020 , 150, 3402-3408	0
289	Preparation of graphene/Fe3O4 composite varnish with excellent corrosion-resistant and electromagnetic shielding properties. 2020 , 46, 22876-22882	2
288	Multidimensional graphene structures and beyond: Unique properties, syntheses and applications. 2020 , 113, 100665	37
287	Three-Dimensional Nitrogen-Doped Graphene Aerogel-Supported MnO Nanoparticles as Efficient Electrocatalysts for CO2 Reduction to CO. 2020 , 8, 4983-4994	14
286	A NiFe layered double hydroxide-decorated N-doped entangled-graphene framework: a robust water oxidation electrocatalyst. 2020 , 2, 1709-1717	8
285	Forming indium-carbon (In[1]) bonds at the edges of graphitic nanoplatelets. 2020, 6, 100030	4
284	3D graphene aerogel based photocatalysts: Synthesized, properties, and applications. 2020 , 594, 124666	11
283	Green and Solvent-Free Supercritical CO2-Assisted Production of Superparamagnetic Graphene Oxide Aerogels: Application as a Superior Contrast Agent in MRI. 2020 , 8, 4877-4888	6
282	The Chemistry and Promising Applications of Graphene and Porous Graphene Materials. 2020 , 30, 1909035	79
281	Bacterial cellulose: an encouraging eco-friendly nano-candidate for energy storage and energy conversion. 2020 , 8, 5812-5842	60
280	Role of perovskites as a bi-functional catalyst for electrochemical water splitting: A review. 2020 , 44, 9714-9747	18
279	Laser Assisted Solution Synthesis of High Performance Graphene Supported Electrocatalysts. 2020 , 30, 2001756	14
278	Rational and wide-range tuning of CNT aerogel conductors with multifunctionalities. 2020 , 12, 13771-13780	1
277	Hollow Mn3O4 nanospheres on graphene matrix for oxygen reduction reaction and supercapacitance applications: Experimental and theoretical insight. 2020 , 471, 228465	23
276	Solvent-free synthesis of Fe/N doped hierarchal porous carbon as an ideal electrocatalyst for oxygen reduction reaction. 2020 , 17, 100444	8
275	Electrochemical Characteristics of Cyanoquinones as Organic Cathodes for High-Potential Sodium-Ion Batteries. 2020 , 8, 11328-11336	8
274	Uniform N-coordinated single-atomic iron sites dispersed in porous carbon framework to activate PMS for efficient BPA degradation via high-valent iron-oxo species. 2020 , 389, 124382	84
273	Nano-hybrid based on polypyrrole/chitosan/grapheneoxide magnetite decoration for dual function in water remediation and its application to form fashionable colored product. 2020 , 31, 1587-1596	13

(2020-2020)

272	ORR electrocatalyst for Zn-air battery. 2020 , 567, 410-418	34
271	Furan and Pyran Functional Groups Driven the Surface of Nitrogen-Doped Nanofiber Sponges. 2020 , 6, 672-684	2
270	Hollow FeP/FeO Hybrid Nanoparticles on Carbon Nanotubes as Efficient Electrocatalysts for the Oxygen Evolution Reaction. 2020 , 12, 12783-12792	15
269	Purification of hemoglobin by adsorption on nitrogen-doped flower-like carbon superstructures. 2020 , 187, 162	5
268	Recent advances in preparations and applications of carbon aerogels: A review. 2020, 163, 1-18	110
267	3D Carbon Nanotubes Spaced Graphene Aerogel Incorporated with Prussian Blue Nanoparticles for Real-Time Detection of H2O2 Released from Living Cells. 2020 , 167, 047511	4
266	Space-confined iron nanoparticles in a 3D nitrogen-doped rGO-CNT framework as efficient bifunctional electrocatalysts for rechargeable ZincAir batteries. 2020 , 298, 110100	9
265	FeNx/FeSx-Anchored Carbon Sheet©arbon Nanotube Composite Electrocatalysts for Oxygen Reduction. 2020 , 3, 2234-2245	2
264	The development of an artificial neural network - genetic algorithm model (ANN-GA) for the adsorption and photocatalysis of methylene blue on a novel sulfur-nitrogen co-doped FeO nanostructure surface 2020 , 10, 5951-5960	11
263	A facile and large-scale synthesis of Co3O4/N-doped graphene for CO oxidation: Low-temperature catalytic activity and the role of nitrogen states. 2020 , 513, 145800	1
262	Nitrogen-doped graphene oxide aerogel anchored with spinel CoFe2O4 nanoparticles for rapid degradation of tetracycline. 2020 , 241, 116690	34
261	The mechanism study of oxygen reduction reaction (ORR) on non-equivalent P, N co-doped graphene. 2020 , 511, 145382	21
260	Atomically thin titanium carbide used as high-efficient, low-cost and stable catalyst for oxygen reduction reaction. 2020 , 45, 6994-7004	6
259	The elaboration of multifunctional hollow core@hell Fe3O4@PDA@TiO2 architecture with dual magnetic- and photo-responsive performance. 2020 , 44, 3487-3492	4
258	Synthesis of Multiple-Twinned Pd Nanoparticles Anchored on Graphitic Carbon Nanosheets for Use as Highly-Active Multifunctional Electrocatalyst in Formic Acid and Methanol Oxidation Reactions. 2020 , 7, 2000142	12
257	Heterostructured NiMoN nanoparticles decorated on reduced graphene oxide as efficient and robust electrocatalyst for hydrogen evolution reaction. 2020 , 165, 122-128	13
256	High performance lithium-ion capacitors based on LiNbO3-arched 3D graphene aerogel anode and BCNNT cathode with enhanced kinetics match. 2020 , 396, 125207	15
255	Three-dimensional nitrogen rich bubbled porous carbon sponge for supercapacitor & pressure sensing applications. 2020 , 44, 7242-7253	12

254	Self-Assembled Fe, N-Doped Chrysanthemum-Like Carbon Microspheres for Efficient Oxygen Reduction Reaction and ZnAir Battery. 2020 , 8, 2000145	6
253	In Situ Interface Design in Graphene-Embedded Polymeric Silica Aerogel with Organic/Inorganic Hybridization. 2020 , 12, 26635-26648	16
252	Single-Atom Cobalt Catalysts for Electrocatalytic Hydrodechlorination and Oxygen Reduction Reaction for the Degradation of Chlorinated Organic Compounds. 2020 , 12, 24019-24029	21
251	General strategy for fabrication of N-doped carbon nanotube/reduced graphene oxide aerogels for dissipation and conversion of electromagnetic energy. 2020 , 8, 7847-7857	24
250	Fabrication of helical SiO2@FeN doped C nanofibers and their applications as stable lithium ion battery anodes and superior oxygen reduction reaction catalysts. 2020 , 342, 136107	12
249	Flexible N-Doped reduced graphene oxide/carbon Nanotube-MnO2 film as a Multifunctional Material for High-Performance supercapacitors, catalysts and sensors. 2020 , 6, 523-531	50
248	Highly efficient Co@NCS nanosheet electrocatalyst for oxygen reduction reaction: An environment-friendly, low-cost and sustainable electrocatalyst. 2020 , 128, 110873	14
247	KOH activation of coal-derived microporous carbons for oxygen reduction and supercapacitors 2020 , 10, 15707-15714	11
246	Influence of uniaxial orientation of fluorinated polymer/phosphonate-modified needle-like nanofiller composite by drawing. 2020 , 41, 3062-3073	3
245	MnO2@Polyaniline-CNT-boron-doped graphene as a freestanding binder-free electrode material for supercapacitor. 2020 , 31, 8385-8393	16
244	Nanostructured graphene materials utilization in fuel cells and batteries: A review. 2020 , 29, 101386	22
243	Preparation and characterization of graphene oxide aerogel/gelatin as a hybrid scaffold for application in nerve tissue engineering. 2021 , 70, 674-683	11
242	In-situ self-templated preparation of porous coreShell Fe1B@N, S co-doped carbon architecture for highly efficient oxygen reduction reaction. 2021 , 54, 310-317	8
241	3D-ordered macroporous N-doped carbon encapsulating Fe-N alloy derived from a single-source metal-organic framework for superior oxygen reduction reaction. 2021 , 42, 490-500	7
240	Carbon quantum dots for advanced electrocatalysis. 2021 , 55, 279-294	69
239	PEDOT functionalized ZIF-67 derived Co-N-S triple-doped porous carbon for high-efficiency oxygen reduction. 2021 , 535, 147659	10
238	Mechanical modeling and simulation of aerogels: A review. 2021 , 47, 2981-2998	11
237	Stable confinement of Fe/Fe3C in Fe, N-codoped carbon nanotube towards robust zinc-air batteries. 2021 , 32, 1121-1126	13

(2021-2021)

236	Formation of nitrogen-doped holey carbon nanosheets via self-generated template assisted carbonization of polyimide nanoflowers for supercapacitor. 2021 , 482, 228993	21
235	Interconnected 3D Fe3O4/rGO as highly durable electrocatalyst for oxygen reduction reaction. 2021 , 855, 157422	8
234	Si-doped graphene nanosheets for NOx gas sensing. 2021 , 328, 129005	17
233	CoMn2O4 nanoparticles embed in graphene oxide aerogel with three-dimensional network for practical application prospects of oxytetracycline degradation. 2021 , 259, 118179	10
232	Removal of 2,4-dichlorophenoxyacetic acid by the boron-nitrogen co-doped carbon nanotubes: Insights into peroxymonosulfate adsorption and activation. 2021 , 259, 118196	15
231	MoS2@X2C (X = Mo or W) hybrids for enhanced supercapacitor and hydrogen evolution performances. 2021 , 421, 127843	22
230	Simultaneous and precise recovery of lithium and boron from salt lake brine by capacitive deionization with oxygen vacancy-rich CoP/Co3O4-graphene aerogel. 2021 , 420, 127661	4
229	Three-dimensional carbon foam supported NiO nanosheets as non-enzymatic electrochemical H2O2 sensors. 2021 , 542, 148699	17
228	Super-high fraction of organic montmorillonite filled polyamide 6 composite foam: Morphologies, thermal and mechanical properties. 2021 , 32, 544-552	5
227	Holey nitrogen-doped graphene aerogel for simultaneously electrochemical determination of ascorbic acid, dopamine and uric acid. 2021 , 224, 121851	21
226	Synthesis of hierarchical interconnected graphene oxide for enhanced oxygen reduction. 2021 , 610, 125719	1
225	Reduced mesoporous Co3O4 nanowires grown on 3D graphene as efficient catalysts for oxygen reduction and binder-free electrodes in aluminum batteries. 2021 , 56, 3861-3873	3
224	Three-dimensional graphene-wrapped Co0.85Se@C as high volumetric capacity anode material for lithium-ion batteries. 2021 , 536, 147746	7
223	Increased production of hydrogen with in situ CO capture through the process of water splitting using magnetic core/shell structures as novel photocatalysts. 2021 , 28, 3566-3578	2
222	3D hierarchically macro-/mesoporous graphene frameworks enriched with pyridinic-nitrogen-cobalt active sites as efficient reversible oxygen electrocatalysts for rechargeable zinc-air batteries. 2021 , 42, 571-582	19
221	Magnetic aerogel: an advanced material of high importance 2021 , 11, 7187-7204	8
220	Tunable and Well-Defined Bimodal Porous Model Electrodes for Revealing Multiscale Structural Effects in the Nonaqueous LiD2 Electrode Process. 2021 , 125, 1403-1413	3
219	Lightweight and Flexible Phenolic Aerogels with Three-Dimensional Foam Reinforcement for Acoustic and Thermal Insulation. 2021 , 60, 1241-1249	8

218	Ultra-small FeO nanodots encapsulated in layered carbon nanosheets with fast kinetics for lithium/potassium-ion battery anodes 2021 , 11, 1261-1270	5
217	Carbon aerogel composites for gas sensing. 2021 , 49-73	О
216	A direct foaming approach for carbon nanotube aerogels with ultra-low thermal conductivity and high mechanical stability. 2021 , 13, 11878-11886	4
215	Aerogels in the environment protection. 2021 , 245-257	
214	Lignocellulose aerogel and amorphous silica nanoparticles from rice husks. 2021, 3,	1
213	Catalyst Materials for Oxygen Reduction Reaction. 2021 , 85-182	
212	Emergent electrochemical functions and future opportunities of hierarchically constructed metal-organic frameworks and covalent organic frameworks. 2021 , 13, 6341-6356	13
211	Nanostructured multifunctional electrocatalysts for efficient energy conversion systems: Recent perspectives. 2021 , 10, 137-157	10
210	Solid-State Ball-Milling of Co3O4 Nano/Microspheres and Carbon Black Endorsed LaMnO3 Perovskite Catalyst for Bifunctional Oxygen Electrocatalysis. 2021 , 11, 76	7
209	Graphene aerogel-supported ruthenium nanoparticles for COx-free hydrogen production from ammonia. 2021 , 610, 117969	6
208	Hybrid Nanocomposites Based on Graphene and Ferrite Nanoparticles: From Preparation to Application. 2021 , 331-350	
207	Three dimensional graphene materials doped with heteroatoms for extraction and adsorption of environmental pollutants in wastewater. 2021 , 39, 17-43	1
206	Analysis on the secondary active site of FeN4-graphene for oxygen reduction reaction by DFT calculation. 2021 , 765, 138321	6
205	Honeycomb-like Self-Supported Co N C Catalysts with an Ultrastable Structure: Highly Efficient Electrocatalysts toward Oxygen Reduction Reaction in Alkaline and Acidic Solutions. 2021 , 4, 2522-2530	4
204	PPy-derived N, P co-doped hollow carbon fiber decorated with island-like Ni2P nanoparticles as bifunctional oxygen electrocatalysts. 2021 , 882, 115013	3
203	Recent trends in Nitrogen doped polymer composites: a review. 2021 , 28, 1	2
202	Polyimide Aerogel Fibers with Superior Flame Resistance, Strength, Hydrophobicity, and Flexibility Made via a Universal Sol-Gel Confined Transition Strategy. 2021 , 15, 4759-4768	21
201	Carbon-Supported High-Entropy Oxide Nanoparticles as Stable Electrocatalysts for Oxygen Reduction Reactions. 2021 , 31, 2010561	21

200	Rock Salt Oxide Hollow Spheres Achieving Durable Performance in Bifunctional Oxygen Energy Cells. 2021 , 4, 3448-3459	3
199	Bifunctional multi-metallic nitrogen-doped nanocarbon catalysts derived from 5-methylresorcinol. 2021 , 124, 106932	5
198	Facile preparation of reduced graphene oxide, polypyrrole, carbon black, and polyvinyl alcohol nanocomposite by electrospinning: a low-cost and sustainable approach for supercapacitor application. 2021 , 27, 2659-2672	2
197	Novel microrecycled ZnO nanoparticles decorated macroporous 3D graphene hybrid aerogel for efficient detection of NO2 at room temperature. 2021 , 330, 129278	17
196	Iodine Capture with Mechanically Robust Heat-Treated Ag-Al-Si-O Xerogel Sorbents. 2021, 6, 11628-11638	4
195	Manganese-Assisted Annealing Produces Abundant Macropores in a Carbon Aerogel to Enhance Its Oxygen Reduction Catalytic Activity in ZincAir Batteries. 2021 , 9, 5526-5535	3
194	Sponge tofu-like graphene-carbon hybrid supporting PtIIo nanocrystals for efficient oxygen reduction reaction and Zn-Air battery. 2021 , 46, 15561-15571	2
193	A New Synthesis of Highly Dispersed MoS2 Nanoparticles on Ketjenblack Carbon for Sustainable Oxygen Reduction Reaction. 1	Ο
192	Metal-Organic Framework and Carbon Black supported MOFs as dynamic electrocatalyst for oxygen reduction reaction in an alkaline electrolyte. 2021 , 133, 1	2
191	Dipoles in 4,12,4-graphyne. 2021 , 545, 148991	3
190	Review©urrent Progress of Non-Precious Metal for ORR Based Electrocatalysts Used for Fuel Cells. 2021 , 168, 044521	3
189	Structural Evolution of Atomically Dispersed Fe Species in FeN/C Catalysts Probed by X-ray Absorption and 57Fe Mssbauer Spectroscopies. 2021 , 125, 11928-11938	1
188	Recent Advances in Nanoparticles Confined in Two-Dimensional Materials as High-Performance Electrocatalysts for Energy-Conversion Technologies. 2021 , 13, 2541-2558	1
187	A bifunctional FeOOH@GCA nanocomposite for enhanced adsorption of arsenic and photo Fenton-like catalytic conversion of As(III). 2021 , 22, 101437	12
186	Carbon-based nonprecious metal electrocatalysts derived from MOFs for oxygen-reduction reaction. 2021 , 45, 15676-15738	5
185	Lanthanide based double perovskites: Bifunctional catalysts for oxygen evolution/reduction reactions. 2021 , 46, 17163-17172	4
184	Carbonaceous and Polymer Materials for Liß Batteries with an Emphasis on Flexible Devices. 2021 , 2, 2000096	2
183	Sandwich-structural Ni/FeO/Ni/cellulose paper with a honeycomb surface for improved absorption	11

182	FeNi-functionalized 3D N, P doped graphene foam as a noble metal-free bifunctional electrocatalyst for direct methanol fuel cells. 2021 , 867, 158732	12
181	Molybdenum-based materials for electrocatalytic nitrogen reduction reaction. 2021 , 2, 100447	9
180	N, P-Codoped Graphene Dots Supported on N-Doped 3D Graphene as Metal-Free Catalysts for Oxygen Reduction. 2021 , 13, 30512-30523	13
179	N-doped carbon nanotube arrays on reduced graphene oxide as multifunctional materials for energy devices and absorption of electromagnetic wave. 2021 , 177, 216-225	21
178	Graphene aerogels via hydrothermal gelation of graphene oxide colloids: Fine-tuning of its porous and chemical properties and catalytic applications. 2021 , 292, 102420	8
177	Synergistic effect on the four-electron ORR of the electro-Fenton system to remove micropollutants using an MOF-derived catalyst with carbon black. 2021 , 554, 149546	5
176	A review on the current research on graphene-based aerogels and their applications. 2021 , 4, 100065	11
175	Fe2O3 clusters embedded in 1D porous N-doped carbon matrix as pH-universal electrocatalyst for enhanced oxygen reduction reaction. 2021 , 415, 129033	8
174	3D Melamine Sponge-Derived Cobalt Nanoparticle-Embedded N-Doped Carbon Nanocages as Efficient Electrocatalysts for the Oxygen Reduction Reaction. 2021 , 6, 20130-20138	0
173	Biomass-derived, multifunctional and wave-layered carbon aerogels toward wearable pressure sensors, supercapacitors and triboelectric nanogenerators. 2021 , 85, 105973	27
172	General construction of molybdenum-based compounds embedded in flexible 3D interconnected porous carbon nanofibers with protective porous shell for high-performance lithium-ion battery. 2021 , 179, 142-150	3
171	Fabrication and electrochemical behavior of halloysite/graphene-polyaniline three-dimensional hybrid aerogel loaded with iron oxide. 2021 , 871, 159157	4
170	Microalgae biomass-derived nitrogen-enriching carbon materials as an efficient pH-universal oxygen reduction electrocatalyst for Zn-air battery. 2021 , 782, 146844	3
169	Improved uniformity of Fe3O4 nanoparticles on FeNII nanosheets derived from a 2D covalent organic polymer for oxygen reduction. 2021 , 46, 27576-27584	2
168	Porous carbon polyhedrons with exclusive Cu-Nx moieties as highly effective electrocatalysts for oxygen reduction reactions. 2021 , 46, 28021-28027	6
167	Ultralight, High Capacitance, Mechanically Strong Graphene-Cellulose Aerogels. 2021 , 26,	3
166	Heuristic Iron-Cobalt-Mediated Robust pH-Universal Oxygen Bifunctional Lusters for Reversible Aqueous and Flexible Solid-State Zn-Air Cells. 2021 , 15, 14683-14696	10

164	Graphene-based hybrid aerogels for energy and environmental applications. 2021, 420, 129700	13
163	Enhancing the Electrocatalytic Activity of Fe Phthalocyanines for the Oxygen Reduction Reaction by the Presence of Axial Ligands: Pyridine-functionalized Single-Walled Carbon Nanotubes. 2021 , 139263	5
162	Interfacing with Fe-N-C Sites Boosts the Formic Acid Dehydrogenation of Palladium Nanoparticles. 2021 , 13, 46749-46755	2
161	Silver nanowires interlocked graphene aerogel for ultra-high efficient clearage of oil pollution on water. 2021 , 29, e00285	О
160	High-efficiency degradation of bisphenol A by heterogeneous MnHe layered double oxides through peroxymonosulfate activation: Performance and synergetic mechanism. 2021 , 270, 118770	19
159	Hierarchical Iron Phosphides Composite Confined in Ultrathin Carbon Layer as Effective Heterogeneous Electro-Fenton Catalyst with Prominent Stability and Catalytic Activity. 2106311	3
158	Recent advances of 3D compressible carbon assemblies: A review of synthesis, properties and applications in energy and environment. 2021 , 9, 106269	2
157	Quo vadis carbocatalysis?. 2021 , 61, 219-227	
156	A ternary hybrid of Zn-doped MoS-RGO for highly effective electrocatalytic hydrogen evolution. 2021 , 599, 100-108	5
155	Selective electrochemical H2O2 generation on the graphene aerogel for efficient electro-Fenton degradation of ciprofloxacin. 2021 , 272, 118884	11
154	Metal-free Covalent Triazine Framework Prepared from 2,4,6-Tricyano-1,3,5-triazine through Open-system and Liquid-phase Synthesis. 2021 , 50, 1773-1777	1
153	Stress release in high-capacity flexible lithium-ion batteries through nested wrinkle texturing of graphene. 2021 , 61, 243-249	6
152	Photo-assisted electrocatalysis of black phosphorus quantum dots/molybdenum disulfide heterostructure for oxygen evolution reaction. 2021 , 562, 150213	7
151	Mechanisms of dispersion of nanoparticle-decorated graphene oxide nanosheets in aqueous media: Experimental and molecular dynamics simulation study. 2021 , 184, 689-697	3
150	GO-CeO[hanohybrid for ultra-rapid fluoride removal from drinking water. 2021 , 793, 148547	11
149	Equably-dispersed Sb/Sb2O3 nanoparticles in ionic liquid-derived nitrogen-enriched carbon for highly reversible lithium/sodium storage. 2021 , 395, 139210	1
148	Performance evaluation of functionalized carbon aerogel as oxygen reduction reaction electrocatalyst in zinc-air cell. 2021 , 511, 230458	3
147	Rational construction of Au@Co2N0.67 nanodots-interspersed 3D interconnected N-graphene hollow sphere network for efficient water splitting and Zn-air battery. 2021 , 89, 106420	5

146	Graphene aerogel-based catalysts in Fenton-like reactions for water decontamination: a short review. 2021 , 8, 100171	2
145	Microscopic mechanism about the selective adsorption of Cr(VI) from salt solution on nitrogen-doped carbon aerogel microsphere pyrolysis products. 2021 , 798, 149331	6
144	Biomass derived Fe,N-doped carbon material as bifunctional electrocatalysts for rechargeable Zn-air batteries. 2021 , 888, 161464	6
143	A hierarchical heterojunction polymer aerogel for accelerating charge transfer and separation. 2021 , 9, 7881-7887	5
142	Fullerene-Based In Situ Doping of N and Fe into a 3D Cross-Like Hierarchical Carbon Composite for High-Performance Supercapacitors. 2019 , 9, 1802928	69
141	Highly Sensitive Electrochemical Detection of Reactive Oxygen Species in Living Cancer Cells Using Monolithic Metallic Foam Electrodes. 2020 , 7, 2485-2492	2
140	Role of Nitrogen Precursor on the Activity Descriptor towards Oxygen Reduction Reaction in Iron-Based Catalysts. 2018 , 3, 6542-6550	8
139	Chloride Corrosion Resistant Nitrogen doped Reduced Graphene Oxide/Platinum Electrocatalyst for Hydrogen Evolution Reaction in an Acidic Medium. 2020 , 5, 1739-1750	2
138	Bio-Inspired Engineering of 3D Carbon Nanostructures. 2016 , 365-420	1
137	A novel sensitive sensor for serotonin based on high-quality of AuAg nanoalloy encapsulated graphene electrocatalyst. 2017 , 96, 186-193	47
136	Heteroatoms doped C $3\mathrm{N}$ 4 as high performance catalysts for the oxygen reduction reaction. 2017 , 42, 20579-20588	27
135	Facile and green preparation of magnetite/zeolite nanocomposites for energy application in a single-step procedure. 2017 , 719, 218-226	20
134	Effects of the degree of oxidation of pitch fibers on their stabilization and carbonization behaviors. 2020 , 35, 722-730	3
133	Nitrogen-Doped Graphene Nanosheet Coated Nanospherical Fe3O4 from Zeolitic Imidazolate Frameworks Template as Anode of Lithium Ion Batteries. 2020 , 34, 14986-14994	8
132	Toward pH Independent Oxygen Reduction Reaction by Polydopamine Derived 3D Interconnected, Iron Carbide Embedded Graphitic Carbon. 2021 , 13, 8147-8158	5
131	Enhancing the Dispersion of Cu-Ni Metals on the Graphene Aerogel Support for Use as a Catalyst in the Direct Synthesis of Dimethyl Carbonate from Carbon Dioxide and Methanol. 2020 , 5, 12391-12397	9
130	Nanosized palladium on phosphorus-incorporated porous carbon frameworks for enhanced selective phenylacetylene hydrogenation. 2017 , 7, 4934-4939	10
129	Hierarchical Co3O4 nanorods anchored on nitrogen doped reduced graphene oxide: a highly efficient bifunctional electrocatalyst for rechargeable ZnBir batteries. 2020 , 10, 1444-1457	9

128	Concentrating and activating carbon dioxide over AuCu aerogel grain boundaries. 2020, 152, 204703	6
127	Supercritical fluids in chemistry. 2020 , 89, 1337-1427	19
126	Review DD Graphene and Graphene-Like Materials and Their Promising Applications in the Generation of Hydrogen Peroxide. 2020 , 167, 126502	5
125	A Unique Synthesis of Macroporous N-Doped Carbon Composite Catalyst for Oxygen Reduction Reaction. 2020 , 11,	O
124	Recent Progress in the Identification of Active Sites in Pyrolyzed FeN/C Catalysts and Insights into Their Role in Oxygen Reduction Reaction. 2017 , 8, 169-182	16
123	Nanocomposites of nitrogen-doped graphene and cobalt tungsten oxide as efficient electrode materials for application in electrochemical devices. 2016 , 3, 1456-1473	7
122	A General Strategy toward Metal Sulfide Nanoparticles Confined in a Sulfur-Doped Ti C T MXene 3D Porous Aerogel for Efficient Ambient N Electroreduction. 2021 , 17, e2103305	10
121	Low-Cost Nanomaterials for High-Performance Polymer Electrolyte Fuel Cells (PEMFCs). 2014 , 359-394	
120	Conventional miRNA Detection Strategies. 2015 , 23-35	1
119	Influence of Magnetic Field on Dealloying of Al-15Fe Ribbons and Formation of Fe3O4 Octahedra. 2015 , 241-248	
118	Influence of Magnetic Field on Dealloying of Al-15Fe Ribbons and Formation of Fe3O4 Octahedra. 241-248	
117	Architecture and Applications of Functional Three-Dimensional Graphene Networks. 67-99	O
116	The Functionalization of Graphene and Its Assembled Macrostructures. 19-44	
115	Nanomaterials for Adsorption and Heterogeneous Reaction in Water Decontamination. 2017, 183-219	
114	N and S Co-doped Ordered Mesoporous Carbon: An Efficient Electrocatalyst for Oxygen Reduction Reaction in Microbial Fuel Cells. 2020 , 16, 625-638	О
113	Interfacial engineering in hollow NiS2/FeS2-NSGA heterostructures with efficient catalytic activity for advanced Li-CO2 battery. 2022 , 430, 133029	5
112	Thermal insulation fibers with a Kevlar aerogel core and a porous Nomex shell 2021, 11, 34828-34835	О
111	Polyaniline interweaved iron embedded in ureafformaldehyde resin-based carbon as a cost-effective catalyst for power generation in microbial fuel cell. 2021 , 431, 133341	3

110	Ultrahigh-strength carbon aerogels for high temperature thermal insulation. 2021,	5
109	Effect of morphology-induced interfacial defects on band location and enhanced photocatalytic dye degradation activity of TiO2/Graphene aerogel. 2021 , 162, 110448	O
108	Highly dispersed PtNi nanoparticles modified carbon black as high-performanced electrocatalyst for oxygen reduction in acidic medium. 2021 , 904, 115908	1
107	Three-dimensional graphene/La(OH)-nanorod aerogel adsorbent by self-assembly process for enhanced removal and recovery of phosphate in wastewater. 2021 , 152124	4
106	Quantitative structure determination of adsorbed formate and surface hydroxyls on FeO(001) 2021 , 24, 488-496	
105	N/Ce doped graphene supported Pt nanoparticles for the catalytic oxidation of formaldehyde at room temperature. 2022 , 125, 135-135	O
104	Withdrawn: Revealing improved electrocatalytic performances of electrochemically synthesized S and Ni doped Fe2O3 nanostructure interfaces. 2022 , 152401	
103	Integrated Design of Silkworm-Chrysalis-Net-Like[Fe3O4/rGO/Mesoporous Carbon Composites as a High-Performance Anode Material for Lithium-Ion Batteries.	O
102	The potential of CoO nanoparticles attached to the surface of MnO nanorods as cathode catalyst for single-chamber microbial fuel cell 2021 , 346, 126584	O
101	Atomically dispersed cobalt anchored on N-doped graphene aerogels for efficient electromagnetic wave absorption with an ultralow filler ratio. 2022 , 9, 011402	13
100	Applications of metalBrganic frameworkBraphene composite materials in electrochemical energy storage. 2022 , 32, 100332	7
99	A novel method to synthesize high-strength elastic gel and carbonized aerogel. 2022 , 580, 152240	O
98	Revealing Improved Electrocatalytic Performances of Electrochemically Synthesized S and Ni Doped Fe 2O 3 Nanostructure Interfaces.	
97	Greener and higher conversion of esterification via interfacial photothermal catalysis.	3
96	Efficient and Selective Hydrogenation of 5-Hydroxymethylfurfural to 2,5-Dimethylfuran Over a Non-noble CoNCx/NiFeO Catalyst. 1	O
95	Recent Advances in the Synthesis and Application of Three-Dimensional Graphene-Based Aerogels 2022 , 27,	1
94	Metal-Organic-Framework based Catalytic Micromotor for Enhanced Water Decontamination. 2022 , 7,	2
93	Electrospun Carbon Nanofibers Loaded with Atomic FeN x /Fe 2 O 3 Active Sites for Efficient Oxygen Reduction Reaction in Both Acidic and Alkaline Media. 2101904	O

92	Efficient Bifunctional Oxygen Electrocatalysts for Rechargeable ZincAir Battery: Fe 3 O 4/NI Nanoflowers Derived from Aromatic Polyamide.	1
91	Nanoporous Graphite-like Membranes Decorated with MoSe2 Nanosheets for Hydrogen Evolution.	2
90	Wavelength-regulated switchable photoelectrochemical system for concurrent detection of dual antibiotics 2022 , 202, 113999	0
89	Porous metal oxide electrocatalytic nanomaterials for energy conversion: Oxygen defects and selection techniques. 2022 , 457, 214389	3
88	Efficiently catalyzed sea urchin-like mixed phase SmMn2O5/MnO2 for oxygen reduction reaction in zinc-air battery. 2022 , 149, 111744	O
87	Reduced graphene oxide spatially scaffolded by a sucrose-derived carbon framework for trace and fast gas detection. 2022 , 191, 164-174	Ο
86	A New Era of Integrative Ice Frozen Assembly into Multiscale Architecturing of Energy Materials. 2112509	2
85	Sulfur-Doped FeNII Nanomaterials as Catalysts for the Oxygen Reduction Reaction in Acidic Medium. 2022 , 5, 4397-4405	1
84	Progress and perspective in mechanically robust carbon aerogels. 2022, 131, 110904	
83	Polyvinylpyrrolidone and graphene-modified hematite nanoparticles for efficient electrocatalytic oxidation of p-nitrophenol. 2022 , 26, 1051-1065	1
82	Successful Manufacturing Protocols of N-Rich Carbon Electrodes Ensuring High ORR Activity: A Review. 2022 , 10, 643	1
81	Fe 3 O 4 Templated Pyrolyzed FeNC Catalysts. Understanding the role of N-Functions and Fe 3 C on the ORR Activity and Mechanism.	1
80	An Overview of the Production of Magnetic Core-Shell Nanoparticles and Their Biomedical Applications. 2022 , 12, 605	2
79	Synthesis, characterization and applications of 3D porous graphene hierarchical structure by direct carbonization of maleic acid. 2022 , 48, 8409-8416	
78	Metagenomics uncovers the effect of nitrogen-doped graphene on anammox consortia and microbial function 2022 , 351, 126998	1
77	Highly efficient activation of peroxymonosulfate by the (3RI-I2H)-CuFeO2 nanocomposite photocatalyst: Intermediate toxicity, BVS validation ionic migration and degradation pathway. 2022 , 289, 120729	2
76	Revealing improved electrocatalytic performances of electrochemically synthesized S and Ni doped Fe2O3 nanostructure interfaces. 2022 , 588, 152894	0
75	Nanoporous and hydrophobic new Chitosan-Silica blend aerogels for enhanced oil adsorption capacity. 2022 , 351, 131247	1

74	Sugar-cubic Fe2O3/nitrogen-doped graphene nanocomposite as high-performance anode material for oxygen evolution reaction. 2022 , 910, 164852	О
73	CuO-NiO binary transition metal oxide nanoparticle anchored on rGO nanosheets as high-performance electrocatalyst for the oxygen reduction reaction 2022 , 112992	2
72	References. 2021 , 317-358	
71	High-Level Oxygen Reduction Catalysts Derived from the Compounds of High-Specific-Surface-Area Pine Peel Activated Carbon and Phthalocyanine Cobalt 2021 , 11,	2
70	Metal®rganic Framework and Its Nanocomposites as Chemical Sensors. 83-124	1
69	Manipulation on active electronic states of metastable phase ENiMoO for large current density hydrogen evolution. 2021 , 12, 5960	11
68	Oxygen reduction reaction catalyzed by carbon composites with ruthenium-doped iron oxide nanoparticles.	
67	ZIF-8 derived CeO 2 -Fe 3 O 4 @Fe-N/C catalyst for oxygen reduction reaction.	
66	Data_Sheet_1.docx. 2019 ,	
65	Data_Sheet_1.pdf. 2019 ,	
65 64	Data_Sheet_1.pdf. 2019, Data_Sheet_1.docx. 2019,	
64	Data_Sheet_1.docx. 2019, Recent progress in microwave-assisted preparations of 2D materials and catalysis applications	3
64	Data_Sheet_1.docx. 2019, Recent progress in microwave-assisted preparations of 2D materials and catalysis applications 2022, Facile solvothermal synthesis of ZnO/Ti3C2Tx MXene nanocomposites for NO2 detection at low	3
64 63 62	Data_Sheet_1.docx. 2019, Recent progress in microwave-assisted preparations of 2D materials and catalysis applications 2022, Facile solvothermal synthesis of ZnO/Ti3C2Tx MXene nanocomposites for NO2 detection at low working temperature. 2022, 132025	
64 63 62 61	Data_Sheet_1.docx. 2019, Recent progress in microwave-assisted preparations of 2D materials and catalysis applications 2022, Facile solvothermal synthesis of ZnO/Ti3C2Tx MXene nanocomposites for NO2 detection at low working temperature. 2022, 132025 An overview of nanomaterials in fuel cells: Synthesis method and application. 2022, Succulent-Inspired Ultraflexible and Multifunctional Carbon Aerogel for High-Performing Strain	
64 63 62 61 60	Data_Sheet_1.docx. 2019, Recent progress in microwave-assisted preparations of 2D materials and catalysis applications 2022, Facile solvothermal synthesis of ZnO/Ti3C2Tx MXene nanocomposites for NO2 detection at low working temperature. 2022, 132025 An overview of nanomaterials in fuel cells: Synthesis method and application. 2022, Succulent-Inspired Ultraflexible and Multifunctional Carbon Aerogel for High-Performing Strain Sensing and Thermal Management. 2200476 Integration of 3D macroscopic reduced graphene oxide aerogel with DUT-67 for selective CO2	0

56	Ceria Boosting on In Situ Nitrogen-Doped Graphene Oxide for Efficient Bifunctional ORR/OER Activity. 10,	1
55	Protein-Based Flexible Conductive Aerogels for Piezoresistive Pressure Sensors.	О
54	Highly-selective light olefins production via photothermal Fischer面ropsch synthesis over 胜Fe2O3-derived Fe5C2 under low pressure.	O
53	CoFe Prussian blue analogues on 3D porous N-doped carbon nanosheets boost the intercalation kinetics for a high-performance quasi-solid-state hybrid capacitor. 2022 , 10, 14501-14512	1
52	Atomically Dispersed Pentacoordinated-Zirconium Catalyst with Axial Oxygen Ligand for Oxygen Reduction Reaction.	4
51	Atomically Dispersed Pentacoordinated-Zirconium Catalyst with Axial Oxygen Ligand for Oxygen Reduction Reaction.	
50	Airlathode Interface-Engineered Electrocatalyst for Solid-State Rechargeable ZincAir Batteries.	
49	Synthesis and characterization of ethylenediamine functionalized graphene oxide-modified UiO-66-NH2 for quinoline removal.	
48	Structural and electrical study of nanocomposite Fe 0. 2 Ni0 $^\circ$. 3 Cu $^\circ$. 5 anode with effect of graphene oxide (GO) for low-temperature SOFCs.	1
47	Iron-Adjustable Compressible Elastic Chitosan-Derived Carbon Aerogel with Wide-Range Linear Sensitivity and Super Sensing Performances for Wearable Piezoresistive Sensors.	Ο
46	Protein-based luminescent aerogels with elastic properties. 2022 , 15, 508-518	
45	Unravelling the role of interface of CuOx-TiO2 hybrid metal oxide in enhancement of oxygen reduction reaction performance. 2022 ,	Ο
44	Electrochemical Performance of Fe2O3@PPy Nanocomposite as an Effective Electrode Material for Supercapacitor.	
43	Recycled ZnO-fused macroporous 3D graphene oxide aerogel composites for high-performance asymmetric supercapacitors.	O
42	A simple Preheating-pyrolysis Strategy Leading to Superior ORR Activity in Fe-N/Carbon black. 2205372	2
41	Porous and three-dimensional carbon aerogels from nanocellulose/pristine graphene for high-performance supercapacitor electrodes.	
40	Construction of hierarchically porous carbon spheres supported nonprecious metal single-atom electrocatalysts for oxygen reduction reaction. 2022 , 545, 231913	0
39	High productivity of tartronate from electrocatalytic oxidation of high concentration glycerol through facilitating the intermediate conversion. 2022 , 317, 121784	

38	Heteroatom doping effect of Pt/rGO catalysts for formaldehyde abatement at ambient temperature. 2022 , 5, 100103	0
37	Ultrathin WS2 nanobowls-based hybrid aerogels for selective trapping of precious metals from electronic wastes and elimination of organic dyes. 2023 , 451, 138539	o
36	Introductory Chapter: Incredible Spicy Iron Oxide Nanoparticles.	0
35	Cellulose/lignin-based carbon nanobelt aerogels coating on VSe2 nanosheets as anode for high performance potassium-ion batteries. 2022 , 548, 232033	1
34	Rapid and Facile Fabrication Of[Hierarchically Porous Graphene Aerogel for Oil-Water Separation and Piezoresistive Sensing Applications.	О
33	Application of graphene aerogels in oil spill recovery: A review. 2023 , 856, 159107	O
32	Study on Lanthanum Cerium 6-Methyluracil As Heat Stabilizer of Polyvinyl Chloride.	0
31	In Situ Oxygen-Doped Porous Carbon Nanoribbons with Expanded Interlayer Distance for Enhanced Potassium Ion Storage.	o
30	Bifunctional electrocatalysts of CoFeP/rGO heterostructure for water splitting. 2022,	0
29	Recent major advances and challenges in the emerging Graphene based nanomaterials in electrocatalytic Fuel Cell technology.	O
28	Six-membered-ring inorganic materials for electrochemical applications. 2022,	0
27	Are FeNC Electrocatalysts an Alternative to Pt-Based Electrocatalysts for the Next Generation of Proton Exchange Membrane Fuel Cells?. 13853-13875	2
26	Design of Oxygen Reduction Catalysts in Primary ZincAir Batteries. 2022 , 35-67	1
25	Metal ferrites-based nanocomposites and nanohybrids for photocatalytic water treatment and electrocatalytic water splitting. 2023 , 310, 136835	O
24	Controlled synthesis of highly active bifunctional electrocatalysts for overall water splitting using coal-based activated carbons.	О
23	Modulating interfacial charge density of FeCo oxyhydroxides via coupling with graphene oxide aerogel for boosting oxygen evolution reaction. 2023 , 934, 167911	O
22	Spinel Iron Oxide Nanoparticles Decorated on Pyridinic-N and Carbon Surface: A Highly Efficient Inexpensive Electrocatalyst for Oxygen Reduction and Oxygen Evolution Eeactions. 2022 , 7,	1
21	Recent progress in heteroatom doped carbon based electrocatalysts for oxygen reduction reaction in anion exchange membrane fuel cells. 2022 ,	o

20	Enhancement in the Electrochemical Performance of Strontium (Sr)-Doped LaMnO3 as Supercapacitor Materials. 2022 , 12, 1739	0
19	Aerogels-Inspired based Photo and Electrocatalyst for Water Splitting to Produce Hydrogen. 2022 , 29, 101670	0
18	Rapid and facile fabrication of hierarchically porous graphene aerogel for oil-water separation and piezoresistive sensing applications. 2023 , 613, 155982	1
17	Design of Bimetallic PtFe-Based Reduced Graphene Oxide as Efficient Catalyst for Oxidation Reduction Reaction. 2022 , 12, 1528	1
16	Porous and three-dimensional carbon aerogels from nanocellulose/pristine graphene for high-performance supercapacitor electrodes. 2022 , 109626	0
15	N-Doped Graphene-Supported Gold Nanorods for Electrochemical Sensing of Ascorbic Acid with Superior Sensitivity.	Ο
14	Design of advanced aerogel structures for oxygen reduction reaction electrocatalysis.	Ο
13	Weakening CO poisoning over size- and support-dependent Ptn/X-graphene catalyst (X = C, B, N, n = 1 \overline{B} , 13).	Ο
12	Cathode Materials for Primary Zinc-Air Battery. 2023 , 23-66	О
11	Transitional trimetallic alloy embedded polyacrylamide hydrogel derived nitrogen-doped carbon air-cathode for bioenergy generation in microbial fuel cell. 2023 , 55, 103001	Ο
10	Graphene-Isolated Satellite Nanostructure Enhanced Raman Spectroscopy Reveals the Critical Role of Different Intermediates on the Oxygen Reduction Reaction. 2023 , 13, 849-855	О
9	Oxidation of Alcohols into Carbonyl Compounds Using a CuO@GO Nano Catalyst in Oxygen Atmospheres. 2023 , 13, 55	0
8	Porous Nitrogen-Doped Crumpled Graphene Nanoparticles: A Metal-Free Nanozyme for Selective Detection of Dopamine in Aqueous Medium and Human Serum. 2023 , 6, 1667-1677	0
7	A microwave-assisted decoration of carbon nanotubes with Fe3O4 nanoparticles for efficient electrocatalytic oxygen reduction reaction. 2023 , 943, 169067	O
6	Growth of carbon nanotubes over carbon nanofibers catalyzed by bimetallic alloy nanoparticles as a bifunctional electrode for ZnBir batteries. 2023 , 13, 11591-11599	0
5	Nitrogen-doped Fe2O3/NiTe2 as an excellent bifunctional electrocatalyst for overall water splitting. 2023 , 639, 416-423	1
4	Graphene and boron nitride foams for smart functional applications.	0
3	Carbon-Coated MnO Quantum Dot-Decorated Three-Dimensional Graphene Aerogel Composite for High-Performance Lithium-Ion Batteries. 2023 , 37, 6240-6247	O

Straightforward engineering of porous C3N4/Fe3O4 electrocatalyst for oxygen reduction reaction in alkaline medium. **2023**, 30, 101534

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Electromechanical application of magnetite nanomaterials blended with single-walled carbon nanotubes. **2023**, 281-295

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