Nitrogen-Doped Graphene as Efficient Metal-Free Elect Fuel Cells

ACS Nano

4, 1321-1326

DOI: 10.1021/nn901850u

Citation Report

#	Article	IF	Citations
7	Nitrogen-doped graphene and its electrochemical applications. Journal of Materials Chemistry, 2010, 20, 7491.	6.7	1,040
8	Oxygen dissociation on nitrogen-doped single wall nanotube: A first-principles study. Chemical Physics Letters, 2010, 492, 131-136.	1.2	62
9	Boron- and nitrogen-doped carbon nanotubes and graphene. Inorganica Chimica Acta, 2010, 363, 4163-4174.	1.2	171
10	Enhanced electrochemical sensitivity of PtRh electrodes coated with nitrogen-doped graphene. Electrochemistry Communications, 2010, 12, 1423-1427.	2.3	90
11	Spontaneous, catalyst-free formation of nitrogen-doped graphitic carbon nanocages. Carbon, 2010, 48, 4190-4196.	5.4	19
12	Growth and properties of chemically modified graphene. Physica Status Solidi (B): Basic Research, 2010, 247, 2915-2919.	0.7	15
13	Voltage-induced incandescent light emission from large-area graphene films. Applied Physics Letters, 2010, 96, .	1.5	30
14	Roles of radical characters of pristine and nitrogen-substituted hydrographene in dioxygen bindings. Journal of Chemical Physics, 2010, 133, 174703.	1.2	6
15	Electrochemical ascorbic acid sensor based on DMF-exfoliated graphene. Journal of Materials Chemistry, 2010, 20, 7864.	6.7	224
16	Graphene versus carbon nanotubes for chemical sensor and fuel cell applications. Analyst, The, 2010, 135, 2790.	1.7	150
17	In Search of the Active Site in Nitrogen-Doped Carbon Nanotube Electrodes for the Oxygen Reduction Reaction. Journal of Physical Chemistry Letters, 2010, 1, 2622-2627.	2.1	579
18	Self-Assembled Graphene Hydrogel via a One-Step Hydrothermal Process. ACS Nano, 2010, 4, 4324-4330.	7.3	2,999
19	Highly Efficient Metal-Free Growth of Nitrogen-Doped Single-Walled Carbon Nanotubes on Plasma-Etched Substrates for Oxygen Reduction. Journal of the American Chemical Society, 2010, 132, 15127-15129.	6.6	608
20	Metal-Free Carbon Nanomaterials Become More Active than Metal Catalysts and Last Longer. Journal of Physical Chemistry Letters, 2010, 1, 2165-2173.	2.1	529
21	Soluble P3HT-Grafted Graphene for Efficient Bilayerâ"Heterojunction Photovoltaic Devices. ACS Nano, 2010, 4, 5633-5640.	7.3	451
22	Graphene electrochemistry: an overview of potential applications. Analyst, The, 2010, 135, 2768.	1.7	481
23	Bio-inspired catalyst compositions for enhanced oxygen reduction using nanostructured Pt electrocatalysts in polymer electrolyte fuel cells. Journal of Materials Chemistry, 2010, 20, 9651.	6.7	5
24	Synthesis of hybrid graphene carbon-coated nanocatalysts. Journal of Materials Chemistry, 2010, 20, 8230.	6.7	18

#	Article	IF	Citations
25	Metal free, end-opened, selective nitrogen-doped vertically aligned carbon nanotubes by a single step in situ low energy plasma process. Journal of Materials Chemistry, 2011, 21, 16162.	6.7	15
26	Theoretical investigation of formation mechanism of bipyridyl molecule on Ni(111) surface: implication for synthesis of N-doped graphene from pyridine. Physical Chemistry Chemical Physics, 2011, 13, 6053.	1.3	5
27	Facile construction of non-precious iron nitride-doped carbon nanofibers as cathode electrocatalysts for proton exchange membrane fuel cells. Chemical Communications, 2011, 47, 2910.	2.2	45
28	Effect of Synthesis Route on Oxygen Reduction Reaction Activity of Carbon-Supported Hafnium Oxynitride in Acid Media. Journal of Physical Chemistry C, 2011, 115, 20610-20617.	1.5	36
29	CoMn2O4 Spinel Nanoparticles Grown on Graphene as Bifunctional Catalyst for Lithium-Air Batteries. Journal of the Electrochemical Society, 2011, 158, A1379.	1.3	218
30	Hybrid gold nanoparticle-reduced graphene oxide nanosheets as active catalysts for highly efficient reduction of nitroarenes. Journal of Materials Chemistry, 2011, 21, 15431.	6.7	222
31	Nitrogen-Doped Hollow Carbon Nanoparticles with Excellent Oxygen Reduction Performances and Their Electrocatalytic Kinetics. Journal of Physical Chemistry C, 2011, 115, 25148-25154.	1.5	131
32	Effect of Hydrogen Termination on Carbon K-Edge X-ray Absorption Spectra of Nanographene. Journal of Physical Chemistry C, 2011, 115, 5392-5403.	1.5	44
33	Nitrogen-Promoted Self-Assembly of N-Doped Carbon Nanotubes and Their Intrinsic Catalysis for Oxygen Reduction in Fuel Cells. ACS Nano, 2011, 5, 1677-1684.	7.3	220
34	Size effect of graphene on electrocatalytic activation of oxygen. Chemical Communications, 2011, 47, 10016.	2.2	212
35	Facile Preparation of Nitrogen-Doped Few-Layer Graphene via Supercritical Reaction. ACS Applied Materials & Interfaces, 2011, 3, 2259-2264.	4.0	75
36	Controllable healing of defects and nitrogen doping of graphene by CO and NO molecules. Physical Review B, 2011, 83, .	1.1	67
37	High oxygen-reduction activity and durability of nitrogen-doped graphene. Energy and Environmental Science, 2011, 4, 760.	15.6	1,153
38	Large-Scale Growth and Characterizations of Nitrogen-Doped Monolayer Graphene Sheets. ACS Nano, 2011, 5, 4112-4117.	7.3	590
39	Nitrogen-doped graphene nanosheet-supported non-precious iron nitride nanoparticles as an efficient electrocatalyst for oxygen reduction. RSC Advances, 2011, 1, 1349.	1.7	91
40	On the mechanism of enhanced oxygen reduction reaction in nitrogen-doped graphene nanoribbons. Physical Chemistry Chemical Physics, 2011, 13, 17505.	1.3	646
41	Polyelectrolyte-Functionalized Graphene as Metal-Free Electrocatalysts for Oxygen Reduction. ACS Nano, 2011, 5, 6202-6209.	7.3	672
42	Graphene-Based Non-Noble-Metal Catalysts for Oxygen Reduction Reaction in Acid. Chemistry of Materials, 2011, 23, 3421-3428.	3.2	434

#	Article	IF	Citations
43	Superior energy capacity of graphene nanosheets for a nonaqueous lithium-oxygen battery. Chemical Communications, 2011, 47, 9438.	2.2	293
44	Nitrogen-doped carbon xerogel: A novel carbon-based electrocatalyst for oxygen reduction reaction in proton exchange membrane (PEM) fuel cells. Energy and Environmental Science, 2011, 4, 3389.	15.6	171
45	Effects of Acid Treatment of Ptâ˜Ni Alloy Nanoparticles@Graphene on the Kinetics of the Oxygen Reduction Reaction in Acidic and Alkaline Solutions. Journal of Physical Chemistry C, 2011, 115, 379-389.	1.5	138
46	The ripple's enhancement in graphene sheets by spark plasma sintering. AIP Advances, 2011, 1, 032170.	0.6	2
47	Formation of Large-Area Nitrogen-Doped Graphene Film Prepared from Simple Solution Casting of Edge-Selectively Functionalized Graphite and Its Electrocatalytic Activity. Chemistry of Materials, 2011, 23, 3987-3992.	3.2	171
48	Nanostructured catalysts in fuel cells. Journal of Materials Chemistry, 2011, 21, 4027-4036.	6.7	196
49	Graphene based new energy materials. Energy and Environmental Science, 2011, 4, 1113.	15.6	1,789
50	One step hydrothermal synthesis of TiO2-reduced graphene oxide sheets. Journal of Materials Chemistry, 2011, 21, 3415.	6.7	459
51	Catalyst-Free Synthesis of Nitrogen-Doped GrapheneviaThermal Annealing Graphite Oxide with Melamine and Its Excellent Electrocatalysis. ACS Nano, 2011, 5, 4350-4358.	7.3	2,341
52	Preparation and Electrocatalytic Activity of Gold Nanoparticles Immobilized on the Surface of 4-Mercaptobenzoyl-Functionalized Multiwalled Carbon Nanotubes. Journal of Physical Chemistry C, 2011, 115, 1746-1751.	1.5	20
53	Nitrogen-Doped Graphene for High-Performance Ultracapacitors and the Importance of Nitrogen-Doped Sites at Basal Planes. Nano Letters, 2011, 11, 2472-2477.	4.5	1,547
54	Preparation of Tunable 3D Pillared Carbon Nanotubeâ€“Graphene Networks for High-Performance Capacitance. Chemistry of Materials, 2011, 23, 4810-4816.	3.2	367
55	Design and synthesis of nitrogen-containing calcined polymer/carbon nanotube hybrids that act as a platinum-free oxygen reduction fuel cell catalyst. Chemical Communications, 2011, 47, 6843.	2.2	39
56	Structural, magnetic, and transport properties of substitutionally doped graphene nanoribbons from first principles. Physical Review B, 2011, 83, .	1.1	124
57	The Role of Chemistry in Graphene Doping for Carbon-Based Electronics. ACS Nano, 2011, 5, 3096-3103.	7.3	79
58	Mechanistic Discussion of the Oxygen Reduction Reaction at Nitrogen-Doped Carbon Nanotubes. Journal of Physical Chemistry C, 2011, 115, 20002-20010.	1.5	197
59	Polyelectrolyte-Induced Reduction of Exfoliated Graphite Oxide: A Facile Route to Synthesis of Soluble Graphene Nanosheets. ACS Nano, 2011, 5, 1785-1791.	7.3	293
60	Energy gaps in nitrogen delta-doping graphene: A first-principles study. Applied Physics Letters, 2011, 99, 012107.	1.5	25

#	Article	IF	Citations
61	CVD graphene electrochemistry: biologically relevant molecules. Physical Chemistry Chemical Physics, 2011, 13, 20284.	1.3	53
62	Facile synthesis of a Ag nanoparticle/polyoxometalate/carbon nanotube tri-component hybrid and its activity in the electrocatalysis of oxygen reduction. Journal of Materials Chemistry, 2011, 21, 14917.	6.7	78
63	Simultaneous reductionâ€“etching route to Pt/ZnSnO3hollow polyhedral architectures for methanol electrooxidation in alkaline media with superior performance. Chemical Communications, 2011, 47, 2447-2449.	2.2	18
64	Nitrogen-Doped Graphene: Efficient Growth, Structure, and Electronic Properties. Nano Letters, 2011, 11, 5401-5407.	4.5	685
65	Visualizing Individual Nitrogen Dopants in Monolayer Graphene. Science, 2011, 333, 999-1003.	6.0	774
66	Toward N-Doped Graphene via Solvothermal Synthesis. Chemistry of Materials, 2011, 23, 1188-1193.	3.2	984
67	Graphene and graphene-based nanomaterials: the promising materials for bright future of electroanalytical chemistry. Analyst, The, 2011, 136, 4631.	1.7	140
68	Graphene-based electrochemical energy conversion and storage: fuel cells, supercapacitors and lithium ion batteries. Physical Chemistry Chemical Physics, 2011, 13, 15384.	1.3	488
69	High-performance self-assembled graphene hydrogels prepared by chemical reduction of graphene oxide. New Carbon Materials, 2011, 26, 9-15.	2.9	283
70	Highly Durable N-Doped Graphene/CdS Nanocomposites with Enhanced Photocatalytic Hydrogen Evolution from Water under Visible Light Irradiation. Journal of Physical Chemistry C, 2011, 115, 11466-11473.	1.5	544
71	Oxidizing metal ions with graphene oxide: the in situ formation of magnetic nanoparticles on self-reduced graphene sheets for multifunctional applications. Chemical Communications, 2011, 47, 11689.	2.2	177
72	Doped Graphene Sheets As Anode Materials with Superhigh Rate and Large Capacity for Lithium Ion Batteries. ACS Nano, 2011, 5, 5463-5471.	7.3	1,904
73	Fullerene-Grafted Graphene for Efficient Bulk Heterojunction Polymer Photovoltaic Devices. Journal of Physical Chemistry Letters, 2011, 2, 1113-1118.	2.1	216
74	Grapheneâ€“Polypyrrole Nanocomposite as a Highly Efficient and Low Cost Electrically Switched Ion Exchanger for Removing ClO‹sub›4‹/sub›‹sup›â€“‹/sup› from Wastewater. ACS Applied Materials & Interfaces, 2011, 3, 3633-3637.	4.0	109
75	Assembly of chemically modified graphene: methods and applications. Journal of Materials Chemistry, 2011, 21, 3311-3323.	6.7	250
76	Co3O4 nanocrystals on graphene as a synergistic catalyst for oxygen reduction reaction. Nature Materials, 2011, 10, 780-786.	13.3	5,120
77	Nanostructured electrodes for lithium-ion and lithium-air batteries: the latest developments, challenges, and perspectives. Materials Science and Engineering Reports, 2011, 72, 203-252.	14.8	467
78	A highly stable TiB2-supported Pt catalyst for polymer electrolyte membrane fuel cells. Journal of Power Sources, 2011, 196, 7931-7936.	4.0	36

#	Article	IF	Citations
79	Nitrogen-doped ultrathin carbon nanofibers derived from electrospinning: Large-scale production, unique structure, and application as electrocatalysts for oxygen reduction. Journal of Power Sources, 2011, 196, 9862-9867.	4.0	119
80	Catalyst-free growth of large scale nitrogen-doped carbon spheres as efficient electrocatalysts for oxygen reduction in alkaline medium. Journal of Power Sources, 2011, 196, 9970-9974.	4.0	79
81	Hydrothermal synthesis of magnetic reduced graphene oxide sheets. Materials Research Bulletin, 2011, 46, 2077-2083.	2.7	52
82	Oxygen reduction reaction mechanism on nitrogen-doped graphene: A density functional theory study. Journal of Catalysis, 2011, 282, 183-190.	3.1	545
83	Synthesis and characterization of nitrogen-doped monolayer and multilayer graphene on TEM copper grids. Chemical Physics Letters, 2011, 516, 212-215.	1.2	17
84	One-pot hybrid physicalâ€“chemical vapor deposition for formation of carbonaceous thin film with catalytic activity for oxygen reduction. Electrochemistry Communications, 2011, 13, 1451-1454.	2.3	13
85	A facile route for preparation of non-noble CNF cathode catalysts in alkaline ethanol fuel cells. Electrochimica Acta, 2011, 56, 9186-9190.	2.6	50
86	Heat-treated multi-walled carbon nanotubes as durable supports for PEM fuel cell catalysts. Electrochimica Acta, 2011, 58, 736-742.	2.6	27
87	Electrochemical synthesis of reduced graphene sheetâ€“AuPd alloy nanoparticle composites for enzymatic biosensing. Biosensors and Bioelectronics, 2011, 29, 159-166.	5.3	208
88	Novel phosphorus-doped multiwalled nanotubes with high electrocatalytic activity for O2 reduction in alkaline medium. Catalysis Communications, 2011, 16, 35-38.	1.6	114
89	Graphene nanosheet: synthesis, molecular engineering, thin film, hybrids, and energy and analytical applications. Chemical Society Reviews, 2011, 40, 2644.	18.7	1,195
90	Polyelectrolyte Functionalized Carbon Nanotubes as Efficient Metal-free Electrocatalysts for Oxygen Reduction. Journal of the American Chemical Society, 2011, 133, 5182-5185.	6.6	678
91	Pyridinic N doped graphene: synthesis, electronic structure, and electrocatalytic property. Journal of Materials Chemistry, 2011, 21, 8038.	6.7	896
92	Nanosized N-doped graphene oxide with visible fluorescence in water for metal ion sensing. Journal of Materials Chemistry, 2011, 21, 17635.	6.7	52
93	Chemical doping of graphene. Journal of Materials Chemistry, 2011, 21, 3335-3345.	6.7	1,433
94	Mechanisms of Oxygen Reduction Reaction on Nitrogen-Doped Graphene for Fuel Cells. Journal of Physical Chemistry C, 2011, 115, 11170-11176.	1.5	1,235
95	Facile Construction of Manganese Oxide Doped Carbon Nanotube Catalysts with High Activity for Oxygen Reduction Reaction and Investigations into the Origin of their Activity Enhancement. ACS Applied Materials & Interfaces, 2011, 3, 2601-2606.	4.0	92
96	Easy-to-Operate and Low-Temperature Synthesis of Gram-Scale Nitrogen-Doped Graphene and Its Application as Cathode Catalyst in Microbial Fuel Cells. ACS Nano, 2011, 5, 9611-9618.	7.3	205

#	Article	IF	Citations
97	On the efficient calculation of the quantum properties (dipolar moments) of the molecular heteroatomic (nitrogen) polycyclic aromatic hydrocarbons. Theoretical Chemistry Accounts, 2011, 128, 223-229.	0.5	6
98	Electrochemical detection of dioxygen and hydrogen peroxide by hemin immobilized on chemically converted graphene. Journal of Electroanalytical Chemistry, 2011, 657, 34-38.	1.9	52
99	Studies on the electrochemical reduction of oxygen catalyzed by reduced graphene sheets in neutral media. Journal of Power Sources, 2011, 196, 1141-1144.	4.0	58
100	Carbon-nitrogen/graphene composite as metal-free electrocatalyst for the oxygen reduction reaction. Science Bulletin, 2011, 56, 3583-3589.	1.7	33
101	Nanocomposite prepared from in situ grafting of polypyrrole to aminobenzoylâ€functionalized multiwalled carbon nanotube and its electrochemical properties. Journal of Polymer Science Part A, 2011, 49, 2529-2537.	2.5	35
102	Tuning of Charge Densities in Graphene by Molecule Doping. Advanced Functional Materials, 2011, 21, 2687-2692.	7.8	99
103	Synthesis of Nitrogenâ€Doped Graphene Using Embedded Carbon and Nitrogen Sources. Advanced Materials, 2011, 23, 1020-1024.	11.1	735
104	Graphene: Piecing it Together. Advanced Materials, 2011, 23, 4471-4490.	11.1	127
105	Metalâ€“Air Batteries with High Energy Density: Liâ€“Air versus Znâ€“Air. Advanced Energy Materials, 2011, 1, 34-50.	10.2	1,906
110	Lowâ€Platinumâ€Content Quaternary PtCuCoNi Nanotubes with Markedly Enhanced Oxygen Reduction Activity. Angewandte Chemie - International Edition, 2011, 50, 2729-2733.	7.2	110
111	Grapheneâ€Based Carbon Nitride Nanosheets as Efficient Metalâ€Free Electrocatalysts for Oxygen Reduction Reactions. Angewandte Chemie - International Edition, 2011, 50, 5339-5343.	7.2	1,024
112	Asymmetrically Functionalized Graphene for Photodependent Diode Rectifying Behavior. Angewandte Chemie - International Edition, 2011, 50, 6575-6578.	7.2	46
113	Vertically Aligned BCN Nanotubes as Efficient Metalâ€Free Electrocatalysts for the Oxygen Reduction Reaction: A Synergetic Effect by Coâ€Doping with Boron and Nitrogen. Angewandte Chemie - International Edition, 2011, 50, 11756-11760.	7.2	725
114	Controlling oxygen functional species of graphene oxide for an electro-oxidation of L-ascorbic acid. Electrochemistry Communications, 2011, 13, 677-680.	2.3	32
115	Enhance the oxygen reduction activity of ruthenium selenide pyrite catalyst with nitrogen-doped carbon. International Journal of Hydrogen Energy, 2011, 36, 7381-7390.	3.8	8
116	Nitrogen doping effects on the structure of graphene. Applied Surface Science, 2011, 257, 9193-9198.	3.1	476
117	An overview of graphene in energy production and storage applications. Journal of Power Sources, 2011, 196, 4873-4885.	4.0	819
118	Artificial tailoring of carbon nanotube and its electrical properties under high-resolution transmission electron microscope. Microelectronic Engineering, 2011, 88, 2519-2523.	1.1	4

#	Article	IF	Citations
119	Electrochemical performance of carbon nanotube-supported cobalt phthalocyanine and its nitrogen-rich derivatives for oxygen reduction. Journal of Molecular Catalysis A, 2011, 335, 89-96.	4.8	71
120	Graphene based materials: Past, present and future. Progress in Materials Science, 2011, 56, 1178-1271.	16.0	3,063
121	Selective nitrogen doping in graphene: Enhanced catalytic activity for the oxygen reduction reaction. Physical Review B, 2011, 84, .	1.1	33
122	Techniques related to graphene biosensors and their potential combination with optical fibres. Materials Technology, 2011, 26, 173-183.	1.5	10
123	Electrochemical oxygen reduction on nitrogen-containing graphene. , 2012, , .		0
124	Control of graphene nanoribbon vacancies by Fe and N dopants: Implications for catalysis. Applied Physics Letters, 2012, 101, 064102.	1.5	37
125	Tuning the catalytic property of nitrogen-doped graphene for cathode oxygen reduction reaction. Physical Review B, 2012, 85, .	1.1	81
126	Nitrogen doping of graphene nanoflakes by thermal plasma as catalyst for oxygen reduction in Proton Exchange Membrane fuel cells. , 2012, , .		3
127	Synthesis of Nitrogen-Doped Graphene by Plasma-Enhanced Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2012, 51, 055101.	0.8	16
128	Thermal stability study of nitrogen functionalities in a graphene network. Journal of Physics Condensed Matter, 2012, 24, 235503.	0.7	55
129	Electronic structure, stability and non-linear optical properties of aza-fullerenes C60-2nN2n(n=1â€“12). AIP Advances, 2012, 2, 042111.	0.6	7
130	Different Characterization Techniques to Evaluate Graphene and Its Properties. , 2012, , 118-161.		0
131	Nitrogen-Doped Colloidal Graphene Quantum Dots and Their Size-Dependent Electrocatalytic Activity for the Oxygen Reduction Reaction. Journal of the American Chemical Society, 2012, 134, 18932-18935.	6.6	545
132	Graphene-based materials for energy applications. MRS Bulletin, 2012, 37, 1265-1272.	1.7	140
133	Nitrogen-Doped Graphene-Rich Catalysts Derived from Heteroatom Polymers for Oxygen Reduction in Nonaqueous Lithiumâ€“O‹sub›2‹/sub› Battery Cathodes. ACS Nano, 2012, 6, 9764-9776.	7.3	486
134	Defects and doping and their role in functionalizing graphene. MRS Bulletin, 2012, 37, 1187-1194.	1.7	61
135	Charge carrier exchange at chemically modified graphene edges: a density functional theory study. Journal of Materials Chemistry, 2012, 22, 8321.	6.7	22
136	Charge-Selective Surface-Enhanced Raman Scattering Using Silver and Gold Nanoparticles Deposited on Siliconâ€“Carbon Coreâ€“Shell Nanowires. ACS Nano, 2012, 6, 2459-2470.	7.3	42

#	Article	IF	Citations
137	Epitaxial Graphene on 4H-SiC(0001) Grown under Nitrogen Flux: Evidence of Low Nitrogen Doping and High Charge Transfer. ACS Nano, 2012, 6, 10893-10900.	7.3	95
138	Graphene for energy conversion and storage in fuel cells and supercapacitors. Nano Energy, 2012, 1, 534-551.	8.2	628
139	Atomistic Description of Electron Beam Damage in Nitrogen-Doped Graphene and Single-Walled Carbon Nanotubes. ACS Nano, 2012, 6, 8837-8846.	7.3	119
140	Biomedical Applications of Graphene. Theranostics, 2012, 2, 283-294.	4.6	827
141	Growth and electronic structure of nitrogen-doped graphene on Ni(111). Physical Review B, 2012, 86, .	1.1	77
142	Graphyne As a Promising Metal-Free Electrocatalyst for Oxygen Reduction Reactions in Acidic Fuel Cells: A DFT Study. Journal of Physical Chemistry C, 2012, 116, 20472-20479.	1.5	105
143	The Magic of Electrocatalysts. Journal of Physical Chemistry Letters, 2012, 3, 3404-3404.	2.1	4
144	Crystal facets controlled synthesis of graphene@TiO₂nanocomposites by a one-pot hydrothermal process. CrystEngComm, 2012, 14, 1687-1692.	1.3	109
145	Flexible FET-Type VEGF Aptasensor Based on Nitrogen-Doped Graphene Converted from Conducting Polymer. ACS Nano, 2012, 6, 1486-1493.	7.3	232
146	Phononic band gap engineering in graphene. Journal of Applied Physics, 2012, 112, .	1.1	13
147	Modulation-doped growth of mosaic graphene with single-crystalline pâ€“n junctions for efficient photocurrent generation. Nature Communications, 2012, 3, 1280.	5.8	97
148	Ordered Mesoporous Carbon Nitrides with Graphitic Frameworks as Metal-Free, Highly Durable, Methanol-Tolerant Oxygen Reduction Catalysts in an Acidic Medium. Langmuir, 2012, 28, 991-996.	1.6	138
149	Preparation of phosphorus-doped carbon nanospheres and their electrocatalytic performance for O2 reduction. Journal of Natural Gas Chemistry, 2012, 21, 257-264.	1.8	51
150	Co/CoO Nanoparticles Assembled on Graphene for Electrochemical Reduction of Oxygen. Angewandte Chemie - International Edition, 2012, 51, 11770-11773.	7.2	391
151	Carbon nanomaterials as metal-free catalysts in next generation fuel cells. Nano Energy, 2012, 1, 514-517.	8.2	198
155	A Versatile, Ultralight, Nitrogenâ€Doped Graphene Framework. Angewandte Chemie - International Edition, 2012, 51, 11371-11375.	7.2	731
156	Nitrogenâ€Doped Graphene Foams as Metalâ€Free Counter Electrodes in Highâ€Performance Dyeâ€Sensitized Solar Cells. Angewandte Chemie - International Edition, 2012, 51, 12124-12127.	7.2	581
157	DNAâ€Directed Growth of Pd Nanocrystals on Carbon Nanotubes towards Efficient Oxygen Reduction Reactions. Chemistry - A European Journal, 2012, 18, 15693-15698.	1.7	51

#	Article	IF	Citations
158	Thermal conductivity of silicon and carbon hybrid monolayers: a molecular dynamics study. Journal of Molecular Modeling, 2012, 18, 4811-4818.	0.8	22
159	Facile and green synthesis of Co3O4 nanoplates/graphene nanosheets composite for supercapacitor. Journal of Solid State Electrochemistry, 2012, 16, 3593-3602.	1.2	82
160	Quantification of the Surface Diffusion of Tripodal Binding Motifs on Graphene Using Scanning Electrochemical Microscopy. Journal of the American Chemical Society, 2012, 134, 6224-6236.	6.6	56
161	Density Functional Theory Study of Niâ€“N_x/C Electrocatalyst for Oxygen Reduction in Alkaline and Acidic Media. Journal of Physical Chemistry C, 2012, 116, 17378-17383.	1.5	120
162	Nitrogen-doped carbon materials produced from hydrothermally treated tannin. Carbon, 2012, 50, 5411-5420.	5.4	127
163	Wet chemical synthesis of nitrogen-doped graphene towards oxygen reduction electrocatalysts without high-temperature pyrolysis. Journal of Materials Chemistry, 2012, 22, 6575.	6.7	274
164	Polybenzimidazole mediated N-doping along the inner and outer surfaces of a carbon nanofiber and its oxygen reduction properties. Journal of Materials Chemistry, 2012, 22, 23668.	6.7	16
165	One dimensional Ag/Au/AgCl nanocomposites stemmed from Ag nanowires for electrocatalysis of oxygen reduction. Journal of Materials Chemistry, 2012, 22, 15285.	6.7	18
166	Poly(bis-2,6-diaminopyridinesulfoxide) as an active and stable electrocatalyst for oxygen reduction reaction. Journal of Materials Chemistry, 2012, 22, 12263.	6.7	16
167	Oxygen molecule dissociation on carbon nanostructures with different types of nitrogen doping. Nanoscale, 2012, 4, 1184-1189.	2.8	220
168	A facile and simple phase-inversion method for the fabrication of Ag nanoparticles/multi-walled carbon nanotubes/poly(vinylidene fluoride) nanocomposite with high-efficiency of electrocatalytic property. RSC Advances, 2012, 2, 1516-1523.	1.7	8
169	Oxygen-enriched carbon material for catalyzing oxygen reduction towards hybrid electrolyte Li-air battery. Journal of Materials Chemistry, 2012, 22, 21051.	6.7	60
170	Oxygen Reduction on Metal-Free Nitrogen-Doped Carbon Nanowall Electrodes. Journal of the Electrochemical Society, 2012, 159, F733-F742.	1.3	52
171	Phosphorus-Doped Ordered Mesoporous Carbons with Different Lengths as Efficient Metal-Free Electrocatalysts for Oxygen Reduction Reaction in Alkaline Media. Journal of the American Chemical Society, 2012, 134, 16127-16130.	6.6	866
172	Controllable gallium melt-assisted interfacial graphene growth on silicon carbide. Diamond and Related Materials, 2012, 24, 34-38.	1.8	7
173	Tunable Band Gaps and p-Type Transport Properties of Boron-Doped Graphenes by Controllable Ion Doping Using Reactive Microwave Plasma. ACS Nano, 2012, 6, 1970-1978.	7.3	244
174	Vertically Aligned Carbon Nanotube Arrays Co-doped with Phosphorus and Nitrogen as Efficient Metal-Free Electrocatalysts for Oxygen Reduction. Journal of Physical Chemistry Letters, 2012, 3, 2863-2870.	2.1	294
175	Activity Modulated Low Platium Content Oxygen Reduction Electrocatalysts Prepared by Inducing Nano-Order Dislocations on Carbon Nanofiber through N₂-Doping. Journal of Physical Chemistry C, 2012, 116, 14754-14763.	1.5	22

#	Article	IF	Citations
176	Graphene for energy harvesting/storage devices and printed electronics. Particuology, 2012, 10, 1-8.	2.0	113
177	The production of nitrogen-doped graphene from mixed amine plus ethanol flames. Thin Solid Films, 2012, 520, 6850-6855.	0.8	36
178	Nitrogen-Doped Graphene Quantum Dots with Oxygen-Rich Functional Groups. Journal of the American Chemical Society, 2012, 134, 15-18.	6.6	1,832
179	The role of defects and doping in 2D graphene sheets and 1D nanoribbons. Reports on Progress in Physics, 2012, 75, 062501.	8.1	475
180	Graphene-based materials for catalysis. Catalysis Science and Technology, 2012, 2, 54-75.	2.1	882
181	Raman Spectroscopy of Boron-Doped Single-Layer Graphene. ACS Nano, 2012, 6, 6293-6300.	7.3	245
182	Graphene quantum dots: an emerging material for energy-related applications and beyond. Energy and Environmental Science, 2012, 5, 8869.	15.6	790
183	Stability, Electronic and Magnetic Properties of In-Plane Defects in Graphene: A First-Principles Study. Journal of Physical Chemistry C, 2012, 116, 8161-8166.	1.5	187
184	Electrochemical bisphenol A sensor based on N-doped graphene sheets. Analytica Chimica Acta, 2012, 711, 24-28.	2.6	200
185	Oxygen reduction on Pd nanoparticle/multi-walled carbon nanotube composites. Journal of Electroanalytical Chemistry, 2012, 666, 67-75.	1.9	47
186	C/TiO2 nanohybrids co-doped by N and their enhanced photocatalytic ability. Journal of Solid State Chemistry, 2012, 192, 305-311.	1.4	22
187	Theoretical approaches to graphene and graphene-based materials. Nano Today, 2012, 7, 180-200.	6.2	122
188	New functionalized graphene sheets for enhanced oxygen reduction as metal-free cathode electrocatalysts. Journal of Power Sources, 2012, 218, 168-173.	4.0	87
189	Nitrogen doped large mesoporous carbon for oxygen reduction electrocatalyst using DNA as carbon and nitrogen precursor. Electrochemistry Communications, 2012, 21, 5-8.	2.3	38
190	A facile two-step electroreductive synthesis of anthraquinone/graphene nanocomposites as efficient electrocatalyst for O2 reduction in neutral medium. Electrochemistry Communications, 2012, 22, 69-72.	2.3	34
191	Effect of Microstructure of Nitrogen-Doped Graphene on Oxygen Reduction Activity in Fuel Cells. Langmuir, 2012, 28, 7542-7550.	1.6	279
192	Macroporous and Monolithic Anode Based on Polyaniline Hybridized Three-Dimensional Graphene for High-Performance Microbial Fuel Cells. ACS Nano, 2012, 6, 2394-2400.	7.3	520
193	NewlyâEDesigned Complex Ternary Pt/PdCu Nanoboxes Anchored on ThreeâEDimensional Graphene Framework for Highly Efficient Ethanol Oxidation. Advanced Materials, 2012, 24, 5493-5498.	11.1	301

#	Article	IF	Citations
194	Graphene: An Emerging Electronic Material. Advanced Materials, 2012, 24, 5782-5825.	11.1	718
195	Oriented Graphene Nanoribbon Yarn and Sheet from Aligned Multiâ€Walled Carbon Nanotube Sheets. Advanced Materials, 2012, 24, 5695-5701.	11.1	67
196	Crumpled Nitrogenâ€Doped Graphene Nanosheets with Ultrahigh Pore Volume for Highâ€Performance Supercapacitor. Advanced Materials, 2012, 24, 5610-5616.	11.1	880
197	New Routes to Graphene, Graphene Oxide and Their Related Applications. Advanced Materials, 2012, 24, 4924-4955.	11.1	329
199	Synthesis of Monolayerâ€Patched Graphene from Glucose. Angewandte Chemie - International Edition, 2012, 51, 9689-9692.	7.2	377
200	Nanostructured Metalâ€Free Electrochemical Catalysts for Highly Efficient Oxygen Reduction. Small, 2012, 8, 3550-3566.	5.2	559
201	Graphene nanostructures toward clean energy technology applications. Wiley Interdisciplinary Reviews: Energy and Environment, 2012, 1, 317-336.	1.9	30
202	Electrode-assisted catalytic water oxidation by a flavin derivative. Nature Chemistry, 2012, 4, 794-801.	6.6	153
203	Graphene based catalysts. Energy and Environmental Science, 2012, 5, 8848.	15.6	726
204	Electrochemically Active Nitrogen-Enriched Nanocarbons with Well-Defined Morphology Synthesized by Pyrolysis of Self-Assembled Block Copolymer. Journal of the American Chemical Society, 2012, 134, 14846-14857.	6.6	354
205	Synthesis of boron doped graphene for oxygen reduction reaction in fuel cells. Journal of Materials Chemistry, 2012, 22, 390-395.	6.7	790
206	Graphene exfoliation in organic solvents and switching solubility in aqueous media with the aid of amphiphilic block copolymers. Journal of Materials Chemistry, 2012, 22, 21507.	6.7	77
208	Pt Nanoparticle-Dispersed Graphene-Wrapped MWNT Composites As Oxygen Reduction Reaction Electrocatalyst in Proton Exchange Membrane Fuel Cell. ACS Applied Materials & Interfaces, 2012, 4, 3805-3810.	4.0	48
209	Graphene enriched with pyrrolic coordination of the doped nitrogen as an efficient metal-free electrocatalyst for oxygen reduction. Journal of Materials Chemistry, 2012, 22, 23506.	6.7	159
211	Instantaneous one-pot synthesis of Feâ€“N-modified graphene as an efficient electrocatalyst for the oxygen reduction reaction in acidic solutions. Chemical Communications, 2012, 48, 10213.	2.2	106
212	Synthesis and upconversion luminescence of N-doped graphene quantum dots. Applied Physics Letters, 2012, 101, .	1.5	173
213	An efficient oxygen reduction electrocatalyst from graphene by simultaneously generating pores and nitrogen doped active sites. Journal of Materials Chemistry, 2012, 22, 23799.	6.7	136
214	Oxygen reduction reactions on pure and nitrogen-doped graphene: a first-principles modeling. Nanoscale, 2012, 4, 417-420.	2.8	103

#	Article	IF	Citations
215	Carbon-based Catalyst Support in Fuel Cell Applications. , 2012, , 549-581.		7
216	Coarse-Grained Molecular Simulation of Self-Assembly for Nonionic Surfactants on Graphene Nanostructures. Journal of Physical Chemistry B, 2012, 116, 12048-12056.	1.2	49
217	Highly efficient supported PtFe cathode electrocatalysts prepared by homogeneous deposition for proton exchange membrane fuel cell. International Journal of Hydrogen Energy, 2012, 37, 13681-13688.	3.8	27
218	Nitrogen-doped carbon xerogel as high active oxygen reduction catalyst for direct methanol alkaline fuel cell. International Journal of Hydrogen Energy, 2012, 37, 19065-19072.	3.8	37
219	Graphene nanosheetâ€“CNT hybrid nanostructure electrode for a proton exchange membrane fuel cell. International Journal of Hydrogen Energy, 2012, 37, 18989-18995.	3.8	34
220	Novel synthesis of N-doped porous carbons from collagen for electrocatalytic production of H2O2. Applied Catalysis B: Environmental, 2012, 126, 208-214.	10.8	102
221	Study on the oxygen adsorption property of nitrogen-containing metal-free carbon-based cathode catalysts for oxygen reduction reaction. Electrochimica Acta, 2012, 82, 291-295.	2.6	17
222	N-doped graphene/carbon composite as non-precious metal electrocatalyst for oxygen reduction reaction. Electrochimica Acta, 2012, 81, 313-320.	2.6	97
223	Efficient and clean synthesis of graphene supported platinum nanoclusters and its application in direct methanol fuel cell. Electrochimica Acta, 2012, 85, 84-89.	2.6	58
224	On the Origin of Oxygen Reduction Reaction at Nitrogen-Doped Carbon Nanotubes: A Computational Study. Journal of Physical Chemistry C, 2012, 116, 632-636.	1.5	47
225	Easy synthesis of nitrogen-doped grapheneâ€“silver nanoparticle hybrids by thermal treatment of graphite oxide with glycine and silver nitrate. Carbon, 2012, 50, 5148-5155.	5.4	39
226	Catalyst-free synthesis of iodine-doped graphenevia a facile thermal annealing process and its use for electrocatalytic oxygen reduction in an alkaline medium. Chemical Communications, 2012, 48, 1027-1029.	2.2	336
227	First-principles study of the oxygen adsorption and dissociation on graphene and nitrogen doped graphene for Li-air batteries. Journal of Applied Physics, 2012, 112, .	1.1	133
228	Reactivity of Monolayer Chemical Vapor Deposited Graphene Imperfections Studied Using Scanning Electrochemical Microscopy. ACS Nano, 2012, 6, 3070-3079.	7.3	115
229	FePt Nanoparticles Assembled on Graphene as Enhanced Catalyst for Oxygen Reduction Reaction. Journal of the American Chemical Society, 2012, 134, 2492-2495.	6.6	626
230	Metal-free selenium doped carbon nanotube/graphene networks as a synergistically improved cathode catalyst for oxygen reduction reaction. Nanoscale, 2012, 4, 6455.	2.8	212
231	Structural Selectivity of CO Oxidation on Fe/N/C Catalysts. Journal of Physical Chemistry C, 2012, 116, 17572-17579.	1.5	54
232	Polylithiated (OLi2) functionalized graphane as a potential hydrogen storage material. Applied Physics Letters, 2012, 101, 243902.	1.5	11

#	Article	IF	Citations
233	Novel preparation of nitrogen-doped graphene in various forms with aqueous ammonia under mild conditions. RSC Advances, 2012, 2, 11249.	1.7	54
234	Bifunctional fluorescent carbon nanodots: green synthesis via soy milk and application as metal-free electrocatalysts for oxygen reduction. Chemical Communications, 2012, 48, 9367.	2.2	630
235	Graphene-TiO2 Composite Photocatalyst with Enhanced Photocatalytic Performance. Chinese Journal of Catalysis, 2012, 33, 777-782.	6.9	28
236	Nitrogen-Doped Graphene and Its Iron-Based Composite As Efficient Electrocatalysts for Oxygen Reduction Reaction. ACS Nano, 2012, 6, 9541-9550.	7.3	640
237	Nitrogen-Doped Graphene/ZnSe Nanocomposites: Hydrothermal Synthesis and Their Enhanced Electrochemical and Photocatalytic Activities. ACS Nano, 2012, 6, 712-719.	7.3	260
238	Potential dependent and structural selectivity of the oxygen reduction reaction on nitrogen-doped carbon nanotubes: a density functional theory study. Physical Chemistry Chemical Physics, 2012, 14, 11715.	1.3	52
239	Sulfated Graphene Oxide as a Hole-Extraction Layer in High-Performance Polymer Solar Cells. Journal of Physical Chemistry Letters, 2012, 3, 1928-1933.	2.1	151
240	Facile Synthesis of Surfactant-Free Au Cluster/Graphene Hybrids for High-Performance Oxygen Reduction Reaction. ACS Nano, 2012, 6, 8288-8297.	7.3	578
241	Atomic-scale characterization of nitrogen-doped graphite: Effects of dopant nitrogen on the local electronic structure of the surrounding carbon atoms. Physical Review B, 2012, 86, .	1.1	247
242	Production of Nitrogen-Doped Graphene by Low-Energy Nitrogen Implantation. Journal of Physical Chemistry C, 2012, 116, 5062-5066.	1.5	96
243	Limitations of CVD graphene when utilised towards the sensing of heavy metals. RSC Advances, 2012, 2, 5385.	1.7	21
244	Can Graphene Oxide Cause Damage to Eyesight?. Chemical Research in Toxicology, 2012, 25, 1265-1270.	1.7	104
245	CVDgraphenevs. highly ordered pyrolytic graphite for use in electroanalytical sensing. Analyst, The, 2012, 137, 833-839.	1.7	33
246	One-pot, low-temperature synthesis of branched platinum nanowires/reduced graphene oxide (BPtNW/RGO) hybrids for fuel cells. Journal of Materials Chemistry, 2012, 22, 7791.	6.7	76
247	Nitrogen-doped graphene: beyond single substitution and enhanced molecular sensing. Scientific Reports, 2012, 2, 586.	1.6	563
248	Ternary Pd2/PtFe networks supported by 3D graphene for efficient and durable electrooxidation of formic acid. Chemical Communications, 2012, 48, 11865.	2.2	52
249	Self-Supporting Oxygen Reduction Electrocatalysts Made from a Nitrogen-Rich Network Polymer. Journal of the American Chemical Society, 2012, 134, 19528-19531.	6.6	370
250	Electroactive and biocompatible hydroxyl- functionalized graphene by ball milling. Journal of Materials Chemistry, 2012, 22, 8367.	6.7	90

#	Article	IF	Citations
251	Metal-free nitrogen-doped hollow carbon spheres synthesized by thermal treatment of poly(o-phenylenediamine) for oxygen reduction reaction in direct methanol fuel cell applications. Journal of Materials Chemistry, 2012, 22, 10911.	6.7	106
252	Synthesis of Nanometer Size Single Layer Grapheneby Moderate Electrochemical Exfoliation. Transactions of the Materials Research Society of Japan, 2012, 37, 209-212.	0.2	2
253	The Role of Nanotechnology in Automotive Industries. , 0, , .		17
254	Solvothermal Synthesis of Nitrogen-Containing Graphene for Electrochemical Oxygen Reduction in Acid Media. E-Journal of Surface Science and Nanotechnology, 2012, 10, 29-32.	0.1	18
255	Chemical Approaches toward Grapheneâ€Based Nanomaterials and their Applications in Energyâ€Related Areas. Small, 2012, 8, 630-646.	5.2	368
256	Carbon Nanomaterials for Advanced Energy Conversion and Storage. Small, 2012, 8, 1130-1166.	5.2	1,304
257	Review on Recent Progress in Nitrogen-Doped Graphene: Synthesis, Characterization, and Its Potential Applications. ACS Catalysis, 2012, 2, 781-794.	5.5	3,171
258	Nitrogen-Doped Graphene Nanosheets as Metal-Free Catalysts for Aerobic Selective Oxidation of Benzylic Alcohols. ACS Catalysis, 2012, 2, 622-631.	5.5	384
259	Sulfur-Doped Graphene as an Efficient Metal-free Cathode Catalyst for Oxygen Reduction. ACS Nano, 2012, 6, 205-211.	7.3	1,783
260	Activity, Selectivity, and Anion-Exchange Membrane Fuel Cell Performance of Virtually Metal-Free Nitrogen-Doped Carbon Nanotube Electrodes for Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2012, 116, 4340-4346.	1.5	106
261	Electrocatalysis for Polymer Electrolyte Fuel Cells: Recent Achievements and Future Challenges. ACS Catalysis, 2012, 2, 864-890.	5.5	728
262	The electrochemistry of CVD graphene: progress and prospects. Physical Chemistry Chemical Physics, 2012, 14, 8264.	1.3	148
263	Functionalization of Graphene Oxide with Polyhedral Oligomeric Silsesquioxane (POSS) for Multifunctional Applications. Journal of Physical Chemistry Letters, 2012, 3, 1607-1612.	2.1	234
264	Highly Active and Durable Coreâ€“Corona Structured Bifunctional Catalyst for Rechargeable Metalâ€“Air Battery Application. Nano Letters, 2012, 12, 1946-1952.	4.5	392
265	Facile preparation of nitrogen-doped graphene as a metal-free catalyst for oxygen reduction reaction. Physical Chemistry Chemical Physics, 2012, 14, 3381.	1.3	261
266	Graphene-Quantum-Dot Assembled Nanotubes: A New Platform for Efficient Raman Enhancement. ACS Nano, 2012, 6, 2237-2244.	7.3	166
267	Interplay between nitrogen dopants and native point defects in graphene. Physical Review B, 2012, 85, .	1.1	133
268	Significant enhancement of blue emission and electrical conductivity of N-doped graphene. Journal of Materials Chemistry, 2012, 22, 17992.	6.7	182

#	Article	IF	Citations
269	Exploration of the active center structure of nitrogen-doped graphene-based catalysts for oxygen reduction reaction. Energy and Environmental Science, 2012, 5, 7936.	15.6	2,089
270	Graphene: The Game Changer?. ACS Nano, 2012, 6, 5739-5741.	7.3	11
271	Electrodynamically Sprayed Thin Films of Aqueous Dispersible Graphene Nanosheets: Highly Efficient Cathodes for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2012, 4, 3500-3507.	4.0	85
272	N-Doped graphene nanosheets for Liâ€“air fuel cells under acidic conditions. Energy and Environmental Science, 2012, 5, 6928.	15.6	145
273	Functional Carbon Materials From Ionic Liquid Precursors. Macromolecular Chemistry and Physics, 2012, 213, 1132-1145.	1.1	99
274	Block Copolymer Templating as a Path to Porous Nanostructured Carbons with Highly Accessible Nitrogens for Enhanced (Electro)chemical Performance. Macromolecular Chemistry and Physics, 2012, 213, 1078-1090.	1.1	73
275	Nanoporous nitrogen doped carbon modified graphene as electrocatalyst for oxygen reduction reaction. Journal of Materials Chemistry, 2012, 22, 12810.	6.7	138
276	Graphene electrochemistry: fundamental concepts through to prominent applications. Chemical Society Reviews, 2012, 41, 6944.	18.7	540
277	Novel Platinumâ€“Cobalt Alloy Nanoparticles Dispersed on Nitrogenâ€Doped Graphene as a Cathode Electrocatalyst for PEMFC Applications. Advanced Functional Materials, 2012, 22, 3519-3526.	7.8	234
278	Revisiting the Structure of Graphene Oxide for Preparing Newâ€Style Grapheneâ€Based Ultraviolet Absorbers. Advanced Functional Materials, 2012, 22, 2542-2549.	7.8	41
279	Efficient Synthesis of Heteroatom (N or S)â€Doped Graphene Based on Ultrathin Graphene Oxideâ€Porous Silica Sheets for Oxygen Reduction Reactions. Advanced Functional Materials, 2012, 22, 3634-3640.	7.8	1,180
280	Facile Synthesis of Manganeseâ€Oxideâ€Containing Mesoporous Nitrogenâ€Doped Carbon for Efficient Oxygen Reduction. Advanced Functional Materials, 2012, 22, 4584-4591.	7.8	306
281	Hole and Electron Extraction Layers Based on Graphene Oxide Derivatives for Highâ€Performance Bulk Heterojunction Solar Cells. Advanced Materials, 2012, 24, 2228-2233.	11.1	279
282	Grapheneâ€Based Materials for Energy Conversion. Advanced Materials, 2012, 24, 4203-4210.	11.1	303
283	Recent Progress in Nonâ€Precious Catalysts for Metalâ€Air Batteries. Advanced Energy Materials, 2012, 2, 816-829.	10.2	652
284	Facile Synthesis of Nitrogenâ€Doped Graphene via Pyrolysis of Graphene Oxide and Urea, and its Electrocatalytic Activity toward the Oxygenâ€Reduction Reaction. Advanced Energy Materials, 2012, 2, 884-888.	10.2	840
287	Facile Oxygen Reduction on a Threeâ€Dimensionally Ordered Macroporous Graphitic C₃N₄/Carbon Composite Electrocatalyst. Angewandte Chemie - International Edition, 2012, 51, 3892-3896.	7.2	588
288	BCN Graphene as Efficient Metalâ€Free Electrocatalyst for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2012, 51, 4209-4212.	7.2	1,119

#	Article	IF	Citations
289	Can Commonly Used Hydrazine Produce nâ€Type Graphene?. Chemistry - A European Journal, 2012, 18, 7665-7670.	1.7	39
290	Plasma Synthesis of Surfaceâ€Functionalized Grapheneâ€Based Platinum Nanoparticles: Highly Active Electrocatalysts as Electrodes for Direct Methanol Fuel Cells. ChemPlusChem, 2012, 77, 432-436.	1.3	30
291	Cuprous oxide nanoparticles dispersed on reduced graphene oxide as an efficient electrocatalyst for oxygen reduction reaction. Chemical Communications, 2012, 48, 1892.	2.2	190
292	Low Temperature Growth of Highly Nitrogen-Doped Single Crystal Graphene Arrays by Chemical Vapor Deposition. Journal of the American Chemical Society, 2012, 134, 11060-11063.	6.6	287
293	Enhancement of quaternary nitrogen doping of graphene oxide via chemical reduction prior to thermal annealing and an investigation of its electrochemical properties. Journal of Materials Chemistry, 2012, 22, 14756.	6.7	58
294	Grapheneâ€“Niâ€“Î±-MnO2 and â€“Cuâ€“Î±-MnO2 nanowire blends as highly active non-precious metal catalysts for the oxygen reduction reaction. Chemical Communications, 2012, 48, 7931.	2.2	84
295	High electrochemical activity from hybrid materials of electrospun tungsten oxide nanofibers and carbon black. Journal of Materials Science, 2012, 47, 6607-6613.	1.7	13
296	A molecular understanding of the gas-phase reduction and doping of graphene oxide. Nano Research, 2012, 5, 361-368.	5.8	16
297	Thermally reduced graphite oxide as positive electrode in Vanadium Redox Flow Batteries. Carbon, 2012, 50, 828-834.	5.4	129
298	Anodic chlorine/nitrogen co-doping of reduced graphene oxide films at room temperature. Carbon, 2012, 50, 3333-3341.	5.4	44
299	A simple method to synthesize continuous large area nitrogen-doped graphene. Carbon, 2012, 50, 4476-4482.	5.4	139
300	Enhanced methanol oxidation activity of Pt catalyst supported on the phosphorus-doped multiwalled carbon nanotubes in alkaline medium. Catalysis Communications, 2012, 22, 34-38.	1.6	32
301	A powerful approach to fabricate nitrogen-doped graphene sheets with high specific surface area. Electrochemistry Communications, 2012, 14, 39-42.	2.3	93
302	Enhanced electrocatalytic activity of nitrogen-doped graphene for the reduction of nitro explosives. Electrochemistry Communications, 2012, 16, 30-33.	2.3	36
303	Nitrogen-doped graphene nanosheets as cathode materials with excellent electrocatalytic activity for high capacity lithium-oxygen batteries. Electrochemistry Communications, 2012, 18, 12-15.	2.3	248
304	Cyanamide derived thin film on carbon nanotubes as metal free oxygen reduction reaction electrocatalyst. Electrochimica Acta, 2012, 59, 8-13.	2.6	45
305	Indirect contribution of transition metal towards oxygen reduction reaction activity in iron phthalocyanine-based carbon catalysts for polymer electrolyte fuel cells. Electrochimica Acta, 2012, 74, 254-259.	2.6	59
306	Manganese oxideâ€“graphene composite as an efficient catalyst for 4-electron reduction of oxygen in alkaline media. Electrochimica Acta, 2012, 75, 305-310.	2.6	40

#	Article	IF	Citations
307	Electrochemical sensor based on nitrogen doped graphene: Simultaneous determination of ascorbic acid, dopamine and uric acid. Biosensors and Bioelectronics, 2012, 34, 125-131.	5.3	686
308	Nitrogen-doped hollow macroporous carbon spheres with high electrocatalytic activity for oxygen reduction. Materials Letters, 2012, 68, 453-456.	1.3	33
309	Towards new graphene materials: Doped graphene sheets and nanoribbons. Materials Letters, 2012, 78, 209-218.	1.3	196
310	Catalytic activity of grapheneâ€“cobalt hydroxide composite for oxygen reduction reaction in alkaline media. Journal of Power Sources, 2012, 198, 122-126.	4.0	94
311	Support materials for PEMFC and DMFC electrocatalystsâ€”A review. Journal of Power Sources, 2012, 208, 96-119.	4.0	1,055
312	Iron- and nitrogen-functionalized graphene as a non-precious metal catalyst for enhanced oxygen reduction in an air-cathode microbial fuel cell. Journal of Power Sources, 2012, 213, 265-269.	4.0	175
313	Nitrogen doping and curvature effects on thermal conductivity of graphene: A non-equilibrium molecular dynamics study. Solid State Communications, 2012, 152, 261-264.	0.9	97
314	Spectroscopic characterization of Cobaltâ€“Phthalocyanine electrocatalysts for fuel cell applications. Solid State Ionics, 2012, 216, 78-82.	1.3	29
315	Enhanced gas sensor based on nitrogen-vacancy graphene nanoribbons. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 559-562.	0.9	49
316	Self-assembly to monolayer graphene film with high electrical conductivity. Journal of Energy Chemistry, 2013, 22, 52-57.	7.1	18
317	Influence of pyrolysis temperature on oxygen reduction reaction activity of carbon-incorporating iron nitride/nitrogen-doped graphene nanosheets catalyst. International Journal of Hydrogen Energy, 2013, 38, 3956-3962.	3.8	32
318	MFe₂O₄ and MFe@Oxide Coreâ€“Shell Nanoparticles Anchored on Nâ€Doped Graphene Sheets for Synergistically Enhancing Lithium Storage Performance and Electrocatalytic Activity for Oxygen Reduction Reactions. Particle and Particle Systems Characterization, 2013, 30, 893-904.	1.2	25
319	Oxygen electrocatalysis in chemical energy conversion and storage technologies. Current Applied Physics, 2013, 13, 309-321.	1.1	167
320	Original design of nitrogen-doped carbon aerogels from sustainable precursors: application as metal-free oxygen reduction catalysts. Green Chemistry, 2013, 15, 2514.	4.6	134
321	Synthesis and electrochemical applications of nitrogen-doped carbon nanomaterials. Nanotechnology Reviews, 2013, 2, 615-635.	2.6	58
322	Boron-doped electrocatalysts derived from carbon dioxide. Journal of Materials Chemistry A, 2013, 1, 8665.	5.2	38
323	Li diffusion through doped and defected graphene. Physical Chemistry Chemical Physics, 2013, 15, 15128.	1.3	86
324	Nitrogen-doped graphene as low-cost counter electrode for high-efficiency dye-sensitized solar cells. Electrochimica Acta, 2013, 92, 269-275.	2.6	95

#	Article	IF	Citations
325	Synthesis of Phosphorusâ€Doped Graphene and its Multifunctional Applications for Oxygen Reduction Reaction and Lithium Ion Batteries. Advanced Materials, 2013, 25, 4932-4937.	11.1	915
326	Nitrogen-Doped Graphene Sheets Grown by Chemical Vapor Deposition: Synthesis and Influence of Nitrogen Impurities on Carrier Transport. ACS Nano, 2013, 7, 6522-6532.	7.3	264
327	Separation of graphene oxide by density gradient centrifugation and study on their morphology-dependent electrochemical properties. Journal of Electroanalytical Chemistry, 2013, 703, 135-145.	1.9	21
328	Can Boron and Nitrogen Co-doping Improve Oxygen Reduction Reaction Activity of Carbon Nanotubes?. Journal of the American Chemical Society, 2013, 135, 1201-1204.	6.6	855
329	Annealing Effects after Nitrogen Ion Casting on Monolayer and Multilayer Graphene. Journal of Physical Chemistry C, 2013, 117, 2129-2134.	1.5	31
330	Polyoxometalate-mediated green synthesis of a 2D silver nanonet/graphene nanohybrid as a synergistic catalyst for the oxygen reduction reaction. Journal of Materials Chemistry A, 2013, 1, 11961.	5.2	75
331	Graphene Coupled with Nanocrystals: Opportunities and Challenges for Energy and Sensing Applications. Journal of Physical Chemistry Letters, 2013, 4, 2441-2454.	2.1	80
332	Electrolytic graphene oxide and its electrochemical properties. Journal of Electroanalytical Chemistry, 2013, 704, 233-241.	1.9	29
333	Nitrogen-doped ordered mesoporous carbons synthesized from honey as metal-free catalyst for oxygen reduction reaction. Electrochimica Acta, 2013, 108, 10-16.	2.6	73
334	Applications of Nanomaterials in Sensors and Diagnostics. Springer Series on Chemical Sensors and Biosensors, 2013, , .	0.5	37
335	Platinum-graphene counter electrodes for dye-sensitized solar cells. Journal of Applied Physics, 2013, 114, .	1.1	25
336	Preparation of Graphene Films and their Applications in Dye-Sensitized Solar Cells. Key Engineering Materials, 0, 538, 332-336.	0.4	1
337	Facile synthesis of hybrid graphene and carbon nanotubes as a metal-free electrocatalyst with active dual interfaces for efficient oxygen reduction reaction. Journal of Materials Chemistry A, 2013, 1, 9603.	5.2	40
338	Transition Metal (Mn, Fe, Co, Ni)â€Doped Graphene Hybrids for Electrocatalysis. Chemistry - an Asian Journal, 2013, 8, 1295-1300.	1.7	78
339	Nitrogen doped graphene nanosheet supported platinum nanoparticles as high performance electrochemical homocysteine biosensors. Journal of Materials Chemistry B, 2013, 1, 4655.	2.9	58
340	Recent progress in nonâ€precious metal catalysts for PEM fuel cell applications. Canadian Journal of Chemical Engineering, 2013, 91, 1881-1895.	0.9	71
341	Multi-Metallic Nanoparticles as More Efficient Catalysts for Fuel Cell Reactions. , 2013, , 333-346.		0
342	Energy-level structure of nitrogen-doped graphene quantum dots. Journal of Materials Chemistry C, 2013, 1, 4908.	2.7	277

#	Article	IF	Citations
343	Electrochemical and oxygen reduction properties of pristine and nitrogen-doped few layered graphene nanoflakes (FLGs). Journal of Solid State Electrochemistry, 2013, 17, 2139-2149.	1.2	29
344	Edgeâ€Selectively Sulfurized Graphene Nanoplatelets as Efficient Metalâ€Free Electrocatalysts for Oxygen Reduction Reaction: The Electron Spin Effect. Advanced Materials, 2013, 25, 6138-6145.	11.1	537
345	Co3O4-reduced graphene oxide nanocomposite as an effective peroxidase mimetic and its application in visual biosensing of glucose. Analytica Chimica Acta, 2013, 796, 92-100.	2.6	181
346	Selective nitrogen doping in graphene for oxygen reduction reactions. Chemical Communications, 2013, 49, 9627.	2.2	175
347	Simultaneous N-intercalation and N-doping of epitaxial graphene on 6H-SiC(0001) through thermal reactions with ammonia. Nano Research, 2013, 6, 399-408.	5.8	41
348	Metal-free catalytic reduction of 4-nitrophenol to 4-aminophenol by N-doped graphene. Energy and Environmental Science, 2013, 6, 3260.	15.6	390
349	Porous nitrogen doped carbon fiber with churros morphology derived from electrospun bicomponent polymer as highly efficient electrocatalyst for Znâ€“air batteries. Journal of Power Sources, 2013, 243, 267-273.	4.0	91
350	Surface and electrochemical characterisation of CVD grown graphene sheets. Electrochemistry Communications, 2013, 35, 26-29.	2.3	22
351	Electrocatalysis in Fuel Cells. Lecture Notes in Energy, 2013, , .	0.2	85
352	Nitrogenâ€Doped Graphitic Nanoribbons: Synthesis, Characterization, and Transport. Advanced Functional Materials, 2013, 23, 3755-3762.	7.8	31
353	A density functional theory study of oxygen reduction reaction on Meâ€“N4 (Me = Fe, Co, or Ni) clusters between graphitic pores. Journal of Materials Chemistry A, 2013, 1, 10790.	5.2	253
354	Synthesis and electronic structure of nitrogen-doped graphene. Physics of the Solid State, 2013, 55, 1325-1332.	0.2	33
355	Non-precious Irâ€“V bimetallic nanoclusters assembled on reduced graphene nanosheets as catalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2013, 1, 11457.	5.2	48
356	Controllable Synthesis of Tetragonal and Cubic Phase Cu₂Se Nanowires Assembled by Small Nanocubes and Their Electrocatalytic Performance for Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2013, 117, 15164-15173.	1.5	73
361	Synthesis of reduced graphene oxide and its electrocatalytic properties. Russian Journal of Applied Chemistry, 2013, 86, 858-862.	0.1	6
362	A First-Principles Study of the Role of Quaternary-N Doping on the Oxygen Reduction Reaction Activity and Selectivity of Graphene Edge Sites. Topics in Catalysis, 2013, 56, 1623-1633.	1.3	67
363	Porous B-doped graphene inspired by Fried-Ice for supercapacitors and metal-free catalysts. Journal of Materials Chemistry A, 2013, 1, 13476.	5.2	100
364	Research progress in metal-free carbon-based catalysts. Chinese Journal of Catalysis, 2013, 34, 508-523.	6.9	111

#	Article	IF	Citations
365	Magnetic properties of 3d transition metals and nitrogen functionalized armchair graphene nanoribbon. RSC Advances, 2013, 3, 21110.	1.7	10
366	Hybrid Li-air battery cathodes with sparse carbon nanotube arrays directly grown on carbon fiber papers. Energy and Environmental Science, 2013, 6, 3339.	15.6	81
367	Hierarchical interconnected macro-/mesoporous Co-containing N-doped carbon for efficient oxygen reduction reactions. Journal of Materials Chemistry A, 2013, 1, 12074.	5.2	59
368	Modeling electronic properties and quantum transport in doped and defective graphene. Solid State Communications, 2013, 175-176, 90-100.	0.9	34
369	Enhanced electrochemical catalytic activity by copper oxide grown on nitrogen-doped reduced graphene oxide. Journal of Materials Chemistry A, 2013, 1, 13179.	5.2	105
370	Graphene for energy solutions and its industrialization. Nanoscale, 2013, 5, 10108.	2.8	86
371	Tailoring Carbon Nanotube N-Dopants while Designing Metal-Free Electrocatalysts for the Oxygen Reduction Reaction in Alkaline Medium. ACS Catalysis, 2013, 3, 2108-2111.	5.5	91
372	Synthesis of nitrogen-doped graphene via simple microwave-hydrothermal process. Materials Letters, 2013, 108, 33-36.	1.3	19
373	Porous nitrogen-doped carbon nanofibers as highly efficient metal-free electrocatalyst for oxygen reduction reaction. Journal of Electroanalytical Chemistry, 2013, 702, 56-59.	1.9	30
374	Effects of N-doping concentration on graphene structures and properties. Chemical Physics Letters, 2013, 581, 74-79.	1.2	8
376	Covalent functionalization based heteroatom doped graphene nanosheet as a metal-free electrocatalyst for oxygen reduction reaction. Nanoscale, 2013, 5, 12255.	2.8	73
377	Realization of ferromagnetic graphene oxide with high magnetization by doping graphene oxide with nitrogen. Scientific Reports, 2013, 3, 2566.	1.6	97
378	Functionalization of Monolayer h-BN by a Metal Support for the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2013, 117, 21359-21370.	1.5	109
379	Doped-carbon electrocatalysts with trimodal porosity from a homogeneous polypeptide gel. Journal of Materials Chemistry A, 2013, 1, 13576.	5.2	51
380	Advanced Oxygen Reduction Electrocatalyst Based on Nitrogen-Doped Graphene Derived from Edible Sugar and Urea. ACS Applied Materials & Interfaces, 2013, 5, 11108-11114.	4.0	198
381	Redoxâ€Mediated Synthesis of Functionalised Graphene: A Strategy towards 2D Multifunctional Electrocatalysts for Energy Conversion Applications. ChemPlusChem, 2013, 78, 1296-1303.	1.3	6
382	Propagative Exfoliation of High Quality Graphene. Chemistry of Materials, 2013, 25, 4487-4496.	3.2	26
383	Theoretical predictions for hexagonal BN based nanomaterials as electrocatalysts for the oxygen reduction reaction. Physical Chemistry Chemical Physics, 2013, 15, 2809.	1.3	95

#	Article	IF	Citations
384	Nitrogen-self-doped graphene as a high capacity anode material for lithium-ion batteries. Journal of Materials Chemistry A, 2013, 1, 14586.	5.2	40
385	Boron-Doped Graphene: Scalable and Tunable p-Type Carrier Concentration Doping. Journal of Physical Chemistry C, 2013, 117, 23251-23257.	1.5	108
386	Iron(II) phthalocyanine covalently functionalized graphene as a highly efficient non-precious-metal catalyst for the oxygen reduction reaction in alkaline media. Electrochimica Acta, 2013, 112, 269-278.	2.6	99
387	A nitrogen-doped graphene film prepared by chemical vapor deposition of a methanol mist containing methylated melamine resin. Applied Physics A: Materials Science and Processing, 2013, 113, 645-650.	1.1	6
388	MgO-catalyzed growth of N-doped wrinkled carbon nanotubes. Carbon, 2013, 56, 38-44.	5.4	48
389	Facile Preparation of Porous Carbon Nanosheets without Template and Their Excellent Electrocatalytic Property. ACS Applied Materials & Interfaces, 2013, 5, 11597-11602.	4.0	43
390	Facile preparation of nitrogen-doped reduced graphene oxide as a metal-free catalyst for oxygen reduction reaction. Journal of Materials Science, 2013, 48, 8101-8107.	1.7	34
391	Oxygen Reduction Electrocatalysis Using N-Doped Graphene Quantum-Dots. Journal of Physical Chemistry Letters, 2013, 4, 4160-4165.	2.1	132
392	A density functional theory study on oxygen reduction reaction on nitrogen-doped graphene. Journal of Molecular Modeling, 2013, 19, 5515-5521.	0.8	42
393	Free Standing Reduced Graphene Oxide Film Cathodes for Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2013, 5, 12295-12303.	4.0	89
394	Solid-phase electrochemical reduction of graphene oxide films in alkaline solution. Nanoscale Research Letters, 2013, 8, 397.	3.1	56
395	Manageable N-doped Graphene for High Performance Oxygen Reduction Reaction. Scientific Reports, 2013, 3, 2771.	1.6	182
396	Synthesis of graphene from asphaltene molecules adsorbed on vermiculite layers. Carbon, 2013, 62, 213-221.	5.4	63
397	Facile-green synthesis of nitrogen-doped carbon-supported ultrafine silver catalyst with enhanced electrocatalytic property. Electrochimica Acta, 2013, 108, 66-73.	2.6	13
398	The atomic structures of carbon nitride sheets for cathode oxygen reduction catalysis. Journal of Chemical Physics, 2013, 138, 164706.	1.2	19
399	Structure and Electrochemical Performance of Nitrogen-Doped Carbon Film Formed by Electron Cyclotron Resonance Sputtering. Analytical Chemistry, 2013, 85, 9845-9851.	3.2	54
400	Synthesis of a hydrophilic poly-l-lysine/graphene hybrid through multiple non-covalent interactions for biosensors. Journal of Materials Chemistry B, 2013, 1, 1406.	2.9	62
401	Nitrogen-doped pyrolytic carbon films as highly electrochemically active electrodes. Physical Chemistry Chemical Physics, 2013, 15, 18688.	1.3	5

#	Article	IF	Citations
403	Graphene-based nanocomposites: preparation, functionalization, and energy and environmental applications. Energy and Environmental Science, 2013, 6, 3483.	15.6	480
404	Chelate resin self-assembled quaternary Coâ€“Nâ€“Pâ€“C catalyst for oxygen reduction reaction. RSC Advances, 2013, 3, 14686.	1.7	17
405	Spaceâ€Confinementâ€Induced Synthesis of Pyridinicâ€and Pyrrolicâ€Nitrogenâ€Doped Graphene for the Catalysis of Oxygen Reduction. Angewandte Chemie - International Edition, 2013, 52, 11755-11759.	7.2	620
406	Graphite oxide-based graphene materials as positive electrodes in vanadium redox flow batteries. Journal of Power Sources, 2013, 241, 349-354.	4.0	57
407	Thermally reduced graphite and graphene oxides in VRFBs. Nano Energy, 2013, 2, 1322-1328.	8.2	37
408	Contrasting Elastic Properties of Heavily B- and N-doped Graphene with Random Impurity Distributions Including Aggregates. Journal of Physical Chemistry C, 2013, 117, 20229-20235.	1.5	28
409	Spontaneous redox synthesis of Prussian blue/graphene nanocomposite as a non-precious metal catalyst for efficient four-electron oxygen reduction in acidic medium. Journal of Power Sources, 2013, 240, 101-108.	4.0	41
410	Synthesis of amino-functionalized graphene as metal-free catalyst and exploration of the roles of various nitrogen states in oxygen reduction reaction. Nano Energy, 2013, 2, 88-97.	8.2	426
411	Boron and nitrogen doping of graphene via thermal exfoliation of graphite oxide in a BF3 or NH3 atmosphere: contrasting properties. Journal of Materials Chemistry A, 2013, 1, 13146.	5.2	72
412	A Pt-free catalyst for oxygen reduction reaction based on Feâ€“N multiwalled carbon nanotube composites. Electrochimica Acta, 2013, 107, 126-132.	2.6	56
413	Identifying the trend of reactivity for sp2 materials: an electron delocalization model from first principles calculations. Physical Chemistry Chemical Physics, 2013, 15, 9498.	1.3	30
414	Temperature-dependent enhancement of oxygen reduction reaction activity for interconnected nitrogen-doped carbon shells. CrystEngComm, 2013, 15, 8504.	1.3	7
415	N-heterocycles tethered graphene as efficient metal-free catalysts for an oxygen reduction reaction in fuel cells. Journal of Materials Chemistry A, 2013, 1, 10166.	5.2	13
416	Highly active reduction of oxygen on a FeCo alloy catalyst encapsulated in pod-like carbon nanotubes with fewer walls. Journal of Materials Chemistry A, 2013, 1, 14868.	5.2	211
417	Tunable nitrogen-doped carbon aerogels as sustainable electrocatalysts in the oxygen reduction reaction. Journal of Materials Chemistry A, 2013, 1, 4002.	5.2	85
418	Toward understanding the active site for oxygen reduction reaction on phosphorus-encapsulated single-walled carbon nanotubes. RSC Advances, 2013, 3, 5577.	1.7	23
419	N-doped graphene analogue synthesized by pyrolysis of metal tetrapyridinoporphyrazine with high and stable catalytic activity for oxygen reduction. RSC Advances, 2013, 3, 9344.	1.7	9
420	Nitrogen-doped grapheneâ€“vanadium carbide hybrids as a high-performance oxygen reduction reaction electrocatalyst support in alkaline media. Journal of Materials Chemistry A, 2013, 1, 13404.	5.2	50

#	Article	IF	Citations
421	Direct growth of flower-like manganese oxide on reduced graphene oxide towards efficient oxygen reduction reaction. Chemical Communications, 2013, 49, 6334.	2.2	101
422	Controlled electrochemical intercalation, exfoliation and in situ nitrogen doping of graphite in nitrate-based protic ionic liquids. Physical Chemistry Chemical Physics, 2013, 15, 20005.	1.3	48
423	Density functional theory calculations of XPS binding energy shift for nitrogen-containing graphene-like structures. Chemical Communications, 2013, 49, 2539.	2.2	347
424	Introduction of nitrogen with controllable configuration into graphene via vacancies and edges. Journal of Materials Chemistry A, 2013, 1, 14927.	5.2	39
425	Highly Active Graphene Nanosheets Prepared via Extremely Rapid Heating as Efficient Zinc-Air Battery Electrode Material. Journal of the Electrochemical Society, 2013, 160, F910-F915.	1.3	57
426	Effect of carbon nanofiber surface functional groups on oxygen reduction in alkaline solution. Journal of Power Sources, 2013, 225, 192-199.	4.0	136
427	Synthesis of nitrogen doped graphene with high electrocatalytic activity toward oxygen reduction reaction. Electrochemistry Communications, 2013, 28, 24-26.	2.3	214
428	Second generation graphene: Opportunities and challenges for surface science. Surface Science, 2013, 609, 1-5.	0.8	54
429	Electrocatalytic activity of nitrogen-doped graphene synthesized via a one-pot hydrothermal process towards oxygen reduction reaction. Journal of Power Sources, 2013, 227, 185-190.	4.0	166
430	Platinum nanoflowers decorated three-dimensional grapheneâ€“carbon nanotubes hybrid with enhanced electrocatalytic activity. Journal of Power Sources, 2013, 223, 23-29.	4.0	49
431	Simple preparation of nanoporous few-layer nitrogen-doped graphene for use as an efficient electrocatalyst for oxygen reduction and oxygen evolution reactions. Carbon, 2013, 53, 130-136.	5.4	331
432	Recent progress in graphene-based nanomaterials as advanced electrocatalysts towards oxygen reduction reaction. Nanoscale, 2013, 5, 1753.	2.8	338
433	Graphene-related nanomaterials: tuning properties by functionalization. Nanoscale, 2013, 5, 4541.	2.8	614
434	Recent progress in nanostructured electrocatalysts for PEM fuel cells. Journal of Materials Chemistry A, 2013, 1, 4631.	5.2	172
435	Electrochemically reduced graphene oxide multilayer films as metal-free electrocatalysts for oxygen reduction. Journal of Materials Chemistry A, 2013, 1, 1415-1420.	5.2	43
436	A strategy for mass production of self-assembled nitrogen-doped graphene as catalytic materials. Journal of Materials Chemistry A, 2013, 1, 1401-1406.	5.2	57
437	Synthesis and characterization of nitrogen-doped graphene hydrogels by hydrothermal route with urea as reducing-doping agents. Journal of Materials Chemistry A, 2013, 1, 2248-2255.	5.2	354
438	Highly ordered multilayered 3D graphene decorated with metal nanoparticles. Journal of Materials Chemistry A, 2013, 1, 1639-1645.	5.2	76

#	Article	IF	Citations
439	Electrocatalysis of oxygen reduction on nitrogen-containing multi-walled carbon nanotube modified glassy carbon electrodes. Electrochimica Acta, 2013, 87, 709-716.	2.6	114
440	Nitrogen-doped graphene by microwave plasma chemical vapor deposition. Thin Solid Films, 2013, 528, 269-273.	0.8	38
441	Large-Scale Production of Edge-Selectively Functionalized Graphene Nanoplatelets via Ball Milling and Their Use as Metal-Free Electrocatalysts for Oxygen Reduction Reaction. Journal of the American Chemical Society, 2013, 135, 1386-1393.	6.6	578
442	Global and local reactivity indexes applied to understand the chemistry of graphene oxide and doped graphene. Journal of Molecular Modeling, 2013, 19, 919-930.	0.8	22
443	PEMFCs and AEMFCs directly fed with ethanol: a current status comparative review. Journal of Applied Electrochemistry, 2013, 43, 119-136.	1.5	191
444	Oxygen Reduction Reaction Using MnO₂Nanotubes/Nitrogen-Doped Exfoliated Graphene Hybrid Catalyst for Li-O₂Battery Applications. Journal of the Electrochemical Society, 2013, 160, A344-A350.	1.3	84
445	Dimension-tailored functional graphene structures for energy conversion and storage. Nanoscale, 2013, 5, 3112.	2.8	101
446	B, N- and P, N-doped graphene as highly active catalysts for oxygen reduction reactions in acidic media. Journal of Materials Chemistry A, 2013, 1, 3694.	5.2	398
447	Cobalt and nitrogen-cofunctionalized graphene as a durable non-precious metal catalyst with enhanced ORR activity,. Journal of Materials Chemistry A, 2013, 1, 3593.	5.2	169
448	Insight into the Origin of the Positive Effects of Imidazolium Salt on Electrocatalytic Activity: Ionic Carbon Nanotubes as Metalâ€Free Electrocatalysts for Oxygen Reduction Reaction. Chemistry - an Asian Journal, 2013, 8, 232-237.	1.7	8
449	Graphene/polymer composites for energy applications. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 231-253.	2.4	222
450	Synthesis of three-dimensional flowerlike nitrogen-doped carbons by a copyrolysis route and the effect of nitrogen species on the electrocatalytic activity in oxygen reduction reaction. Carbon, 2013, 54, 249-257.	5.4	143
451	Nitrogen-doped mesoporous carbon as low-cost counter electrode for high-efficiency dye-sensitized solar cells. Electrochimica Acta, 2013, 113, 346-353.	2.6	44
452	Oxygen reduction reaction over nitrogen-doped graphene oxide cathodes in acid and alkaline fuel cells at intermediate temperatures. Electrochimica Acta, 2013, 112, 82-89.	2.6	38
453	Ultrafast room-temperature reduction of graphene oxide to graphene with excellent dispersibility by lithium naphthalenide. Carbon, 2013, 63, 165-174.	5.4	23
454	Catalytic activity of Coâ€“N_x/C electrocatalysts for oxygen reduction reaction: a density functional theory study. Physical Chemistry Chemical Physics, 2013, 15, 148-153.	1.3	303
455	Graphene Oxide Fuel Cell. Journal of the Electrochemical Society, 2013, 160, F1175-F1178.	1.3	86
456	A mini review on carbon-based metal-free electrocatalysts for oxygen reduction reaction. Chinese Journal of Catalysis, 2013, 34, 1986-1991.	6.9	42

#	Article	IF	Citations
457	Assembled gold nanoparticles on nitrogen-doped graphene for ultrasensitive electrochemical detection of matrix metalloproteinase-2. Carbon, 2013, 61, 357-366.	5.4	91
458	Nitrogen-Doped Fullerene as a Potential Catalyst for Hydrogen Fuel Cells. Journal of the American Chemical Society, 2013, 135, 3315-3318.	6.6	167
459	Highly nitrogen-doped carbon capsules: scalable preparation and high-performance applications in fuel cells and lithium ion batteries. Nanoscale, 2013, 5, 2726.	2.8	177
460	Vanadium oxide nanowire â€“ Graphene binder free nanocomposite paper electrodes for supercapacitors: A facile green approach. Journal of Power Sources, 2013, 230, 130-137.	4.0	142
461	Doped Graphene as a Material for Oxygen Reduction Reaction in Hydrogen Fuel Cells: A Computational Study. ACS Catalysis, 2013, 3, 159-165.	5.5	100
462	A New Three-Dimensional (3D) Multilayer Organic Material: Synthesis, Swelling, Exfoliation, and Application. Langmuir, 2013, 29, 3813-3820.	1.6	3
463	Textile electrodes woven by carbon nanotubeâ€“graphene hybrid fibers for flexible electrochemical capacitors. Nanoscale, 2013, 5, 3428.	2.8	307
464	Nitrogen-doped graphene as catalysts and catalyst supports for oxygen reduction in both acidic and alkaline solutions. International Journal of Hydrogen Energy, 2013, 38, 1413-1418.	3.8	105
465	One-pot synthesis of a mesoporous NiCo2O4 nanoplatelet and graphene hybrid and its oxygen reduction and evolution activities as an efficient bi-functional electrocatalyst. Journal of Materials Chemistry A, 2013, 1, 4754.	5.2	491
466	Challenges of non-aqueous Liâ€“O2 batteries: electrolytes, catalysts, and anodes. Energy and Environmental Science, 2013, 6, 1125.	15.6	453
467	Grapheneâ€“nickel composites. Applied Surface Science, 2013, 273, 484-490.	3.1	234
468	The role of band structure in electron transfer kinetics in lowâ€dimensional carbon. Materialwissenschaft Und Werkstofftechnik, 2013, 44, 226-230.	0.5	13
469	Aqueous Dispersible Graphene/Pt Nanohybrids by Green Chemistry: Application as Cathodes for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2013, 5, 2053-2061.	4.0	42
470	Synthesis of nitrogen-doped graphene by pyrolysis of ionic-liquid-functionalized graphene. Journal of Materials Chemistry C, 2013, 1, 1713.	2.7	48
471	Strongly Coupled Inorganic/Nanocarbon Hybrid Materials for Advanced Electrocatalysis. Journal of the American Chemical Society, 2013, 135, 2013-2036.	6.6	856
472	Twoâ€Step Boron and Nitrogen Doping in Graphene for Enhanced Synergistic Catalysis. Angewandte Chemie - International Edition, 2013, 52, 3110-3116.	7.2	863
473	Nitrogen doped holey graphene as an efficient metal-free multifunctional electrochemical catalyst for hydrazine oxidation and oxygen reduction. Nanoscale, 2013, 5, 3457.	2.8	154
474	Nitrogenâ€Enriched Carbon from Melamine Resins with Superior Oxygen Reduction Reaction Activity. ChemSusChem, 2013, 6, 807-812.	3.6	82

#	Article	IF	Citations
475	Photocatalytic Properties of Graphdiyne and Graphene Modified TiO₂: From Theory to Experiment. ACS Nano, 2013, 7, 1504-1512.	7.3	434
476	Efficient oxygen reduction by a Fe/Co/C/N nano-porous catalyst in neutral media. Journal of Materials Chemistry A, 2013, 1, 1450-1456.	5.2	64
477	Palladium nanoparticles supported on nitrogen-doped HOPG: a surface science and electrochemical study. Physical Chemistry Chemical Physics, 2013, 15, 2923.	1.3	52
478	Recent advances and challenges in the anode architecture and their modifications for the applications of microbial fuel cells. Biosensors and Bioelectronics, 2013, 43, 461-475.	5.3	246
479	Graphene at the Atomicâ€Scale: Synthesis, Characterization, and Modification. Advanced Functional Materials, 2013, 23, 2554-2564.	7.8	30
480	Nitrogen-Rich Mesoporous Carbons: Highly Efficient, Regenerable Metal-Free Catalysts for Low-Temperature Oxidation of H₂S. ACS Catalysis, 2013, 3, 862-870.	5.5	150
481	Oxygen reduction reaction on active sites of heteroatom-doped graphene. RSC Advances, 2013, 3, 5498.	1.7	59
482	3D Nitrogen-doped graphene prepared by pyrolysis of graphene oxide with polypyrrole for electrocatalysis of oxygen reduction reaction. Nano Energy, 2013, 2, 241-248.	8.2	367
483	Recent progress in doped carbon nanomaterials as effective cathode catalysts for fuel cell oxygen reduction reaction. Journal of Power Sources, 2013, 236, 238-249.	4.0	450
484	Use of polypyrrole in catalysts for low temperature fuel cells. Energy and Environmental Science, 2013, 6, 1105.	15.6	153
485	Effect of nitrogen induced defects in Li dispersed graphene onÂhydrogen storage. International Journal of Hydrogen Energy, 2013, 38, 4611-4617.	3.8	59
486	Feâ€“N doped carbon nanotube/graphene composite: facile synthesis and superior electrocatalytic activity. Journal of Materials Chemistry A, 2013, 1, 3302.	5.2	115
487	Improved synthesis of graphene flakes from the multiple electrochemical exfoliation of graphite rod. Nano Energy, 2013, 2, 377-386.	8.2	200
488	Electronic structure of N-doped graphene with native point defects. Physical Review B, 2013, 87, .	1.1	113
489	Preparation of nitrogen-doped carbon submicrotubes by coaxial electrospinning and their electrocatalytic activity for oxygen reduction reaction in acid media. Electrochimica Acta, 2013, 96, 225-229.	2.6	32
490	Nitrogen-doped reduced graphene oxide supports for noble metal catalysts with greatly enhanced activity and stability. Applied Catalysis B: Environmental, 2013, 132-133, 379-388.	10.8	231
491	Controlling the local chemical reactivity of graphene through spatial functionalization. Carbon, 2013, 60, 84-93.	5.4	32
492	Facile and straightforward synthesis of superparamagnetic reduced graphene oxideâ€“Fe₃O₄hybrid composite by a solvothermal reaction. Nanotechnology, 2013, 24, 025604.	1.3	60

#	Article	IF	Citations
493	Graphene-Based Chemical and Biosensors. Springer Series on Chemical Sensors and Biosensors, 2013, , 103-141.	0.5	9
494	Nitrogen: unraveling the secret to stable carbon-supported Pt-alloy electrocatalysts. Energy and Environmental Science, 2013, 6, 2957.	15.6	99
495	Graphene-based electrodes for electrochemical energy storage. Energy and Environmental Science, 2013, 6, 1388.	15.6	696
496	The use of nitrogen-doped graphene supporting Pt nanoparticles as a catalyst for methanol electrocatalytic oxidation. Carbon, 2013, 52, 181-192.	5.4	275
497	Electrochemical behavior of N and Ar implanted highly oriented pyrolytic graphite substrates and activity toward oxygen reduction reaction. Electrochimica Acta, 2013, 88, 477-487.	2.6	52
498	Electrochemical CO₂ and CO Reduction on Metal-Functionalized Porphyrin-like Graphene. Journal of Physical Chemistry C, 2013, 117, 9187-9195.	1.5	260
499	Graphene in lithium ion battery cathode materials: A review. Journal of Power Sources, 2013, 240, 66-79.	4.0	534
500	Fuel Cell Electrocatalyst Using Polybenzimidazoleâ€Modified Carbon Nanotubes As Support Materials. Advanced Materials, 2013, 25, 1666-1681.	11.1	160
501	A green approach to the synthesis of high-quality graphene oxide flakes via electrochemical exfoliation of pencil core. RSC Advances, 2013, 3, 11745.	1.7	142
502	Nitrogen-doped reduced-graphene oxide as an efficient metal-free electrocatalyst for oxygen reduction in fuel cells. RSC Advances, 2013, 3, 3990.	1.7	112
503	Nitrogen Doping Effects on the Physical and Chemical Properties of Mesoporous Carbons. Journal of Physical Chemistry C, 2013, 117, 8318-8328.	1.5	237
504	Enhanced electrochemical oxygen reduction reaction by restacking of N-doped single graphene layers. RSC Advances, 2013, 3, 4246.	1.7	30
505	Enhanced-electrocatalytic activity of Pt nanoparticles supported onÂnitrogen-doped carbon for the oxygen reduction reaction. Journal of Power Sources, 2013, 240, 60-65.	4.0	47
506	Nitrogen-doped (6,0) carbon nanotubes: A comparative DFT study based on surface reactivity descriptors. Computational and Theoretical Chemistry, 2013, 1015, 1-7.	1.1	59
507	Siliconâ€“doping in carbon nanotubes: formation energies, electronic structures, and chemical reactivity. Journal of Molecular Modeling, 2013, 19, 1667-1675.	0.8	29
508	Plasma-assisted simultaneous reduction and nitrogen doping of graphene oxide nanosheets. Journal of Materials Chemistry A, 2013, 1, 4431.	5.2	198
509	Recent Development of Non-precious Metal Catalysts. Lecture Notes in Energy, 2013, , 247-269.	0.2	10
510	Theoretical Study of Oxygen Reduction Reaction Catalysts: From Pt to Non-precious Metal Catalysts. Lecture Notes in Energy, 2013, , 339-373.	0.2	2

#	Article	IF	Citations
511	Metal-Free Electrocatalysts for Oxygen Reduction. Lecture Notes in Energy, 2013, , 375-389.	0.2	3
512	Ptâ€“Au/nitrogen-doped graphene nanocomposites for enhanced electrochemical activities. Journal of Materials Chemistry A, 2013, 1, 1754-1762.	5.2	121
513	Promises and Challenges of Unconventional Electrocatalyst Supports. Lecture Notes in Energy, 2013, , 689-728.	0.2	2
514	Organic Functionalization of Graphene in Dispersions. Accounts of Chemical Research, 2013, 46, 138-148.	7.6	229
515	A Nitrogenâ€Doped Graphene/Carbon Nanotube Nanocomposite with Synergistically Enhanced Electrochemical Activity. Advanced Materials, 2013, 25, 3192-3196.	11.1	576
516	Nitrogen-doped graphene hollow nanospheres as novel electrode materials for supercapacitor applications. Journal of Power Sources, 2013, 243, 973-981.	4.0	157
517	One-step scalable preparation of N-doped nanoporous carbon as a high-performance electrocatalyst for the oxygen reduction reaction. Nano Research, 2013, 6, 293-301.	5.8	142
518	Functional Freeâ€Standing Graphene Honeycomb Films. Advanced Functional Materials, 2013, 23, 2972-2978.	7.8	116
519	Tuning Nanoparticle Catalysis for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2013, 52, 8526-8544.	7.2	902
520	Preparation of polyaniline/reduced graphene oxide nanocomposite and its application in adsorption of aqueous Hg(II). Chemical Engineering Journal, 2013, 229, 460-468.	6.6	165
521	The synergetic effect of N-doped graphene and silver nanowires for high electrocatalytic performance in the oxygen reduction reaction. RSC Advances, 2013, 3, 11552.	1.7	44
522	Biomass-derived activated carbon as high-performance non-precious electrocatalyst for oxygen reduction. RSC Advances, 2013, 3, 12039.	1.7	76
523	Co3O4 nanoparticle-modified MnO2 nanotube bifunctional oxygen cathode catalysts for rechargeable zincâ€“air batteries. Nanoscale, 2013, 5, 4657.	2.8	247
524	Graphene supported Î±-MnO2 nanotubes as a cathode catalyst for improved power generation and wastewater treatment in single-chambered microbial fuel cells. RSC Advances, 2013, 3, 7902.	1.7	135
525	Facile synthesis of triangular shaped palladium nanoparticles decorated nitrogen doped graphene and their catalytic study for renewable energy applications. International Journal of Hydrogen Energy, 2013, 38, 2240-2250.	3.8	107
526	Reduced graphene oxide and CuInS2 co-decorated TiO2 nanotube arrays for efficient removal of herbicide 2,4-dichlorophenoxyacetic acid from water. Journal of Photochemistry and Photobiology A: Chemistry, 2013, 262, 22-27.	2.0	31
527	A Graphene Oxide and Copperâ€Centered Metal Organic Framework Composite as a Triâ€Functional Catalyst for HER, OER, and ORR. Advanced Functional Materials, 2013, 23, 5363-5372.	7.8	858
528	Phosphorus-doped graphene nanosheets as efficient metal-free oxygen reduction electrocatalysts. RSC Advances, 2013, 3, 9978.	1.7	365

#	Article	IF	Citations
529	Sulfur and Nitrogen Coâ€Doped, Fewâ€Layered Graphene Oxide as a Highly Efficient Electrocatalyst for the Oxygenâ€Reduction Reaction. ChemSusChem, 2013, 6, 493-499.	3.6	242
530	Growth and electronic structure of boron-doped graphene. Physical Review B, 2013, 87, .	1.1	113
531	Zeolitic Imidazolate Framework (ZIF)â€Derived, Hollowâ€Core, Nitrogenâ€Doped Carbon Nanostructures for Oxygenâ€Reduction Reactions in PEFCs. Chemistry - A European Journal, 2013, 19, 9335-9342.	1.7	147
532	Photoluminescent nanographitic/nitrogen-doped graphitic hollow shells as a potential candidate for biological applications. Journal of Materials Chemistry B, 2013, 1, 1229.	2.9	12
533	Synthesis and electrocatalytic performance of nitrogen-doped macroporous carbons. Journal of Materials Chemistry A, 2013, 1, 9469.	5.2	29
534	Nitrogen-Doped Graphene Nanoplatelets from Simple Solution Edge-Functionalization for n-Type Field-Effect Transistors. Journal of the American Chemical Society, 2013, 135, 8981-8988.	6.6	113
535	Theoretical Characterization of X-ray Absorption, Emission, and Photoelectron Spectra of Nitrogen Doped along Graphene Edges. Journal of Physical Chemistry A, 2013, 117, 579-589.	1.1	39
536	Edgeâ€Selectively Functionalized Graphene Nanoplatelets. Chemical Record, 2013, 13, 224-238.	2.9	31
537	Active and stable carbon nanotube/nanoparticle composite electrocatalyst for oxygen reduction. Nature Communications, 2013, 4, 1922.	5.8	749
538	Microscopic View on a Chemical Vapor Deposition Route to Boron-Doped Graphene Nanostructures. Chemistry of Materials, 2013, 25, 1490-1495.	3.2	130
539	Excellent electrical conductivity of the exfoliated and fluorinated hexagonal boron nitride nanosheets. Nanoscale Research Letters, 2013, 8, 49.	3.1	109
540	Doping nitrogen anion enhanced photocatalytic activity on TiO2 hybridized with graphene composite under solar light. Separation and Purification Technology, 2013, 106, 97-104.	3.9	44
541	A Highly Efficient Catalyst toward Oxygen Reduction Reaction in Neutral Media for Microbial Fuel Cells. Industrial & Engineering Chemistry Research, 2013, 52, 6076-6082.	1.8	93
542	Electrochemically Reduced Graphene Oxide Multilayer Films as Efficient Counter Electrode for Dye-Sensitized Solar Cells. Scientific Reports, 2013, 3, 1489.	1.6	130
543	Bioinspired prospects of graphene: from biosensing to energy. Journal of Materials Chemistry B, 2013, 1, 3521.	2.9	26
544	One-Pot, Green, Rapid Synthesis of Flowerlike Gold Nanoparticles/Reduced Graphene Oxide Composite with Regenerated Silk Fibroin As Efficient Oxygen Reduction Electrocatalysts. ACS Applied Materials & Interfaces, 2013, 5, 654-662.	4.0	188
545	Boron and Nitrogen Codoped Nanodiamond as an Efficient Metal-Free Catalyst for Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2013, 117, 14992-14998.	1.5	80
546	Evolution of Raman spectra in nitrogen doped graphene. Carbon, 2013, 61, 57-62.	5.4	228

#	Article	IF	Citations
547	Developing Polymer Composite Materials: Carbon Nanotubes or Graphene?. Advanced Materials, 2013, 25, 5153-5176.	11.1	398
549	Grapheneâ€Based Materials for Hydrogen Generation from Lightâ€Driven Water Splitting. Advanced Materials, 2013, 25, 3820-3839.	11.1	704
550	Nanostructured Nonprecious Metal Catalysts for Oxygen Reduction Reaction. Accounts of Chemical Research, 2013, 46, 1878-1889.	7.6	975
551	Three-dimensional B,N-doped graphene foam as a metal-free catalyst for oxygen reduction reaction. Physical Chemistry Chemical Physics, 2013, 15, 12220.	1.3	284
552	Interactions of graphene and graphene oxide with proteins and peptides. Nanotechnology Reviews, 2013, 2, 27-45.	2.6	198
553	Identifying the Active Site in Nitrogen-Doped Graphene for the VO²⁺/VO₂⁺ Redox Reaction. ACS Nano, 2013, 7, 4764-4773.	7.3	236
554	The Effect of N and B Doping on Graphene and the Adsorption and Migration Behavior of Pt Atoms. Journal of Physical Chemistry C, 2013, 117, 10523-10535.	1.5	71
555	Can Si-doped graphene activate or dissociate O2 molecule?. Journal of Molecular Graphics and Modelling, 2013, 39, 126-132.	1.3	65
556	Sulfur-Doped Graphene via Thermal Exfoliation of Graphite Oxide in H₂S, SO₂, or CS₂ Gas. ACS Nano, 2013, 7, 5262-5272.	7.3	321
557	Facile, scalable synthesis of edge-halogenated graphene nanoplatelets as efficient metal-free eletrocatalysts for oxygen reduction reaction. Scientific Reports, 2013, 3, 1810.	1.6	300
558	A remarkably simple characterization of glassy carbon-supported films of graphite, graphene oxide, and chemically converted graphene using Fe(CN)3â^'6/Fe(CN)4â^'6 and O2 as redox probes. RSC Advances, 2013, 3, 9550.	1.7	37
559	Synthesis and Electrochemical Characterization of N-Doped Partially Graphitized Ordered Mesoporous Carbonâ€“Co Composite. Journal of Physical Chemistry C, 2013, 117, 16896-16906.	1.5	101
560	Crown Graphene Nanomeshes: Highly Stable Chelation-Doped Semiconducting Materials. Journal of Chemical Theory and Computation, 2013, 9, 2398-2403.	2.3	18
561	Reduced graphene oxide: a promising electrode material for oxygen electrodes. Journal of Nanostructure in Chemistry, 2013, 3, 1.	5.3	11
562	Sustainable Energy Recovery in Wastewater Treatment by Microbial Fuel Cells: Stable Power Generation with Nitrogen-doped Graphene Cathode. Environmental Science & Technology, 2013, 47, 13889-13895.	4.6	146
563	Improved Superiority by Covalently Binding Dye to Graphene for Hydrogen Evolution from Water under Visible-Light Irradiation. Journal of Physical Chemistry C, 2013, 117, 21303-21311.	1.5	32
564	A compartment-less nonenzymatic glucoseâ€“air fuel cell with nitrogen-doped mesoporous carbons and Au nanowires as catalysts. Energy and Environmental Science, 2013, 6, 3600.	15.6	40
565	Electron Transfer Number Control of the Oxygen Reduction Reaction on Nitrogen-Doped Reduced-Graphene Oxides Using Experimental Design Strategies. Journal of the Electrochemical Society, 2013, 160, H547-H552.	1.3	17

#	Article	IF	Citations
566	Photochemical doping of graphene oxide with nitrogen for photoluminescence enhancement. Applied Physics Letters, 2013, 103, .	1.5	28
567	Highly Efficient Oxygen Reduction Electrocatalysts based on Winged Carbon Nanotubes. Scientific Reports, 2013, 3, 3195.	1.6	45
568	Novel Chemistry for the Selective Oxidation of Benzyl Alcohol by Graphene Oxide and N-Doped Graphene. Organic Letters, 2013, 15, 5920-5923.	2.4	32
569	The Effect of Metal Catalyst on the Electrocatalytic Activity of Nitrogen-Doped Carbon Nanotubes. Journal of Physical Chemistry C, 2013, 117, 25213-25221.	1.5	36
570	Graphene and its application in fuel cell catalysis: a review. Asia-Pacific Journal of Chemical Engineering, 2013, 8, 218-233.	0.8	71
571	Functionalization of Graphene for Efficient Energy Conversion and Storage. Accounts of Chemical Research, 2013, 46, 31-42.	7.6	739
572	Electronic Properties of Boron and Nitrogen Doped Graphene. Nano Hybrids, 2013, 5, 65-83.	0.3	13
573	Microstructures and Electrocatalytic Properties of Nitrogen Doped Graphene Synthesized by Pyrolysis of Metal Tetrapyrazinoporphyrazine. Applied Mechanics and Materials, 2013, 275-277, 1762-1768.	0.2	1
574	Graphene Research in China. Materials Research Society Symposia Proceedings, 2013, 1505, 1.	0.1	1
575	Carbon Mono and Dioxide Hydrogenation over Pure and Metal Oxide Decorated Graphene Oxide Substrates: Insight from DFT. Graphene, 2013, 02, 109-114.	0.3	3
576	Chemically Functionalized Graphene and Their Applications in Electrochemical Energy Conversion and Storage. , 0, , .		9
577	Carbon-Based Nanomaterials. Nanostructure Science and Technology, 2013, , 115-144.	0.1	1
578	Substitutional doping of bore, aluminum, silicon, phosphor and nitrogen in graphene for fuel cell Density functional theory study. , 2013, , .		0
579	Nitrogenâ€doped Graphitic Carbon Synthesized by Laser Annealing of Sumanenemonoone Imine as a Bowlâ€shaped Ïâ€Conjugated Molecule. Chemistry - an Asian Journal, 2013, 8, 2569-2574.	1.7	17
581	Nitrogenâ€Doped Pt/C Electrocatalysts with Enhanced Activity and Stability toward the Oxygen Reduction Reaction. ChemPlusChem, 2013, 78, 1252-1257.	1.3	12
582	Enhancing Electrocatalytic Oxygen Reduction on Nitrogen-Doped Graphene by Active Sites Implantation. Scientific Reports, 2013, 3, 3306.	1.6	100
583	Nitrogen-doped Carbon Nanofibers as Highly Active Metal-free Electrocatalysts for Oxygen Reduction Reactions in Acidic Media. Chemistry Letters, 2013, 42, 413-415.	0.7	9
584	The opportunity for graphene nanomaterials in energy applications. Nanomaterials and Energy, 2013, 2, 212-215.	0.1	3

#	Article	IF	Citations
585	Electrochemical Performance of Iron and Cobalt Tetrapyrazinoporphyrazines Supported on Multiwalled Carbon Nanotubes. Advanced Materials Research, 2013, 634-638, 2155-2159.	0.3	1
586	Titanium Nitride Nanocrystals on Nitrogenâ€Doped Graphene as an Efficient Electrocatalyst for Oxygen Reduction Reaction. Chemistry - A European Journal, 2013, 19, 14781-14786.	1.7	73
588	The Effects of Vasectomy on Epididymal Morphology and Sperm Parameters in Adult Male Balb/c mice. International Journal of Morphology, 2013, 31, 1349-1354.	0.1	1
589	High-Throughput Heterogeneous Integration of Diverse Nanomaterials on a Single Chip for Sensing Applications. PLoS ONE, 2014, 9, e111377.	1.1	10
590	Allotropic Carbon Nanoforms as Advanced Metal-Free Catalysts or as Supports. Advances in Chemistry, 2014, 2014, 1-20.	1.1	12
591	Resonance of graphene nanoribbons doped with nitrogen and boron: a molecular dynamics study. Beilstein Journal of Nanotechnology, 2014, 5, 717-725.	1.5	6
592	Applications of Graphene in Catalysis. Journal of Biofertilizers & Biopesticides, 2014, 05, .	0.8	7
594	Non-Precious Metal Oxygen Reduction Electrocatalyst from Pyrolyzing Cobalt Tetraethylenepentamine Complex on Carbon. Journal of the Electrochemical Society, 2014, 161, F925-F932.	1.3	10
595	Modified Graphene as Electrocatalyst towards Oxygen Reduction Reaction for Fuel Cells. Journal of Physics: Conference Series, 2014, 557, 012009.	0.3	5
596	Nitrogenâ€Doped Carbon Nanosheets with Sizeâ€Defined Mesopores as Highly Efficient Metalâ€Free Catalyst for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2014, 53, 1570-1574.	7.2	457
597	A simple and efficient electrochemical reductive method for graphene oxide. Bulletin of Materials Science, 2014, 37, 1529-1533.	0.8	11
598	Criticality of surface topology for charge-carrier transport characteristics in two-dimensional borocarbonitrides: design principles for an efficient electronic material. Nanoscale, 2014, 6, 13430-13434.	2.8	15
599	Plasma Synthesis of Nitrogen-Doped Graphene Based Palladium Nanoparticles as a New Catalyst for C-C Coupling Reactions. International Journal of Nanoscience, 2014, , 1460004.	0.4	0
600	Egg White Derived Tremella-Like Mesoporous Carbon as Efficient Non-Precious Electrocatalyst for Oxygen Reduction. Journal of the Electrochemical Society, 2014, 161, H637-H642.	1.3	20
601	Carbon Nanotubes/Heteroatomâ€Doped Carbon Coreâ€“Sheath Nanostructures as Highly Active, Metalâ€Free Oxygen Reduction Electrocatalysts for Alkaline Fuel Cells. Angewandte Chemie - International Edition, 2014, 53, 4102-4106.	7.2	168
602	Opportunities and challenges of nanotechnology in the green economy. Environmental Health, 2014, 13, 78.	1.7	112
605	A resin-based methodology to synthesize N-doped graphene-like metal-free catalyst for oxygen reduction. Electrochimica Acta, 2014, 142, 182-186.	2.6	17
606	Mesoporous fluorine-doped carbon as efficient cathode material for oxygen reduction reaction. Materials Letters, 2014, 136, 384-387.	1.3	30

#	Article	IF	Citations
607	The Electrochemistry of Graphene. , 2014, , 79-126.		3
608	Growth of graphene on copper and nickel foils via chemical vapour deposition using ethylene. Materials Research Innovations, 2014, 18, S4-706-S4-710.	1.0	16
609	Chemical Manipulation of Graphene in Dispersions. World Scientific Series on Carbon Nanoscience, 2014, , 185-217.	0.1	2
610	Nitrogen doping of chemical vapor deposition grown graphene on 4H-SiC (0001). Journal of Applied Physics, 2014, 115, .	1.1	27
611	Sumanenemonoone Imines Bridged by Redoxâ€Active Ï€â€Conjugated Unit: Synthesis, Stepwise Coordination to Palladium(II), and Laserâ€Induced Formation of Nitrogenâ€Doped Graphitic Carbon. Chemistry - an Asian Journal, 2014, 9, 2568-2575.	1.7	13
612	Doping against the Native Propensity of MoS₂: Degenerate Hole Doping by Cation Substitution. Nano Letters, 2014, 14, 6976-6982.	4.5	574
613	Electrochemical Preparation of Nâ€Doped Cobalt Oxide Nanoparticles with High Electrocatalytic Activity for the Oxygenâ€Reduction Reaction. Chemistry - A European Journal, 2014, 20, 3457-3462.	1.7	39
614	Highly nitrogen-doped mesoscopic carbons as efficient metal-free electrocatalysts for oxygen reduction reactions. Journal of Materials Chemistry A, 2014, 2, 20030-20037.	5.2	37
615	Advances in Carbonâ€Incorporated Nonâ€Noble Transition Metal Catalysts for Oxygen Reduction Reaction in Polymer Electrolyte Fuel Cells. Journal of the Chinese Chemical Society, 2014, 61, 93-100.	0.8	15
616	Nanocomposite of N-Doped TiO₂ Nanorods and Graphene as an Effective Electrocatalyst for the Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2014, 6, 21978-21985.	4.0	76
617	The Effect of Substrates at Cathodes in Lowâ€temperature Fuel Cells. ChemElectroChem, 2014, 1, 37-46.	1.7	29
618	Graphene as dispersive solidphase extraction materials for pesticides LC-MS/MS multi-residue analysis in leek, onion and garlic. Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment, 2014, 31, 250-261.	1.1	30
619	Electrochemical Oxygen Reduction Reaction. , 2014, , 133-170.		26
620	Co/Co3O4/Câ€“N, a novel nanostructure and excellent catalytic system for the oxygen reduction reaction. Nano Energy, 2014, 8, 118-125.	8.2	106
621	Synchrotron Soft Xâ€ray Absorption Spectroscopy Study of Carbon and Silicon Nanostructures for Energy Applications. Advanced Materials, 2014, 26, 7786-7806.	11.1	84
622	Sulfurâ€Doped Carbons Prepared from Eutectic Mixtures Containing Hydroxymethylthiophene as Metalâ€Free Oxygen Reduction Catalysts. ChemSusChem, 2014, 7, 3347-3355.	3.6	17
623	First Principles Study of Morphology, Doping Level, and Water Solvation Effects on the Catalytic Mechanism of Nitrogenâ€Doped Graphene in the Oxygen Reduction Reaction. ChemCatChem, 2014, 6, 2662-2670.	1.8	40
624	Solution Synthesis of Cu₃PdN Nanocrystals as Ternary Metal Nitride Electrocatalysts for the Oxygen Reduction Reaction. Chemistry of Materials, 2014, 26, 6226-6232.	3.2	82

#	Article	IF	Citations
625	Graphene Applications. , 2014, , 127-174.		3
626	Simple synthesis of bimetallic alloyed Pdâ€“Au nanochain networks supported on reduced graphene oxide for enhanced oxygen reduction reaction. RSC Advances, 2014, 4, 52640-52646.	1.7	24
627	Atomic oxidation of large area epitaxial graphene on 4H-SiC(0001). Applied Physics Letters, 2014, 104, 093109.	1.5	8
628	Liquid Crystal Assisted Selective Separation of Large Graphene Oxide and its Size Dependent Oxygen Reduction Catalytic Effect. Advances in Science and Technology, 0, , .	0.2	0
629	Nanoparticles potential: types, mechanisms of action, actual in vitro and animal studies, recent patents. , 2014, , 53-150.		3
630	Tuning nondoped carbon nanotubes to an efficient metal-free electrocatalyst for oxygen reduction reaction by localizing the orbital of the nanotubes with topological defects. Nanoscale, 2014, 6, 14262-14269.	2.8	41
631	Magnesiumâ€“air batteries: from principle to application. Materials Horizons, 2014, 1, 196-206.	6.4	371
632	Synergy among manganese, nitrogen and carbon to improve the catalytic activity for oxygen reduction reaction. Journal of Power Sources, 2014, 251, 363-369.	4.0	54
633	Preparation of nitrogen-doped graphitic carboncages as electrocatalyst for oxygen reduction reaction. Electrochimica Acta, 2014, 129, 196-202.	2.6	23
634	Effect of the electrochemical oxidation/reduction cycle on the electrochemical capacitance of graphite oxide. Carbon, 2014, 76, 40-45.	5.4	32
635	Single-crystalline mesoporous Mo2N nanobelts with an enhanced electrocatalytic activity for oxygen reduction reaction. Materials Letters, 2014, 124, 231-234.	1.3	24
636	The mechanisms of impurityâ€“impurity and impurityâ€“matrix interactions in B/N-doped graphene. Chemical Physics Letters, 2014, 605-606, 56-61.	1.2	2
637	Synthesis of nitrogen-doped graphene by the thermal chemical vapor deposition method from a single liquid precursor. Materials Letters, 2014, 117, 199-203.	1.3	19
638	Metal free nitrogen doped hollow mesoporous graphene-analogous spheres as effective electrocatalyst for oxygen reduction reaction. Journal of Power Sources, 2014, 245, 772-778.	4.0	83
639	Non-noble Feâ€“NX electrocatalysts supported on the reduced graphene oxide for oxygen reduction reaction. Carbon, 2014, 76, 386-400.	5.4	77
640	Synthesis and luminescence of graphene-nano calcium sulphide composite. Materials Chemistry and Physics, 2014, 147, 57-64.	2.0	9
641	Air-stable n-type doping of graphene from overlying Si3N4 film. Applied Surface Science, 2014, 307, 712-715.	3.1	21
642	Carbon Aerogels and Monoliths: Control of Porosity and Nanoarchitecture via Solâ€“Gel routes. Chemistry of Materials, 2014, 26, 196-210.	3.2	204

#	Article	IF	Citations
643	Facile synthesis of porous Ptâ€“Pd nanospheres supported on reduced graphene oxide nanosheets for enhanced methanol electrooxidation. Journal of Power Sources, 2014, 247, 213-218.	4.0	136
644	Mechanisms for Enhanced Performance of Platinumâ€Based Electrocatalysts in Proton Exchange Membrane Fuel Cells. ChemSusChem, 2014, 7, 361-378.	3.6	86
645	Electrocatalytic oxygen reduction on nitrogen-doped graphene in alkaline media. Applied Catalysis B: Environmental, 2014, 147, 369-376.	10.8	215
646	Highly stable pyridinic nitrogen doped graphene modified electrode in simultaneous determination of hydroquinone and catechol. Sensors and Actuators B: Chemical, 2014, 193, 623-629.	4.0	97
648	Facile Preparation of Graphene/Polyaniline Composite and Its Application for Electrocatalysis Hexavalent Chromium Reduction. Electrochimica Acta, 2014, 132, 496-503.	2.6	56
649	A review of graphene and graphene oxide sponge: material synthesis and applications to energy and the environment. Energy and Environmental Science, 2014, 7, 1564.	15.6	996
650	The inherent kinetic electrochemical reduction of oxygen into H2O on FeN4-carbon: A density functional theory study. Journal of Power Sources, 2014, 255, 65-69.	4.0	83
651	Reversible Selfâ€Assembly of Terpyridineâ€Functionalized Graphene Oxide for Energy Conversion. Angewandte Chemie - International Edition, 2014, 53, 1415-1419.	7.2	75
652	Boosting Graphene Reactivity with Oxygen by Boron Doping: Density Functional Theory Modeling of the Reaction Path.. Journal of Physical Chemistry C, 2014, 118, 223-230.	1.5	78
653	Metalâ^'Organic Frameworkâ€Derived Nitrogenâ€Doped Coreâ€Shellâ€Structured Porous Fe/Fe₃C@C Nanoboxes Supported on Graphene Sheets for Efficient Oxygen Reduction Reactions. Advanced Energy Materials, 2014, 4, 1400337.	10.2	512
654	Defective Nitrogen-Doped Graphene Foam: A Metal-Free, Non-Precious Electrocatalyst for the Oxygen Reduction Reaction in Acid. Journal of the Electrochemical Society, 2014, 161, F544-F550.	1.3	41
655	Synergistically enhanced activity of graphene quantum dot/multi-walled carbon nanotube composites as metal-free catalysts for oxygen reduction reaction. Nanoscale, 2014, 6, 2603.	2.8	105
656	Graphene and Grapheneâ€like Layered Transition Metal Dichalcogenides in Energy Conversion and Storage. Small, 2014, 10, 2165-2181.	5.2	535
657	Mixed Transitionâ€Metal Oxides: Design, Synthesis, and Energyâ€Related Applications. Angewandte Chemie - International Edition, 2014, 53, 1488-1504.	7.2	2,019
658	Controllable Synthesis of Doped Graphene and Its Applications. Small, 2014, 10, 2975-2991.	5.2	58
659	Non-Pt catalyst as oxygen reduction reaction in microbial fuel cells: A review. International Journal of Hydrogen Energy, 2014, 39, 4870-4883.	3.8	269
660	Tuning the MoS₂ Edge-Site Activity for Hydrogen Evolution via Support Interactions. Nano Letters, 2014, 14, 1381-1387.	4.5	660
661	High-yield production of N-doped graphitic platelets by aqueous exfoliation of pyrolyzed chitosan. Carbon, 2014, 68, 777-783.	5.4	78

#	Article	IF	Citations
662	Doped graphene for metal-free catalysis. Chemical Society Reviews, 2014, 43, 2841-2857.	18.7	710
663	Large scale production of biomass-derived N-doped porous carbon spheres for oxygen reduction and supercapacitors. Journal of Materials Chemistry A, 2014, 2, 3317.	5.2	208
664	First-principle study of the transition-metal adatoms on B-doped vacancy-defected graphene. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 60, 133-138.	1.3	24
665	A one-pot hydrothermal synthesis of 3D nitrogen-doped graphene aerogels-supported NiS2 nanoparticles as efficient electrocatalysts for the oxygen-reduction reaction. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	23
666	Highly Efficient Electrocatalysts for Oxygen Reduction Based on 2D Covalent Organic Polymers Complexed with Nonâ€precious Metals. Angewandte Chemie - International Edition, 2014, 53, 2433-2437.	7.2	417
667	Determination of methyl parathion by a molecularly imprinted sensor based on nitrogen doped graphene sheets. Electrochimica Acta, 2014, 116, 366-371.	2.6	94
668	Oâ€•and Nâ€Doped Carbon Nanowebs as Metalâ€Free Catalysts for Hybrid Liâ€Air Batteries. Advanced Energy Materials, 2014, 4, 1301795.	10.2	89
669	Graphene Nanoplatelets Doped with N at its Edges as Metalâ€Free Cathodes for Organic Dyeâ€Sensitized Solar Cells. Advanced Materials, 2014, 26, 3055-3062.	11.1	140
670	Nitrogen-doped carbon coated Li₃V₂(PO₄)₃derived from a facile in situ fabrication strategy with ultrahigh-rate stable performance for lithium-ion storage. New Journal of Chemistry, 2014, 38, 430-436.	1.4	45
671	Exploring the active sites of nitrogen-doped graphene as catalysts for the oxygen reduction reaction. International Journal of Hydrogen Energy, 2014, 39, 15996-16005.	3.8	164
672	Excavated Feâ€Nâ€C Sites for Enhanced Electrocatalytic Activity in the Oxygen Reduction Reaction. ChemSusChem, 2014, 7, 1289-1294.	3.6	40
673	A general approach for fabrication of nitrogen-doped graphene sheets and its application in supercapacitors. Journal of Colloid and Interface Science, 2014, 417, 270-277.	5.0	93
675	Origin of the Electrocatalytic Oxygen Reduction Activity of Graphene-Based Catalysts: A Roadmap to Achieve the Best Performance. Journal of the American Chemical Society, 2014, 136, 4394-4403.	6.6	946
676	Fewâ€Layer Borocarbonitride Nanosheets: Platinumâ€Free Catalyst for the Oxygen Reduction Reaction. Chemistry - an Asian Journal, 2014, 9, 838-843.	1.7	29
677	25th Anniversary Article: Chemically Modified/Doped Carbon Nanotubes & Graphene for Optimized Nanostructures & Nanodevices. Advanced Materials, 2014, 26, 40-67.	11.1	479
678	Nanocarbon Electrocatalysts for Oxygen Reduction in Alkaline Media for Advanced Energy Conversion and Storage. Advanced Energy Materials, 2014, 4, 1301415.	10.2	351
679	Chemically Functionalized Carbon Nanotubes with Pyridine Groups as Easily Tunable N-Decorated Nanomaterials for the Oxygen Reduction Reaction in Alkaline Medium. Chemistry of Materials, 2014, 26, 3460-3470.	3.2	107
680	A novel 3D structured reduced graphene oxide/TiO₂ composite: synthesis and photocatalytic performance. Journal of Materials Chemistry A, 2014, 2, 3605-3612.	5.2	59

#	Article	IF	Citations
681	Platinum-like Behavior of Reduced Graphene Oxide as a Cocatalyst on TiO₂ for the Efficient Photocatalytic Oxidation of Arsenite. Environmental Science and Technology Letters, 2014, 1, 185-190.	3.9	114
682	Development and Simulation of Sulfurâ€doped Graphene Supported Platinum with Exemplary Stability and Activity Towards Oxygen Reduction. Advanced Functional Materials, 2014, 24, 4325-4336.	7.8	214
683	Distinct Mechanisms of DNA Sensing Based on Nâ€Doped Carbon Nanotubes with Enhanced Conductance and Chemical Selectivity. Small, 2014, 10, 774-781.	5.2	11
684	Carbon as catalyst and support for electrochemical energy conversion. Carbon, 2014, 75, 5-42.	5.4	443
685	Nâ€Doped Graphene Derived from Biomass as a Visibleâ€Light Photocatalyst for Hydrogen Generation from Water/Methanol Mixtures. Chemistry - A European Journal, 2014, 20, 187-194.	1.7	136
686	Comparisons of heat treatment on the electrochemical performance of different carbons for lithium-oxygen cells. Electrochimica Acta, 2014, 129, 318-326.	2.6	4
687	A Review of Grapheneâ€Based Nanostructural Materials for Both Catalyst Supports and Metalâ€Free Catalysts in PEM Fuel Cell Oxygen Reduction Reactions. Advanced Energy Materials, 2014, 4, 1301523.	10.2	416
688	A density functional theory study on the adsorption and decomposition of methanol on B12N12 fullerene-like nanocage. Superlattices and Microstructures, 2014, 67, 54-60.	1.4	67
689	Oxygen Reduction Reaction Studies of Phosphorus and Nitrogen Coâ€Doped Mesoporous Carbon Synthesized via Microwave Technique. ChemElectroChem, 2014, 1, 573-579.	1.7	67
690	Bicontinuous Nanoporous Nâ€doped Graphene for the Oxygen Reduction Reaction. Advanced Materials, 2014, 26, 4145-4150.	11.1	261
691	Porous nitrogen-doped carbon nanosheet on graphene as metal-free catalyst for oxygen reduction reaction in air-cathode microbial fuel cells. Bioelectrochemistry, 2014, 95, 23-28.	2.4	105
692	One-step synthesis of dopamine-derived micro/mesoporous nitrogen-doped carbon materials for highly efficient oxygen-reduction catalysts. Journal of Power Sources, 2014, 262, 414-420.	4.0	35
693	High Electrocatalytic and Wettable Nitrogenâ€Doped Microwaveâ€Exfoliated Graphene Nanosheets as Counter Electrode for Dyeâ€Sensitized Solar Cells. Small, 2014, 10, 3347-3353.	5.2	58
694	Layerâ€byâ€Layer Assembled Heteroatomâ€Doped Graphene Films with Ultrahigh Volumetric Capacitance and Rate Capability for Microâ€Supercapacitors. Advanced Materials, 2014, 26, 4552-4558.	11.1	289
695	Nitrogenâ€Doped Holey Graphitic Carbon from 2D Covalent Organic Polymers for Oxygen Reduction. Advanced Materials, 2014, 26, 3315-3320.	11.1	292
696	B-Doped Graphene as an Electrochemically Superior Metal-Free Cathode Material As Compared to Pt over a Co(II)/Co(III) Electrolyte for Dye-Sensitized Solar Cell. Chemistry of Materials, 2014, 26, 3586-3591.	3.2	57
697	Strongly Veined Carbon Nanoleaves as a Highly Efficient Metalâ€Free Electrocatalyst. Angewandte Chemie - International Edition, 2014, 53, 6905-6909.	7.2	156
698	Investigation of hydrogen peroxide reduction reaction on graphene and nitrogen doped graphene nanoflakes in neutral solution. Journal of Power Sources, 2014, 257, 356-363.	4.0	49

#	Article	IF	Citations
699	Au nanoparticles decorated polypyrrole/reduced graphene oxide hybrid sheets for ultrasensitive dopamine detection. Sensors and Actuators B: Chemical, 2014, 193, 759-763.	4.0	114
700	Hybrid Nanocarbon as a Catalyst for Direct Dehydrogenation of Propane: Formation of an Active and Selective Coreâ€“Shell sp²/sp³ Nanocomposite Structure. Chemistry - A European Journal, 2014, 20, 6324-6331.	1.7	107
701	One-step conversion from metalâ€“organic frameworks to Co3O4@N-doped carbon nanocomposites towards highly efficient oxygen reduction catalysts. Journal of Materials Chemistry A, 2014, 2, 8184.	5.2	130
702	A theoretical insight into surface reactivity of nitrogen-doped BC3 nanotubes. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 59, 223-229.	1.3	8
703	Deactivation of carbon electrode for elimination of carbon dioxide evolution from rechargeable lithiumâ€“oxygen cells. Nature Communications, 2014, 5, 3937.	5.8	76
704	Chemical Vapor Deposition of N-Doped Graphene and Carbon Films: The Role of Precursors and Gas Phase. ACS Nano, 2014, 8, 3337-3346.	7.3	133
705	Catalyst-Free Synthesis of Crumpled Boron and Nitrogen Co-Doped Graphite Layers with Tunable Bond Structure for Oxygen Reduction Reaction. ACS Nano, 2014, 8, 3313-3321.	7.3	258
706	Amine-functionalized holey graphene as a highly active metal-free catalyst for the oxygen reduction reaction. Journal of Materials Chemistry A, 2014, 2, 441-450.	5.2	119
707	The role of holes in improving the performance of nitrogen-doped holey graphene as an active electrode material for supercapacitor and oxygen reduction reaction. Journal of Power Sources, 2014, 251, 55-65.	4.0	123
708	Pyridyne cycloaddition of graphene: â€œexternalâ€•active sites for oxygen reduction reaction. Journal of Materials Chemistry A, 2014, 2, 897-901.	5.2	33
709	Probing the influence of different oxygenated groups on graphene oxide's catalytic performance. Journal of Materials Chemistry A, 2014, 2, 610-613.	5.2	68
710	Solution-Processed PEDOT:PSS/Graphene Composites as the Electrocatalyst for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2014, 6, 3587-3593.	4.0	115
711	Heterogeneous nanocarbon materials for oxygen reduction reaction. Energy and Environmental Science, 2014, 7, 576.	15.6	922
712	Luminescent graphene quantum dots as new fluorescent materials for environmental and biological applications. TrAC - Trends in Analytical Chemistry, 2014, 54, 83-102.	5.8	296
713	Iodide-mediated room temperature reduction of graphene oxide: a rapid chemical route for the synthesis of a bifunctional electrocatalyst. Journal of Materials Chemistry A, 2014, 2, 1332-1340.	5.2	137
714	A graphene hybrid material functionalized with POSS: Synthesis and applications in low-dielectric epoxy composites. Composites Science and Technology, 2014, 92, 112-119.	3.8	72
715	Application of carbon materials in redox flow batteries. Journal of Power Sources, 2014, 253, 150-166.	4.0	262
716	Facile synthesis of mesoporous nitrogen-doped graphene: An efficient methanolâ€“tolerant cathodic catalyst for oxygen reduction reaction. Nano Energy, 2014, 3, 55-63.	8.2	183

#	Article	IF	Citations
717	Improved electrocatalytic activity of carbon materials by nitrogen doping. Applied Catalysis B: Environmental, 2014, 147, 633-641.	10.8	118
718	Sulfur-doped graphene as a potential alternative metal-free electrocatalyst and Pt-catalyst supporting material for oxygen reduction reaction. Physical Chemistry Chemical Physics, 2014, 16, 103-109.	1.3	207
719	Oxygen electrocatalysts in metalâ€“air batteries: from aqueous to nonaqueous electrolytes. Chemical Society Reviews, 2014, 43, 7746-7786.	18.7	1,264
720	Development of shape-engineered Î±-MnO 2 materials as bi-functional catalysts for oxygen evolution reaction and oxygen reduction reaction in alkaline medium. International Journal of Hydrogen Energy, 2014, 39, 21024-21036.	3.8	112
721	Microwave-assisted solvothermal preparation of nitrogen and sulfur co-doped reduced graphene oxide and graphene quantum dots hybrids for highly efficient oxygen reduction. Journal of Materials Chemistry A, 2014, 2, 20605-20611.	5.2	76
722	Nitrogen-doped graphene-supported Co/CoNx nanohybrid as a highly efficient electrocatalyst for oxygen reduction reaction in an alkaline medium. RSC Advances, 2014, 4, 62272-62280.	1.7	13
723	Low-temperature and one-pot synthesis of sulfurized graphene nanosheets via in situ doping and their superior electrocatalytic activity for oxygen reduction reaction. Journal of Materials Chemistry A, 2014, 2, 20714-20722.	5.2	54
724	Improved numerical calculation of the generation of a neutral beam by charge transfer between chlorine ions/neutrals and a graphite surface. Journal Physics D: Applied Physics, 2014, 47, 465203.	1.3	2
725	Dyeing bacterial cellulose pellicles for energetic heteroatom doped carbon nanofiber aerogels. Nano Research, 2014, 7, 1861-1872.	5.8	97
726	Patterned graphene functionalization via mask-free scanning of micro-plasma jet under ambient condition. Applied Physics Letters, 2014, 104, .	1.5	66
727	Ab Initio Study of Thin Oxideâ€“Metal Overlayers as an Inverse Catalytic System for Dioxygen Reduction and Enhanced CO Tolerance. ACS Catalysis, 2014, 4, 4074-4080.	5.5	42
728	Stability and Spectroscopy of Single Nitrogen Dopants in Graphene at Elevated Temperatures. ACS Nano, 2014, 8, 11806-11815.	7.3	45
729	Carbonization of self-assembled nanoporous hemin with a significantly enhanced activity for the oxygen reduction reaction. Faraday Discussions, 2014, 176, 393-408.	1.6	30
730	Development of Graphene/CdSe Quantum Dotsâ€Co Phthalocyanine Nanocomposite for Oxygen Reduction Reaction. Electroanalysis, 2014, 26, 2261-2272.	1.5	15
731	A N-o-sulphonic acid benzyl chitosan (NSBC) and N,N-dimethylene phosphonic acid propylsilane graphene oxide (NMPSGO) based multi-functional polymer electrolyte membrane with enhanced water retention and conductivity. RSC Advances, 2014, 4, 57200-57209.	1.7	42
732	Mussel-inspired nitrogen-doped graphene nanosheet supported manganese oxide nanowires as highly efficient electrocatalysts for oxygen reduction reaction. Journal of Materials Chemistry A, 2014, 2, 6167.	5.2	41
733	Nitrogen doped graphene: influence of precursors and conditions of the synthesis. Journal of Materials Chemistry C, 2014, 2, 2887-2893.	2.7	61
734	Block copolymer-templated nitrogen-enriched nanocarbons with morphology-dependent electrocatalytic activity for oxygen reduction. Chemical Science, 2014, 5, 3315.	3.7	40

#	Article	IF	Citations
735	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. Electrochimica Acta, 2014, 149, 56-64.	2.6	61
736	Low-temperature solution-processable Ni(OH)₂ ultrathin nanosheet/N-graphene nanohybrids for high-performance supercapacitor electrodes. Nanoscale, 2014, 6, 5960-5966.	2.8	41
737	Mn and Co co-substituted Fe₃O₄nanoparticles on nitrogen-doped reduced graphene oxide for oxygen electrocatalysis in alkaline solution. Journal of Materials Chemistry A, 2014, 2, 16217-16223.	5.2	118
738	Design and synthesis of carbonized polypyrrole-coated graphene aerogel acting as an efficient metal-free catalyst for oxygen reduction. RSC Advances, 2014, 4, 16979-16984.	1.7	24
739	One-step synthesis of sulfur doped graphene foam for oxygen reduction reactions. Dalton Transactions, 2014, 43, 3420.	1.6	84
740	Nitrogen containing graphene-like structures from pyrolysis of pyrimidine polymers for polymer/graphene hybrid field effect transistors. RSC Advances, 2014, 4, 41997-42001.	1.7	7
741	TiO₂ Nanoparticles-Functionalized N-Doped Graphene with Superior Interfacial Contact and Enhanced Charge Separation for Photocatalytic Hydrogen Generation. ACS Applied Materials & Interfaces, 2014, 6, 13798-13806.	4.0	153
742	High concentration of nitrogen doped into graphene using N₂plasma with an aluminum oxide buffer layer. Journal of Materials Chemistry C, 2014, 2, 933-939.	2.7	62
743	Microwave assisted synthesis and characterization of silicon and phosphorous co-doped carbon as an electrocatalyst for oxygen reduction reaction. RSC Advances, 2014, 4, 6306.	1.7	29
744	A Novel double-shelled C@NiO hollow microsphere: Synthesis and application for electrochemical capacitor. Electrochimica Acta, 2014, 148, 211-219.	2.6	54
745	Tuning the Catalytic Activity of Graphene Nanosheets for Oxygen Reduction Reaction via Size and Thickness Reduction. ACS Applied Materials & Interfaces, 2014, 6, 19726-19736.	4.0	83
746	Two and three dimensional network polymers for electrocatalysis. Physical Chemistry Chemical Physics, 2014, 16, 11150-11161.	1.3	11
747	Graphene and its composites with nanoparticles for electrochemical energy applications. Nano Today, 2014, 9, 668-683.	6.2	230
748	Carbon Materials as Catalyst Supports and Catalysts in the Transformation of Biomass to Fuels and Chemicals. ACS Catalysis, 2014, 4, 3393-3410.	5.5	523
749	Metal-Free Ketjenblack Incorporated Nitrogen-Doped Carbon Sheets Derived from Gelatin as Oxygen Reduction Catalysts. Nano Letters, 2014, 14, 1870-1876.	4.5	155
750	Hierarchically porous carbons with optimized nitrogen doping as highly active electrocatalysts for oxygen reduction. Nature Communications, 2014, 5, 4973.	5.8	921
751	Nanocarbon-based electrochemical systems for sensing, electrocatalysis, and energy storage. Nano Today, 2014, 9, 405-432.	6.2	93
752	Branched platinum-on-palladium bimetallic heteronanostructures supported on reduced graphene oxide for highly efficient oxygen reduction reaction. Journal of Power Sources, 2014, 272, 1078-1085.	4.0	31

#	Article	IF	Citations
753	Nitrogen-doped hierarchically porous carbon as efficient oxygen reduction electrocatalysts in acid electrolyte. Journal of Materials Chemistry A, 2014, 2, 17047-17057.	5.2	62
754	Nitrogen-doped mesoporous carbon hollow spheres as a novel carbon support for oxygen reduction reaction. New Journal of Chemistry, 2014, 38, 5521-5526.	1.4	19
755	A promising monolayer membrane for oxygen separation from harmful gases: nitrogen-substituted polyphenylene. Nanoscale, 2014, 6, 9960-9964.	2.8	51
756	Supercritical fluid assisted synthesis of N-doped graphene nanosheets and their capacitance behavior in ionic liquid and aqueous electrolytes. Journal of Materials Chemistry A, 2014, 2, 4731-4738.	5.2	72
757	Advanced hybrid Liâ€“air batteries with high-performance mesoporous nanocatalysts. Energy and Environmental Science, 2014, 7, 2630.	15.6	129
758	Hollow nitrogen-doped carbon spheres as efficient and durable electrocatalysts for oxygen reduction. Chemical Communications, 2014, 50, 9473-9476.	2.2	88
759	Reduction of the oxygen reduction reaction overpotential of nitrogen-doped graphene by designing it to a microspherical hollow shape. Journal of Materials Chemistry A, 2014, 2, 14071.	5.2	38
760	Ultrathin MnO2 nanoflakes as efficient catalysts for oxygen reduction reaction. Chemical Communications, 2014, 50, 7885.	2.2	113
761	Particle size dependence on oxygen reduction reaction activity of electrodeposited TaO_xcatalysts in acidic media. Physical Chemistry Chemical Physics, 2014, 16, 895-898.	1.3	39
762	Spiers Memorial Lecture : Advances of carbon nanomaterials. Faraday Discussions, 2014, 173, 9-46.	1.6	24
763	Large-Scale Growth of Nitrogen-Doped via Solvothermal Synthesis. Applied Mechanics and Materials, 0, 670-671, 323-326.	0.2	1
764	In situ solution plasma synthesis of nitrogen-doped carbon nanoparticles as metal-free electrocatalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2014, 2, 18677-18686.	5.2	96
765	Dually functional, N-doped porous graphene foams as counter electrodes for dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2014, 16, 21820-21826.	1.3	30
766	Plasma synthesis of nitrogen-doped porous graphene supporting Pd nanoparticles as a new catalyst for Câ€“C coupling reactions. RSC Advances, 2014, 4, 26804.	1.7	20
767	Nitrogen doped graphene paper as a highly conductive, and light-weight substrate for flexible supercapacitors. RSC Advances, 2014, 4, 51878-51883.	1.7	33
768	Bottom-up synthesis of nitrogen-doped graphene sheets for ultrafast lithium storage. Nanoscale, 2014, 6, 6075-6083.	2.8	110
769	Submerged liquid plasma â€“ low energy synthesis of nitrogen-doped graphene for electrochemical applications. Journal of Materials Chemistry A, 2014, 2, 3332-3337.	5.2	51
770	Hexamethylenetetramine mediated simultaneous nitrogen doping and reduction of graphene oxide for a metal-free SERS substrate. RSC Advances, 2014, 4, 44146-44150.	1.7	17

#	Article	IF	Citations
771	MOF derived catalysts for electrochemical oxygen reduction. Journal of Materials Chemistry A, 2014, 2, 14064-14070.	5.2	407
772	From two-dimension to one-dimension: the curvature effect of silicon-doped graphene and carbon nanotubes for oxygen reduction reaction. Physical Chemistry Chemical Physics, 2014, 16, 17479-17486.	1.3	48
773	Ionic liquid derived carbons as highly efficient oxygen reduction catalysts: first elucidation of pore size distribution dependent kinetics. Chemical Communications, 2014, 50, 1469-1471.	2.2	49
774	Post modification of MOF derived carbon via g-C₃N₄ entrapment for an efficient metal-free oxygen reduction reaction. Chemical Communications, 2014, 50, 3363-3366.	2.2	145
775	Nanostructured carbon-based cathode catalysts for nonaqueous lithiumâ€“oxygen batteries. Physical Chemistry Chemical Physics, 2014, 16, 13568-13582.	1.3	104
776	Metal-free oxygen reduction electrodes based on thin PEDOT films with high electrocatalytic activity. RSC Advances, 2014, 4, 9819.	1.7	34
777	From filter paper to porous carbon composite membrane oxygen reduction catalyst. Chemical Communications, 2014, 50, 11151.	2.2	39
778	2D polyacrylonitrile brush derived nitrogen-doped carbon nanosheets for high-performance electrocatalysts in oxygen reduction reaction. Polymer Chemistry, 2014, 5, 2057-2064.	1.9	54
779	Nitrogen-enriched carbon from bamboo fungus with superior oxygen reduction reaction activity. Journal of Materials Chemistry A, 2014, 2, 18263-18270.	5.2	78
780	Magnetic edge-states in nanographene, HNO3-doped nanographene and its residue compounds of nanographene-based nanoporous carbon. Physical Chemistry Chemical Physics, 2014, 16, 6273-6282.	1.3	6
781	Active Sites and Mechanisms for Oxygen Reduction Reaction on Nitrogen-Doped Carbon Alloy Catalysts: Stoneâ€“Wales Defect and Curvature Effect. Journal of the American Chemical Society, 2014, 136, 13629-13640.	6.6	273
782	Magnetic graphene oxide nanocomposites: nanoparticles growth mechanism and property analysis. Journal of Materials Chemistry C, 2014, 2, 9478-9488.	2.7	92
783	Preparation of N-doped graphene by reduction of graphene oxide with mixed microbial system and its haemocompatibility. Nanoscale, 2014, 6, 4882.	2.8	43
784	Polypyrroleâ€Derived Nitrogen and Oxygen Coâ€Doped Mesoporous Carbons as Efficient Metalâ€Free Electrocatalyst for Hydrazine Oxidation. Advanced Materials, 2014, 26, 6510-6516.	11.1	114
785	Graphene Phosphonic Acid as an Efficient Flame Retardant. ACS Nano, 2014, 8, 2820-2825.	7.3	169
786	SGO/SPES-Based Highly Conducting Polymer Electrolyte Membranes for Fuel Cell Application. ACS Applied Materials & Interfaces, 2014, 6, 5595-5601.	4.0	172
787	Non-precious electrocatalysts synthesized from metalâ€“organic frameworks. Journal of Materials Chemistry A, 2014, 2, 12270.	5.2	73
788	Facile synthesis of porous NiCo2O4 microflowers as high-performance anode materials for advanced lithium-ion batteries. Electrochimica Acta, 2014, 145, 185-192.	2.6	91

#	Article	IF	Citations
789	Electrolyte-induced Reorganization of SDS Self-assembly on Graphene: A Molecular Simulation Study. ACS Applied Materials & Interfaces, 2014, 6, 5789-5797.	4.0	12
790	The selective formation of graphene ranging from two-dimensional sheets to three-dimensional mesoporous nanospheres. Nanoscale, 2014, 6, 7204-7208.	2.8	9
791	Nanoporous molybdenum carbide wires as an active electrocatalyst towards the oxygen reduction reaction. Physical Chemistry Chemical Physics, 2014, 16, 10088-10094.	1.3	43
792	Pyrolysis of Cellulose under Ammonia Leads to Nitrogen-Doped Nanoporous Carbon Generated through Methane Formation. Nano Letters, 2014, 14, 2225-2229.	4.5	297
793	Edgeâ€Selectively Halogenated Graphene Nanoplatelets (XGnPs, X = Cl, Br, or I) Prepared by Ballâ€Milling and Used as Anode Materials for Lithiumâ€Ion Batteries. Advanced Materials, 2014, 26, 7317-7323.	11.1	160
794	Enhanced Visible Activities of Î±-Fe₂O₃ by Coupling N-Doped Graphene and Mechanism Insight. ACS Catalysis, 2014, 4, 990-998.	5.5	132
795	Determination of Quantum Capacitance and Band Filling Potential in Graphene Transistors with Dual Electrochemical and Field-Effect Gates. Journal of Physical Chemistry C, 2014, 118, 21160-21169.	1.5	29
796	Nitrogen Modified-Reduced Graphene Oxide Supports for Catalysts for Fuel Cells and Their Electrocatalytic Activity. Journal of the Electrochemical Society, 2014, 161, F518-F524.	1.3	16
797	ZIF-derived in situ nitrogen-doped porous carbons as efficient metal-free electrocatalysts for oxygen reduction reaction. Energy and Environmental Science, 2014, 7, 442-450.	15.6	719
798	Computational Study on the Interaction of Modified Nucleobases with Graphene and Doped Graphenes. Journal of Physical Chemistry C, 2014, 118, 16165-16174.	1.5	54
799	Dissociation of oxygen on pristine and nitrogen-doped carbon nanotubes: a spin-polarized density functional study. RSC Advances, 2014, 4, 15225-15235.	1.7	36
800	Nitrogen-doped nanoporous carbon nanosheets derived from plant biomass: an efficient catalyst for oxygen reduction reaction. Energy and Environmental Science, 2014, 7, 4095-4103.	15.6	537
801	Nitrogen Self-Doped Porous Carbon from Surplus Sludge as Metal-Free Electrocatalysts for Oxygen Reduction Reactions. ACS Applied Materials & Interfaces, 2014, 6, 14911-14918.	4.0	54
802	Nitrogen-doped one-dimensional (1D) macroporous carbonaceous nanotube arrays and their application in electrocatalytic oxygen reduction reactions. Nanoscale, 2014, 6, 11057-11061.	2.8	50
803	Interplay between Oxidized Monovacancy and Nitrogen Doping in Graphene. Journal of Physical Chemistry C, 2014, 118, 19795-19805.	1.5	11
804	Mass Production of Multiâ€Channeled Porous Carbon Nanofibers and Their Application as Binderâ€Free Electrodes for Highâ€Performance Supercapacitors. Small, 2014, 10, 4671-4676.	5.2	42
805	Monoclinic hafnium oxynitride supported on reduced graphene oxide to catalyse the oxygen reduction reaction in acidic media. Physical Chemistry Chemical Physics, 2014, 16, 20415-20419.	1.3	17
806	Toward Tailored Functional Design of Multi-Walled Carbon Nanotubes (MWNTs): Electrochemical and Antimicrobial Activity Enhancement via Oxidation and Selective Reduction. Environmental Science & Technology, 2014, 48, 5938-5945.	4.6	44

#	Article	IF	Citations
807	Boron-doped graphene as active electrocatalyst for oxygen reduction reaction at a fuel-cell cathode. Journal of Catalysis, 2014, 318, 203-210.	3.1	134
808	Oneâ€Step Hydrothermal Synthesis of Nitrogenâ€Doped Carbon Nanotubes as an Efficient Electrocatalyst for Oxygen Reduction Reactions. Chemistry - an Asian Journal, 2014, 9, 2915-2920.	1.7	16
809	Electrochemiluminescence resonance energy transfer between graphene quantum dots and gold nanoparticles for DNA damage detection. Analyst, The, 2014, 139, 2404-2410.	1.7	107
810	Oxygen Reduction Reaction in a Droplet on Graphite: Direct Evidence that the Edge Is More Active than the Basal Plane. Angewandte Chemie - International Edition, 2014, 53, 10804-10808.	7.2	410
811	Graphene's potential in materials science and engineering. RSC Advances, 2014, 4, 28987-29011.	1.7	60
812	A cobaltâ€“nitrogen complex on N-doped three-dimensional graphene framework as a highly efficient electrocatalyst for oxygen reduction reaction. Nanoscale, 2014, 6, 15066-15072.	2.8	117
813	Doped h-BN monolayer as efficient noble metal-free catalysts for CO oxidation: the role of dopant and water in activity and catalytic de-poisoning. Journal of Materials Chemistry A, 2014, 2, 12812-12820.	5.2	76
814	Sensitive electrochemical sensors for simultaneous determination of ascorbic acid, dopamine, and uric acid based on Au@Pd-reduced graphene oxide nanocomposites. Nanoscale, 2014, 6, 11303-11309.	2.8	213
815	Nitrogen-Doped Hollow Carbon Spheres as a Support for Platinum-Based Electrocatalysts. ACS Catalysis, 2014, 4, 3856-3868.	5.5	107
816	Mussel-inspired, ultralight, multifunctional 3D nitrogen-doped graphene aerogel. Carbon, 2014, 80, 174-182.	5.4	145
817	Use of H₂S to Probe the Active Sites in FeNC Catalysts for the Oxygen Reduction Reaction (ORR) in Acidic Media. ACS Catalysis, 2014, 4, 3454-3462.	5.5	81
818	Hydrothermal Transformation of Dried Grass into Graphitic Carbonâ€Based High Performance Electrocatalyst for Oxygen Reduction Reaction. Small, 2014, 10, 3371-3378.	5.2	135
820	N-doped mesoporous carbon as a bifunctional material for oxygen reduction reaction and supercapacitors. Chinese Journal of Catalysis, 2014, 35, 1078-1083.	6.9	35
821	Efficient nitrogen-doping and structural control of hierarchical carbons using unconventional precursors in the form of deep eutectic solvents. Journal of Materials Chemistry A, 2014, 2, 17387-17399.	5.2	37
822	Surface Polarization Matters: Enhancing the Hydrogenâ€Evolution Reaction by Shrinking Pt Shells in Ptâ€“Pdâ€“Graphene Stack Structures. Angewandte Chemie - International Edition, 2014, 53, 12120-12124.	7.2	436
823	Fabrication of functionalized nitrogen-doped graphene for supercapacitor electrodes. Ionics, 2014, 20, 1489-1494.	1.2	28
824	Toward New Fuel Cell Support Materials: A Theoretical and Experimental Study of Nitrogenâ€Doped Graphene. ChemSusChem, 2014, 7, 2609-2620.	3.6	45
825	Liquid Crystal Size Selection of Large-Size Graphene Oxide for Size-Dependent N-Doping and Oxygen Reduction Catalysis. ACS Nano, 2014, 8, 9073-9080.	7.3	116

#	Article	IF	Citations
828	Mn₃O₄/Carbon Nanotube Nanocomposites as Electrocatalysts for the Oxygen Reduction Reaction in Alkaline Solution. ChemElectroChem, 2014, 1, 1531-1536.	1.7	16
829	Fabrication of Nitrogen-Modified Annealed Nanodiamond with Improved Catalytic Activity. ACS Nano, 2014, 8, 7823-7833.	7.3	127
830	A one-pot method to synthesize high performance multielement co-doped reduced graphene oxide catalysts for oxygen reduction. Electrochemistry Communications, 2014, 47, 49-53.	2.3	22
831	Metal-free doped carbon materials as electrocatalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2014, 2, 4085-4110.	5.2	683
832	One-step synthesis of nitrogen-doped microporous carbon materials as metal-free electrocatalysts for oxygen reduction reaction. Journal of Materials Chemistry A, 2014, 2, 11666-11671.	5.2	84
833	Oxygen Reduction on Grapheneâ€“Carbon Nanotube Composites Doped Sequentially with Nitrogen and Sulfur. ACS Catalysis, 2014, 4, 2734-2740.	5.5	174
834	Enhanced electrocatalytic activity due to additional phosphorous doping in nitrogen and sulfur-doped graphene: A comprehensive study. Carbon, 2014, 78, 257-267.	5.4	249
835	A novel electrochemiluminescence sensor based on nitrogen-doped graphene/CdTe quantum dots composite. Applied Surface Science, 2014, 315, 22-27.	3.1	18
836	Pd Nanoparticles deposited on nitrogen-doped HOPG: New Insights into the Pd-catalyzed Oxygen Reduction Reaction. Electrochimica Acta, 2014, 141, 89-101.	2.6	42
837	Ordered mesoporous Fe (or Co)â€“Nâ€“graphitic carbons as excellent non-precious-metal electrocatalysts for oxygen reduction. Carbon, 2014, 78, 49-59.	5.4	84
838	Nanoporous graphene by quantum dots removal from graphene and its conversion to a potential oxygen reduction electrocatalyst via nitrogen doping. Energy and Environmental Science, 2014, 7, 1059.	15.6	156
839	Nitrogen-doped graphdiyne as a metal-free catalyst for high-performance oxygen reduction reactions. Nanoscale, 2014, 6, 11336-11343.	2.8	229
840	Ag nanoparticles supported on N-doped graphene hybrids for catalytic reduction of 4-nitrophenol. RSC Advances, 2014, 4, 43204-43211.	1.7	65
841	Possible Oxygen Reduction Reactions for Graphene Edges from First Principles. Journal of Physical Chemistry C, 2014, 118, 17616-17625.	1.5	56
842	Synthesis of Iron Oxide/Partly Graphitized Carbon Composites as a High-Efficiency and Low-Cost Cathode Catalyst for Microbial Fuel Cells. ACS Applied Materials & Interfaces, 2014, 6, 13438-13447.	4.0	61
843	Synthesis of graphene oxide nanosheets by electrochemical exfoliation of graphite in cetyltrimethylammonium bromide and its application for oxygen reduction. Journal of Materials Chemistry A, 2014, 2, 15428.	5.2	124
844	Silver/Nitrogen-Doped Graphene Interaction and Its Effect on Electrocatalytic Oxygen Reduction. Chemistry of Materials, 2014, 26, 5868-5873.	3.2	101
845	Molecular doping of graphene as metal-free electrocatalyst for oxygen reduction reaction. Chemical Communications, 2014, 50, 10672.	2.2	78

#	Article	IF	Citations
846	Advanced oxygen reduction reaction catalyst based on nitrogen and sulfur co-doped graphene in alkaline medium. Physical Chemistry Chemical Physics, 2014, 16, 23196-23205.	1.3	35
847	Heteroatom-doped graphene materials: syntheses, properties and applications. Chemical Society Reviews, 2014, 43, 7067-7098.	18.7	1,547
848	MoO2 nanobelts@nitrogen self-doped MoS2 nanosheets as effective electrocatalysts for hydrogen evolution reaction. Journal of Materials Chemistry A, 2014, 2, 11358.	5.2	262
849	A green one-arrow-two-hawks strategy for nitrogen-doped carbon dots as fluorescent ink and oxygen reduction electrocatalysts. Journal of Materials Chemistry A, 2014, 2, 6320.	5.2	136
850	Small-sized PdCu nanocapsules on 3D graphene for high-performance ethanol oxidation. Nanoscale, 2014, 6, 2768.	2.8	132
851	Nitrogen-enriched, double-shelled carbon/layered double hydroxide hollow microspheres for excellent electrochemical performance. Nanoscale, 2014, 6, 10887-10895.	2.8	74
852	Germanium Quantum Dots Embedded in Nâ€Doping Graphene Matrix with Spongeâ€Like Architecture for Enhanced Performance in Lithiumâ€Ion Batteries. Chemistry - A European Journal, 2014, 20, 9675-9682.	1.7	44
853	Nitrogen-doped carbon nanotubes and graphene composite structures for energy and catalytic applications. Chemical Communications, 2014, 50, 6818.	2.2	428
854	Metalâ€“Nitrogen Doping of Mesoporous Carbon/Graphene Nanosheets by Selfâ€Templating for Oxygen Reduction Electrocatalysts. ChemSusChem, 2014, 7, 3002-3006.	3.6	52
855	N-, O-, and S-Tridoped Nanoporous Carbons as Selective Catalysts for Oxygen Reduction and Alcohol Oxidation Reactions. Journal of the American Chemical Society, 2014, 136, 13554-13557.	6.6	317
856	Unique Configuration of a Nitrogen-Doped Graphene Nanoribbon: Potential Applications to Semiconductor and Hydrogen Fuel Cell. Journal of Physical Chemistry C, 2014, 118, 24723-24729.	1.5	8
857	Edge-iodine/sulfonic acid-functionalized graphene nanoplatelets as efficient electrocatalysts for oxygen reduction reaction. Journal of Materials Chemistry A, 2014, 2, 8690-8695.	5.2	45
858	Amino acid mediated functionalization and reduction of graphene oxide â€“ synthesis and the formation mechanism of nitrogen-doped graphene. New Journal of Chemistry, 2014, 38, 3457-3467.	1.4	58
859	Low-Temperature Growth of Large-Area Heteroatom-Doped Graphene Film. Chemistry of Materials, 2014, 26, 2460-2466.	3.2	87
860	One-Step Synthesis of Graphene/Polypyrrole Nanofiber Composites as Cathode Material for a Biocompatible Zinc/Polymer Battery. ACS Applied Materials & Interfaces, 2014, 6, 16679-16686.	4.0	65
861	Graphene-based macroscopic assemblies and architectures: an emerging material system. Chemical Society Reviews, 2014, 43, 7295-7325.	18.7	416
862	Density-Functional-Theory Calculation Analysis of Active Sites for Four-Electron Reduction of O₂ on Fe/N-Doped Graphene. ACS Catalysis, 2014, 4, 4170-4177.	5.5	215
863	Theoretical insight into highly durable iron phthalocyanine derived non-precious catalysts for oxygen reduction reactions. Journal of Materials Chemistry A, 2014, 2, 19707-19716.	5.2	52

#	Article	IF	Citations
864	Nanocrystalline tungstic carbide/graphitic carbon composite: synthesis, characterization, and its application as an effective Pt catalyst support for methanol oxidation. Journal of Solid State Electrochemistry, 2014, 18, 2225-2232.	1.2	6
865	Mechanical exfoliation of graphite in 1-butyl-3-methylimidazolium hexafluorophosphate (BMIM-PF6) providing graphene nanoplatelets that exhibit enhanced electrocatalysis. Journal of Power Sources, 2014, 271, 312-325.	4.0	10
866	Oxygen reduction reaction by electrochemically reduced graphene oxide. Faraday Discussions, 2014, 173, 415-428.	1.6	77
867	Low-loading cobalt coupled with nitrogen-doped porous graphene as excellent electrocatalyst for oxygen reduction reaction. Journal of Materials Chemistry A, 2014, 2, 9079.	5.2	61
868	A three-dimensional Mn₃O₄network supported on a nitrogenated graphene electrocatalyst for efficient oxygen reduction reaction in alkaline media. Journal of Materials Chemistry A, 2014, 2, 14493-14501.	5.2	120
870	Recent progress on nitrogen/carbon structures designed for use in energy and sustainability applications. Energy and Environmental Science, 2014, 7, 1212-1249.	15.6	559
872	Flexible nitrogen-doped graphene/carbon nanotube/Co₃O₄ paper and its oxygen reduction activity. Nanoscale, 2014, 6, 7534-7541.	2.8	75
874	Metal-free B-doped graphene with efficient electrocatalytic activity for hydrogen evolution reaction. Catalysis Science and Technology, 2014, 4, 2023-2030.	2.1	268
875	Nitrogen-Doped Graphene Nanoribbons as Efficient Metal-Free Electrocatalysts for Oxygen Reduction. ACS Applied Materials & Interfaces, 2014, 6, 4214-4222.	4.0	156
876	Observation of Active Sites for Oxygen Reduction Reaction on Nitrogen-Doped Multilayer Graphene. ACS Nano, 2014, 8, 6856-6862.	7.3	519
877	Identifying atomic sites in N-doped pristine and defective graphene from ab initio core level binding energies. Carbon, 2014, 76, 155-164.	5.4	14
878	Iron(II) tetraaminophthalocyanine functionalized graphene: Synthesis, characterization and their application in direct methanol fuel cell. Journal of Electroanalytical Chemistry, 2014, 727, 91-98.	1.9	31
879	Electrical transport properties of polycrystalline CVD graphene on SiO2/Si substrate. Diamond and Related Materials, 2014, 45, 28-33.	1.8	19
880	A comparison of N-containing carbon nanostructures (CN) and N-coordinated ironâ€“carbon catalysts (FeNC) for the oxygen reduction reaction in acidic media. Journal of Catalysis, 2014, 317, 30-43.	3.1	98
881	A rapid and sensitive method for hydroxyl radical detection on a microfluidic chip using an N-doped porous carbon nanofiber modified pencil graphite electrode. Analyst, The, 2014, 139, 3416.	1.7	32
882	Free-standing nitrogen-doped carbon nanotubes at electrospun carbon nanofibers composite as an efficient electrocatalyst for oxygen reduction. Electrochimica Acta, 2014, 138, 318-324.	2.6	61
883	Tailored design of functional nanoporous carbon materials toward fuel cell applications. Nano Today, 2014, 9, 305-323.	6.2	254
884	The key role of metal dopants in nitrogen-doped carbon xerogel for oxygen reduction reaction. Journal of Power Sources, 2014, 269, 225-235.	4.0	73

#	Article	IF	Citations
885	Preparation of La1â^'Ca MnO3 perovskiteâ€“graphene composites as oxygen reduction reaction electrocatalyst in alkaline medium. Journal of Power Sources, 2014, 269, 144-151.	4.0	82
886	Nitrogen-doped graphene with enhanced oxygen reduction activity produced by pyrolysis of graphene functionalized with imidazole derivatives. International Journal of Hydrogen Energy, 2014, 39, 12749-12756.	3.8	24
887	Active catalysts based on cobalt oxide@cobalt/N-C nanocomposites for oxygen reduction reaction in alkaline solutions. Nano Research, 2014, 7, 1054-1064.	5.8	72
888	Electronic and magnetic properties of single-layer graphene doped by nitrogen atoms. European Physical Journal B, 2014, 87, 1.	0.6	19
889	Highly active nitrogen-doped few-layer graphene/carbon nanotube composite electrocatalyst for oxygen reduction reaction in alkaline media. Carbon, 2014, 73, 361-370.	5.4	251
890	Facile one-step room-temperature synthesis of Mn-based spinel nanoparticles for electro-catalytic oxygen reduction. RSC Advances, 2014, 4, 4727-4731.	1.7	27
891	Electroreduction of oxygen on palladium nanoparticles supported on nitrogen-doped graphene nanosheets. Electrochimica Acta, 2014, 137, 206-212.	2.6	66
892	Nitrogen-Doped Hierarchical Porous Carbon Nanowhisker Ensembles on Carbon Nanofiber for High-Performance Supercapacitors. ACS Sustainable Chemistry and Engineering, 2014, 2, 1525-1533.	3.2	99
893	Nitrogen-doped carbon nanotubes decorated silicon carbide as a metal-free catalyst for partial oxidation of H2S. Applied Catalysis A: General, 2014, 482, 397-406.	2.2	52
894	Intrinsic Relationship between Enhanced Oxygen Reduction Reaction Activity and Nanoscale Work Function of Doped Carbons. Journal of the American Chemical Society, 2014, 136, 8875-8878.	6.6	360
895	Functional graphene nanomesh foam. Energy and Environmental Science, 2014, 7, 1913.	15.6	206
896	Electronic Interaction between Nitrogen-Doped Graphene and Porphyrin Molecules. ACS Nano, 2014, 8, 9403-9409.	7.3	52
897	Carbon black/sulfur-doped graphene composite prepared by pyrolysis of graphene oxide with sodium polysulfide for oxygen reduction reaction. Electrochimica Acta, 2014, 142, 51-60.	2.6	33
898	Hollow mesoporous carbon nitride nanosphere/three-dimensional graphene composite as high efficient electrocatalyst for oxygen reduction reaction. Journal of Power Sources, 2014, 272, 696-702.	4.0	53
899	Environmentally Responsive Graphene Systems. Small, 2014, 10, 2151-2164.	5.2	73
900	Graphene, inorganic graphene analogs and their composites for lithium ion batteries. Journal of Materials Chemistry A, 2014, 2, 12104.	5.2	251
901	Graphene quantum dots cut from graphene flakes: high electrocatalytic activity for oxygen reduction and low cytotoxicity. RSC Advances, 2014, 4, 23097-23106.	1.7	67
902	Atomistic mechanisms of codoping-induced p- to n-type conversion in nitrogen-doped graphene. Nanoscale, 2014, 6, 14911-14918.	2.8	30

#	Article	IF	Citations
903	Ironâ€“nitrogen-doped mesoporous tungsten carbide nanostructures as oxygen reduction electrocatalysts. Physical Chemistry Chemical Physics, 2014, 16, 14644-14650.	1.3	26
904	Hierarchical Carbonâ€“Nitrogen Architectures with Both Mesopores and Macrochannels as Excellent Cathodes for Rechargeable Liâ€“O₂ Batteries. Advanced Functional Materials, 2014, 24, 6826-6833.	7.8	161
905	N-Doped Graphene: An Alternative Carbon-Based Matrix for Highly Efficient Detection of Small Molecules by Negative Ion MALDI-TOF MS. Analytical Chemistry, 2014, 86, 9122-9130.	3.2	104
906	Nitrogen and Sulfur Co-doped Mesoporous Carbon Materials as Highly Efficient Electrocatalysts for Oxygen Reduction Reaction. Electrochimica Acta, 2014, 145, 259-269.	2.6	59
907	Palladium catalyst supported on N-aminoguanidine functionalized magnetic graphene oxide as a robust water-tolerant and versatile nanocatalyst. RSC Advances, 2014, 4, 48613-48620.	1.7	39
908	Facile Synthesis of Highly Electrocapacitive Nitrogen-Doped Graphitic Porous Carbons. Journal of Physical Chemistry C, 2014, 118, 9357-9367.	1.5	78
909	Spinel Mnâ€“Co Oxide in N-Doped Carbon Nanotubes as a Bifunctional Electrocatalyst Synthesized by Oxidative Cutting. Journal of the American Chemical Society, 2014, 136, 7551-7554.	6.6	275
910	An electrochemical sensor based on the three-dimensional functionalized graphene for simultaneous determination of hydroquinone and catechol. Journal of Electroanalytical Chemistry, 2014, 722-723, 38-45.	1.9	42
911	Fabrication of 2D ordered mesoporous carbon nitride and its use as electrochemical sensing platform for H2O2, nitrobenzene, and NADH detection. Biosensors and Bioelectronics, 2014, 53, 250-256.	5.3	152
912	N-doped graphene as a bifunctional electrocatalyst for oxygen reduction and oxygen evolution reactions in an alkaline electrolyte. International Journal of Hydrogen Energy, 2014, 39, 15913-15919.	3.8	163
913	Plasma-assisted nitrogen doping of graphene-encapsulated Pt nanocrystals as efficient fuel cell catalysts. Journal of Materials Chemistry A, 2014, 2, 472-477.	5.2	44
914	Single step fabrication of N-doped graphene/Si3N4/SiC heterostructures. Nano Research, 2014, 7, 835-843.	5.8	17
915	Graphene-Supported Nanoelectrocatalysts for Fuel Cells: Synthesis, Properties, and Applications. Chemical Reviews, 2014, 114, 5117-5160.	23.0	899
916	Density functional study of hydrogen adsorption and diffusion on Niâ€loaded graphene and graphene oxide. International Journal of Quantum Chemistry, 2014, 114, 879-884.	1.0	8
917	Efficient Oxygen Reduction Electrocatalyst Based on Edge-Nitrogen-Rich Graphene Nanoplatelets: Toward a Large-Scale Synthesis. ACS Applied Materials & Interfaces, 2014, 6, 3930-3936.	4.0	51
918	Application of nitrogen-doped graphene nanosheets in electrically conductive adhesives. Carbon, 2014, 67, 449-456.	5.4	63
919	Colloidal suspensions of N-modified graphene nano-platelets in water and organic solvent/water mixed systems. Solid State Sciences, 2014, 27, 1-4.	1.5	16
920	Nitrogen-rich mesoporous carbon derived from melamine with high electrocatalytic performance for oxygen reduction reaction. Journal of Power Sources, 2014, 261, 238-244.	4.0	87

#	Article	IF	Citations
921	High oxygen reduction activity of few-walled carbon nanotubes with low nitrogen content. Applied Catalysis B: Environmental, 2014, 158-159, 233-241.	10.8	62
922	Influence of pyrolyzing atmosphere on the catalytic activity and structure of Co-based catalysts for oxygen reduction reaction. Electrochimica Acta, 2014, 115, 1-9.	2.6	12
923	Highly efficient cathode catalyst layer based on nitrogen-doped carbon nanotubes for the alkaline direct methanol fuel cell. Applied Catalysis B: Environmental, 2014, 156-157, 341-349.	10.8	30
924	Heteroatom doped mesoporous carbon/graphene nanosheets as highly efficient electrocatalysts for oxygen reduction. Journal of Colloid and Interface Science, 2014, 421, 160-164.	5.0	26
925	Electrocatalytic Activity of Carbonized Nanostructured Polyanilines for Oxidation Reactions: Sensing of Nitrite Ions and Ascorbic Acid. Electrochimica Acta, 2014, 120, 147-158.	2.6	28
926	Synthesis of nitrogen-doped multilayer graphene from milk powder with melamine and their application to fuel cells. Carbon, 2014, 76, 1-9.	5.4	60
927	Rapid synthesis of nitrogen-doped graphene by microwave heating for oxygen reduction reactions in alkaline electrolyte. Chinese Journal of Catalysis, 2014, 35, 509-513.	6.9	16
928	Synthesizing Nitrogen-Doped Activated Carbon and Probing its Active Sites for Oxygen Reduction Reaction in Microbial Fuel Cells. ACS Applied Materials & Interfaces, 2014, 6, 7464-7470.	4.0	157
929	Nitrogen-doped reduced graphene oxide electrodes for electrochemical supercapacitors. Physical Chemistry Chemical Physics, 2014, 16, 2280.	1.3	87
930	Three-Dimensional Porous Supramolecular Architecture from Ultrathin g-C₃N₄ Nanosheets and Reduced Graphene Oxide: Solution Self-Assembly Construction and Application as a Highly Efficient Metal-Free Electrocatalyst for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2014, 6, 1011-1017.	4.0	235
931	Graphene/Grapheneâ€Tube Nanocomposites Templated from Cageâ€Containing Metalâ€Organic Frameworks for Oxygen Reduction in Liâ€“O₂ Batteries. Advanced Materials, 2014, 26, 1378-1386.	11.1	398
932	New methods of synthesis and varied properties of carbon quantum dots with high nitrogen content. Journal of Materials Research, 2014, 29, 383-391.	1.2	42
933	Hybrid of Iron Nitride and Nitrogenâ€Doped Graphene Aerogel as Synergistic Catalyst for Oxygen Reduction Reaction. Advanced Functional Materials, 2014, 24, 2930-2937.	7.8	391
934	Catalytic Mechanisms of Sulfur-Doped Graphene as Efficient Oxygen Reduction Reaction Catalysts for Fuel Cells. Journal of Physical Chemistry C, 2014, 118, 3545-3553.	1.5	373
935	Nitrogen and Phosphorus Dualâ€Doped Hierarchical Porous Carbon Foams as Efficient Metalâ€Free Electrocatalysts for Oxygen Reduction Reactions. Chemistry - A European Journal, 2014, 20, 3106-3112.	1.7	179
936	Facile Oneâ€Pot, Oneâ€Step Synthesis of a Carbon Nanoarchitecture for an Advanced Multifunctonal Electrocatalyst. Angewandte Chemie - International Edition, 2014, 53, 6496-6500.	7.2	169
937	NMR Chemical Shifts of ¹⁵N-Bearing Graphene. Journal of Physical Chemistry C, 2014, 118, 13929-13935.	1.5	11
938	Water Splitting over Graphene-Based Catalysts: Ab Initio Calculations. ACS Catalysis, 2014, 4, 2016-2021.	5.5	55

#	Article	IF	Citations
939	Density functional theory study of the oxygen reduction reaction mechanism in a BN co-doped graphene electrocatalyst. Journal of Materials Chemistry A, 2014, 2, 10273.	5.2	88
940	The Handbook of Graphene Electrochemistry. , 2014, , .		151
941	Functional Gels Based on Chemically Modified Graphenes. Advanced Materials, 2014, 26, 3992-4012.	11.1	276
942	Newly Developed Stepwise Electroless Deposition Enables a Remarkably Facile Synthesis of Highly Active and Stable Amorphous Pd Nanoparticle Electrocatalysts for Oxygen Reduction Reaction. Journal of the American Chemical Society, 2014, 136, 5217-5220.	6.6	132
943	Synthesis, properties and applications of graphene doped with boron, nitrogen and other elements. Nano Today, 2014, 9, 324-343.	6.2	369
944	Optical properties of nitrogen-doped graphene thin films probed by spectroscopic ellipsometry. Thin Solid Films, 2014, 571, 675-679.	0.8	14
945	Nitrogen-doped carbon nanotubes on silicon carbide as a metal-free catalyst. Chinese Journal of Catalysis, 2014, 35, 906-913.	6.9	30
946	Recent advances in zincâ€“air batteries. Chemical Society Reviews, 2014, 43, 5257-5275.	18.7	1,882
948	N-Doped Hierarchical Hollow Mesoporous Carbon as Metal-Free Cathode for Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2014, 118, 16694-16702.	1.5	44
949	Direct Synthesis of Nitrogen-Doped Carbon Nanosheets with High Surface Area and Excellent Oxygen Reduction Performance. Langmuir, 2014, 30, 8238-8245.	1.6	131
950	Oneâ€Step Production of Sulfur and Nitrogen Coâ€doped Graphitic Carbon for Oxygen Reduction: Activation Effect of Oxidized Sulfur and Nitrogen. ChemCatChem, 2014, 6, 1204-1209.	1.8	20
951	A 3D insight on the catalytic nanostructuration of few-layer graphene. Nature Communications, 2014, 5, 4109.	5.8	23
952	Amplified electrochemiluminescence of lucigenin triggered by electrochemically reduced graphene oxide and its sensitive detection of bisphenol A. Analytical Methods, 2014, 6, 4746-4753.	1.3	13
953	First-principles study of single atom adsorption on capped single-walled carbon nanotubes. International Journal of Hydrogen Energy, 2014, 39, 10161-10168.	3.8	10
954	Electrochemical investigation of graphene/cerium oxide nanoparticles as an electrode material for supercapacitors. Materials Science in Semiconductor Processing, 2014, 26, 374-378.	1.9	42
955	The value of mixed conduction for oxygen electroreduction on grapheneâ€“chitosan composites. Carbon, 2014, 73, 234-243.	5.4	14
957	How Nanotechnologies Can Enhance Sustainability in the Agrifood Sector. , 2014, , 74-93.		2
958	Nanoengineered Lithiumâ€“Air Secondary Batteries: Fundamental Understanding and the Current Status of Development. , 2014, , 89-126.		0

#	Article	IF	Citations
961	An In Situ Sourceâ€Templateâ€Interface Reaction Route to 3D Nitrogenâ€Doped Hierarchical Porous Carbon as Oxygen Reduction Electrocatalyst. Advanced Materials Interfaces, 2015, 2, 1500199.	1.9	39
962	Electrocatalytic activity of a nitrogen-enriched mesoporous carbon framework and its hybrids with metal nanoparticles fabricated through the pyrolysis of block copolymers. RSC Advances, 2015, 5, 105760-105773.	1.7	7
963	Covalent Modification of Organo-Functionalized Graphene Oxide and its Scope as Catalyst for One-Pot Pyrazolo-Pyranopyrimidine Derivatives. ChemistryOpen, 2015, 4, 703-707.	0.9	17
964	Three-dimensional Nitrogen-Doped Graphene Supported Molybdenum Disulfide Nanoparticles as an Advanced Catalyst for Hydrogen Evolution Reaction. Scientific Reports, 2015, 5, 17542.	1.6	156
965	Stochastic Events in Nanoelectrochemical Systems. , 2015, , 256-307.		0
966	- Different Functionalization Methods of Carbon-Based Nanomaterials. , 2015, , 54-83.		0
970	Anisotropic electronic conduction in stacked two-dimensional titanium carbide. Scientific Reports, 2015, 5, 16329.	1.6	107
972	Activation of CO and CO2 on homonuclear boron bonds of fullerene-like BN cages: first principles study. Scientific Reports, 2015, 5, 17460.	1.6	36
973	Non-precious metal catalysts with TBAH as carbon source for ORR. Emerging Materials Research, 2015, 4, 76-80.	0.4	1
974	Use of a borocarbonitrideâ€“iron pthalocyanine composite in ORR. Nanomaterials and Energy, 2015, 4, 3-8.	0.1	3
975	Reassembly of Exfoliated Î±-ZrP Nanosheets and Cobalt Porphyrin Used as an Oxygen Sensor. Chemistry Letters, 2015, 44, 1345-1346.	0.7	2
976	Electro-Catalytic Oxygen Reduction Activity of Graphene-Covered Nickel Particles Prepared by Microwave-assisted Catalytic Decomposition. Electrochemistry, 2015, 83, 339-341.	0.6	6
977	On the Formal Redox Potential of Oxygen Reduction Reaction at Iron Phthalocyanine/Graphene Composite Electrode in Alkaline Media. Electrochemistry, 2015, 83, 376-380.	0.6	10
978	Porous three-dimensional graphene foam/Prussian blue composite for efficient removal of radioactive 137Cs. Scientific Reports, 2015, 5, 17510.	1.6	109
980	Greatly Enhancing Catalytic Activity of Graphene by Doping the Underlying Metal Substrate. Scientific Reports, 2015, 5, 12058.	1.6	23
981	Design Principles of Inert Substrates for Exploiting Gold Clustersâ€™ Intrinsic Catalytic Reactivity. Scientific Reports, 2015, 5, 15095.	1.6	5
982	Direct Synthesis of Co-doped Graphene on Dielectric Substrates Using Solid Carbon Sources. Nano-Micro Letters, 2015, 7, 368-373.	14.4	15
983	Multifunctional grapheneâ€based nanostructures for efficient electrocatalytic reduction of oxygen. Journal of Chemical Technology and Biotechnology, 2015, 90, 2132-2151.	1.6	20

#	Article	IF	Citations
984	Wellâ€Combined Magnetically Separable Hybrid Cobalt Ferrite/Nitrogenâ€Doped Graphene as Efficient Catalyst with Superior Performance for Oxygen Reduction Reaction. Small, 2015, 11, 5833-5843.	5.2	73
986	Oneâ€pot Synthesis of Nitrogen and Phosphorus Coâ€doped Graphene and Its Use as Highâ€performance Electrocatalyst for Oxygen Reduction Reaction. Chemistry - an Asian Journal, 2015, 10, 2609-2614.	1.7	42
987	Carbonâ€Based Nanostructures for Advanced Catalysis. ChemCatChem, 2015, 7, 2806-2815.	1.8	88
988	A Platinumâ€“Vanadium Nitride/Porous Graphitic Nanocarbon Composite as an Excellent Catalyst for the Oxygen Reduction Reaction. ChemElectroChem, 2015, 2, 1813-1820.	1.7	14
989	Mesomeric Effects of Graphene Modified with Diazonium Salts: Substituent Type and Position Influence its Properties. Chemistry - A European Journal, 2015, 21, 17728-17738.	1.7	26
990	Iodineâ€Doped Cobalt Phthalocyanine Supported on Multiwalled Carbon Nanotubes for Electrocatalysis of Oxygen Reduction Reaction. Electroanalysis, 2015, 27, 1176-1187.	1.5	11
991	Freestanding 3D Grapheneâ€“Nickel Encapsulated Nitrogenâ€Rich Aligned Bamboo Like Carbon Nanotubes for Highâ€Performance Supercapacitors with Robust Cycle Stability. Advanced Materials Interfaces, 2015, 2, 1500191.	1.9	82
992	Design of Oxide Cathode Catalysts for Polymer Electrolyte Fuel Cells. Hyomen Kagaku, 2015, 36, 339-344.	0.0	0
993	Electrochemical Reaction of Graphene Oxide at Au Electrode Surface Monitored by Surface Enhanced Infrared Absorption Spectroscopy. E-Journal of Surface Science and Nanotechnology, 2015, 13, 413-416.	0.1	1
994	Design Principles for Heteroatomâ€Doped Carbon Nanomaterials as Highly Efficient Catalysts for Fuel Cells and Metalâ€“Air Batteries. Advanced Materials, 2015, 27, 6834-6840.	11.1	490
995	Nitrogenâ€Doped Holey Graphene as an Anode for Lithiumâ€Ion Batteries with High Volumetric Energy Density and Long Cycle Life. Small, 2015, 11, 6179-6185.	5.2	115
996	Scalable Production of Edgeâ€Functionalized Graphene Nanoplatelets via Mechanochemical Ballâ€Milling. Advanced Functional Materials, 2015, 25, 6961-6975.	7.8	135
997	Homogenous Coreâ€“Shell Nitrogenâ€Doped Carbon Nanotubes for the Oxygen Reduction Reaction. ChemElectroChem, 2015, 2, 1892-1896.	1.7	4
998	The Hydric Effect in Inorganic Nanomaterials for Nanoelectronics and Energy Applications. Advanced Materials, 2015, 27, 3850-3867.	11.1	55
999	Nanostructured Electrocatalysts for Allâ€Vanadium Redox Flow Batteries. Chemistry - an Asian Journal, 2015, 10, 2096-2110.	1.7	90
1000	Enhanced Chemical Reactivity of Pristine Graphene Interacting Strongly with a Substrate: Chemisorbed Carbon Monoxide on Graphene/Nickel(1â€‰×â€‰1). ChemCatChem, 2015, 7, 2328-2331.	1.8	36
1001	A Comparative Study of CO Oxidation on Nitrogenâ€•and Phosphorusâ€Doped Graphene. ChemPhysChem, 2015, 16, 3719-3727.	1.0	70
1002	Order of Activity of Nitrogen, Iron Oxide, and FeN_x Complexes towards Oxygen Reduction in Alkaline Medium. ChemSusChem, 2015, 8, 4016-4021.	3.6	26

#	Article	IF	Citations
1003	Porous Carbon Supports: Recent Advances with Various Morphologies and Compositions. ChemCatChem, 2015, 7, 2788-2805.	1.8	83
1004	A Discussion on the Activity Origin in Metalâ€Free Nitrogenâ€Doped Carbons For Oxygen Reduction Reaction and their Mechanisms. ChemSusChem, 2015, 8, 2772-2788.	3.6	111
1005	3D Porous Nâ€Doped Graphene Frameworks Made of Interconnected Nanocages for Ultrahighâ€Rate and Longâ€Life Liâ€“O₂ Batteries. Advanced Functional Materials, 2015, 25, 6913-6920.	7.8	231
1006	On the Role of Metals in Nitrogenâ€Doped Carbon Electrocatalysts for Oxygen Reduction. Angewandte Chemie - International Edition, 2015, 54, 10102-10120.	7.2	583
1008	Nitrogen-doped graphene films from chemical vapor deposition of pyridine: influence of process parameters on the electrical and optical properties. Beilstein Journal of Nanotechnology, 2015, 6, 2028-2038.	1.5	63
1009	Phosphorus and Nitrogen Dual Doped and Simultaneously Reduced Graphene Oxide with High Surface Area as Efficient Metal-Free Electrocatalyst for Oxygen Reduction. Catalysts, 2015, 5, 981-991.	1.6	122
1010	Nitrogen-Doped Carbon Nanotube and Graphene Materials for Oxygen Reduction Reactions. Catalysts, 2015, 5, 1574-1602.	1.6	183
1011	Reduction Expansion Synthesis as Strategy to Control Nitrogen Doping Level and Surface Area in Graphene. Materials, 2015, 8, 7048-7058.	1.3	14
1012	Biofabrication of Reduced Graphene Oxide Nanosheets using Terminalia Bellirica Fruit Extract. Current Nanoscience, 2015, 12, 94-102.	0.7	24
1013	X-ray photoelectron spectroscopy of graphitic carbon nanomaterials doped with heteroatoms. Beilstein Journal of Nanotechnology, 2015, 6, 177-192.	1.5	319
1014	High Sensitive Sensor Fabricated by Reduced Graphene Oxide/Polyvinyl Butyral Nanofibers for Detecting Cu (II) in Water. International Journal of Analytical Chemistry, 2015, 2015, 1-7.	0.4	14
1015	A review of cathode materials and structures for rechargeable lithiumâ€“air batteries. Energy and Environmental Science, 2015, 8, 2144-2198.	15.6	415
1016	Improved carrier mobility of chemical vapor deposition-graphene by counter-doping with hydrazine hydrate. Applied Physics Letters, 2015, 106, 091602.	1.5	5
1017	Altered Electrochemistry at Graphene- or Alumina-Modified Electrodes: Catalysis vs Electrocatalysis in Multistep Electrode Processes. Journal of Physical Chemistry C, 2015, 119, 13777-13784.	1.5	20
1018	Non-covalent polymer wrapping of carbon nanotubes and the role of wrapped polymers as functional dispersants. Science and Technology of Advanced Materials, 2015, 16, 024802.	2.8	279
1019	Nitrogen and fluorine co-doped graphite nanofibers as high durable oxygen reduction catalyst in acidic media for polymer electrolyte fuel cells. Carbon, 2015, 93, 130-142.	5.4	130
1020	A new class of electroactive Fe- and P-functionalized graphene for oxygen reduction. Journal of Materials Chemistry A, 2015, 3, 11031-11039.	5.2	96
1021	Antimony-doped graphene nanoplatelets. Nature Communications, 2015, 6, 7123.	5.8	77

#	Article	IF	Citations
1022	Interconnected coreâ€“shell carbon nanotubeâ€“graphene nanoribbon scaffolds for anchoring cobalt oxides as bifunctional electrocatalysts for oxygen evolution and reduction. Journal of Materials Chemistry A, 2015, 3, 13371-13376.	5.2	51
1023	The influence of source molecule structure on the low temperature growth of nitrogen-doped graphene. Physical Chemistry Chemical Physics, 2015, 17, 14115-14121.	1.3	11
1024	Nitrogen and fluorine dual-doped mesoporous graphene: a high-performance metal-free ORR electrocatalyst with a super-low HO₂^{â^'}yield. Nanoscale, 2015, 7, 10584-10589.	2.8	94
1025	Multifunctional glucose biosensors from Fe3O4 nanoparticles modified chitosan/graphene nanocomposites. Scientific Reports, 2015, 5, 11129.	1.6	103
1026	Charge transfer, bonding conditioning and solvation effect in the activation of the oxygen reduction reaction on unclustered graphitic-nitrogen-doped graphene. Physical Chemistry Chemical Physics, 2015, 17, 16238-16242.	1.3	20
1027	Carbon nanotube/Sâ€“Nâ€“C nanohybrids as high performance bifunctional electrocatalysts for both oxygen reduction and evolution reactions. New Journal of Chemistry, 2015, 39, 6289-6296.	1.4	32
1028	Effect of acid-leaching on carbon-supported copper phthalocyanine tetrasulfonic acid tetrasodium salt (CuTSPc/C) for oxygen reduction reaction in alkaline electrolyte: active site studies. RSC Advances, 2015, 5, 50344-50352.	1.7	10
1029	PAF-derived nitrogen-doped 3D Carbon Materials for Efficient Energy Conversion and Storage. Scientific Reports, 2015, 5, 8307.	1.6	28
1030	Photochemistry of Graphene. Structure and Bonding, 2015, , 213-238.	1.0	0
1031	Nitrogen-doped carbon nanoparticles derived from acrylonitrile plasma for electrochemical oxygen reduction. Physical Chemistry Chemical Physics, 2015, 17, 6227-6232.	1.3	76
1032	Multiple doping of graphene oxide foams and quantum dots: new switchable systems for oxygen reduction and water remediation. Journal of Materials Chemistry A, 2015, 3, 14334-14347.	5.2	57
1033	Constructing holey graphene monoliths via supramolecular assembly: Enriching nitrogen heteroatoms up to the theoretical limit for hydrogen evolution reaction. Nano Energy, 2015, 15, 567-575.	8.2	57
1034	Photofunctional Layered Materials. Structure and Bonding, 2015, , .	1.0	10
1035	Electrocatalytic activity of Mn/Cu doped Fe₂O₃â€“PANIâ€“rGO composites for fuel cell applications. RSC Advances, 2015, 5, 39455-39463.	1.7	7
1036	Uniform Polyaniline Nanotubes Formation via Frozen Polymerization and Application for Oxygen Reduction Reactions. Macromolecular Chemistry and Physics, 2015, 216, 977-984.	1.1	6
1037	Graphene Oxide. , 2015, , .		91
1038	Role of lattice defects in catalytic activities of graphene clusters for fuel cells. Physical Chemistry Chemical Physics, 2015, 17, 16733-16743.	1.3	181
1039	GO/rGO as Advanced Materials for Energy Storage and Conversion. , 2015, , 97-127.		0

#	Article	IF	Citations
1040	Electrochemical preparation of nitrogen-doped graphene quantum dots and their size-dependent electrocatalytic activity for oxygen reduction. Bulletin of Materials Science, 2015, 38, 435-442.	0.8	32
1041	Graphitic carbon nitrides supported by nitrogen-doped graphene as efficient metal-free electrocatalysts for oxygen reduction. Journal of Electroanalytical Chemistry, 2015, 753, 16-20.	1.9	51
1042	Polymer fuel cell components modified by graphene: Electrodes, electrolytes and bipolar plates. Renewable and Sustainable Energy Reviews, 2015, 49, 954-967.	8.2	77
1043	Sulfur-doped graphene as a catalyst support: Influences of carbon black and ruthenium nanoparticles on the hydrogen evolution reaction performance. Carbon, 2015, 93, 762-773.	5.4	73
1044	Very low amount of TiO₂ on N-doped carbon nanotubes significantly improves oxygen reduction activity and stability of supported Pt nanoparticles. Physical Chemistry Chemical Physics, 2015, 17, 10767-10773.	1.3	9
1045	Supercapacitors based on highly dispersed polypyrrole-reduced graphene oxide composite with a folded surface. Applied Physics A: Materials Science and Processing, 2015, 120, 693-698.	1.1	13
1046	pH Effect on Electrochemistry of Nitrogen-Doped Carbon Catalyst for Oxygen Reduction Reaction. ACS Catalysis, 2015, 5, 4325-4332.	5.5	142
1047	Synthesis, characterization and electrical properties of silicon-doped graphene films. Journal of Materials Chemistry C, 2015, 3, 6301-6306.	2.7	66
1048	Electrochemical activation of commercial polyacrylonitrile-based carbon fiber for the oxygen reduction reaction. Physical Chemistry Chemical Physics, 2015, 17, 7707-7713.	1.3	20
1049	Understanding room-temperature metastability of graphene oxide utilizing hydramines from a synthetic chemistry view. RSC Advances, 2015, 5, 49688-49695.	1.7	14
1050	Enhanced Shubnikovâ€“De Haas Oscillation in Nitrogen-Doped Graphene. ACS Nano, 2015, 9, 7207-7214.	7.3	19
1051	Band Gap Engineering of Boron Nitride by Graphene and Its Application as Positive Electrode Material in Asymmetric Supercapacitor Device. ACS Applied Materials & Interfaces, 2015, 7, 14211-14222.	4.0	131
1052	Experimental Sensing and Density Functional Theory Study of H₂S and SOF₂ Adsorption on Auâ€Modified Graphene. Advanced Science, 2015, 2, 1500101.	5.6	213
1053	Graphitic Carbon Nitride/Graphene Hybrids as New Active Materials for Energy Conversion and Storage. ChemNanoMat, 2015, 1, 298-318.	1.5	117
1054	A nitrogen-doped graphene electrocatalyst for selective oxygen reduction in presence of glucose and D-gluconic acid in pH-neutral media. Electrochimica Acta, 2015, 186, 579-590.	2.6	24
1055	Influence of Carbon Precursors on the Structure, Composition, and Oxygen Reduction Reaction Performance of Nitrogen-Doped Carbon Materials. Journal of Physical Chemistry C, 2015, 119, 28757-28765.	1.5	45
1056	Fe/N co-doped carbon microspheres as a high performance electrocatalyst for the oxygen reduction reaction. RSC Advances, 2015, 5, 107389-107395.	1.7	8
1057	Simultaneous reduction and nitrogen doping of graphite oxide by using electron beam irradiation. RSC Advances, 2015, 5, 104502-104508.	1.7	17

#	Article	IF	Citations
1058	Conversion from self-assembled block copolymer nanodomains to carbon nanostructures with well-defined morphology. RSC Advances, 2015, 5, 105774-105784.	1.7	13
1059	Photocatalysis fundamentals and surface modification of TiO2 nanomaterials. Chinese Journal of Catalysis, 2015, 36, 2049-2070.	6.9	458
1060	Electrode materials for microbial fuel cells: nanomaterial approach. Materials for Renewable and Sustainable Energy, 2015, 4, 1.	1.5	177
1061	Electrochemical and structure characteristics of PtCoCr/C-Catalyst with platinum content 50 wt % and cathode on its basis for fuel cell with proton-conducting polymer electrolyte. Russian Journal of Electrochemistry, 2015, 51, 602-614.	0.3	7
1062	Nitrogen-doped graphene by ball-milling graphite with melamine for energy conversion and storage. 2D Materials, 2015, 2, 044001.	2.0	69
1063	Remarkable performance of heavily nitrogenated graphene in the oxygen reduction reaction of fuel cells in alkaline medium. Materials Research Express, 2015, 2, 095503.	0.8	7
1064	Facile fabrication of N-doped hierarchical porous carbon@CNT coaxial nanocables with high performance for energy storage and conversion. RSC Advances, 2015, 5, 96580-96586.	1.7	18
1065	Nitrogen self-doped electrocatalysts synthesized by pyrolysis of commercial polymer fibers for oxygen reduction reaction. International Journal of Hydrogen Energy, 2015, 40, 17300-17307.	3.8	14
1066	Graphene supported platinum nanoparticles as catalyst for oxygen reduction reaction. Chemical Research in Chinese Universities, 2015, 31, 1007-1011.	1.3	9
1067	Selective in-plane nitrogen doping of graphene by an energy-controlled neutral beam. Nanotechnology, 2015, 26, 485602.	1.3	13
1068	An oxygen reduction sensor based on a novel type of porous carbon composite membrane electrode. Chinese Chemical Letters, 2015, 26, 1322-1326.	4.8	5
1069	Graphene Oxide: A Fertile Nanosheet for Various Applications. Journal of the Physical Society of Japan, 2015, 84, 121012.	0.7	22
1070	Functional MoS2 by the Co/Ni doping as the catalyst for oxygen reduction reaction. Applied Surface Science, 2015, 354, 221-228.	3.1	74
1071	Sulfur-doped graphitic carbon nitride decorated with graphene quantum dots for an efficient metal-free electrocatalyst. Journal of Materials Chemistry A, 2015, 3, 1841-1846.	5.2	229
1072	Diagnosis of the measurement inconsistencies of carbon-based electrocatalysts for the oxygen reduction reaction in alkaline media. RSC Advances, 2015, 5, 1571-1580.	1.7	42
1073	N-doped graphene nanoribbons as efficient metal-free counter electrodes for disulfide/thiolate redox mediated DSSCs. Nanoscale, 2015, 7, 7078-7083.	2.8	41
1074	Homogeneous deposition-assisted synthesis of ironâ€“nitrogen composites on graphene as highly efficient non-precious metal electrocatalysts for microbial fuel cell power generation. Journal of Power Sources, 2015, 278, 773-781.	4.0	59
1075	N-doped hierarchically macro/mesoporous carbon with excellent electrocatalytic activity and durability for oxygen reduction reaction. Carbon, 2015, 86, 108-117.	5.4	145

#	Article	IF	Citations
1076	Nanoscale imaging of freestanding nitrogen doped single layer graphene. Nanoscale, 2015, 7, 2289-2294.	2.8	18
1077	Nitrogen-doped carbon nanotubes as catalysts for the oxygen reduction reaction in alkaline medium. Journal of Power Sources, 2015, 279, 28-35.	4.0	39
1078	Hydrogenation and dehydrogenation of nitrogen-doped graphene investigated by X-ray photoelectron spectroscopy. Surface Science, 2015, 634, 89-94.	0.8	12
1079	B and N isolate-doped graphitic carbon nanosheets from nitrogen-containing ion-exchanged resins for enhanced oxygen reduction. Scientific Reports, 2014, 4, 5184.	1.6	68
1080	A combined numerical and experimental study on graphene/ionic liquid nanofluid based direct absorption solar collector. Solar Energy Materials and Solar Cells, 2015, 136, 177-186.	3.0	173
1081	Heavily nitrogen doped, graphene supercapacitor from silk cocoon. Electrochimica Acta, 2015, 160, 244-253.	2.6	172
1082	One-step and rapid synthesis of nitrogen and sulfur co-doped graphene for hydrogen peroxide and glucose sensing. Journal of Electroanalytical Chemistry, 2015, 742, 8-14.	1.9	53
1083	Promotional effect of phosphorus doping on the activity of the Fe-N/C catalyst for the oxygen reduction reaction. Electrochimica Acta, 2015, 155, 335-340.	2.6	50
1084	Design of N-graphene-NbOx hybrid nanosheets with sandwich-like structure and electrocatalytic performance towards oxygen reduction reaction. Electrochimica Acta, 2015, 158, 42-48.	2.6	7
1085	Honeysuckles-derived porous nitrogen, sulfur, dual-doped carbon as high-performance metal-free oxygen electroreduction catalyst. Nano Energy, 2015, 12, 785-793.	8.2	167
1086	Defect Structure Analysis of Heterointerface between Pt and CeO_x Promoter on Pt Electro-Catalyst. ACS Applied Materials & Interfaces, 2015, 7, 2698-2707.	4.0	34
1087	Enhanced oxygen reduction performance by novel pyridine substituent groups of iron (II) phthalocyanine with graphene composite. Journal of Power Sources, 2015, 282, 9-18.	4.0	50
1088	Effect of Nitrogen Doping on the Migration of the Carbon Adatom and Monovacancy in Graphene. Journal of Physical Chemistry C, 2015, 119, 4922-4933.	1.5	29
1089	Preparation of Metal-Free Nitrogen-Doped Graphene Via Direct Electrochemical Exfoliation of Graphite in Ammonium Nitrate. Australian Journal of Chemistry, 2015, 68, 830.	0.5	19
1090	Silicon Phthalocyanine Covalently Functionalized N-Doped Ultrasmall Reduced Graphene Oxide Decorated with Pt Nanoparticles for Hydrogen Evolution from Water. ACS Applied Materials & Interfaces, 2015, 7, 3732-3741.	4.0	65
1091	Graphene Polymer Nanocomposites for Fuel Cells. , 2015, , 91-130.		3
1092	Synthesis of highly dispersed Pt nanoclusters anchored graphene composites and their application for non-enzymatic glucose sensing. Electrochimica Acta, 2015, 157, 149-157.	2.6	118
1093	A MnOOH/nitrogen-doped graphene hybrid nanowires sandwich film for flexible all-solid-state supercapacitors. Journal of Materials Chemistry A, 2015, 3, 6136-6145.	5.2	49

#	Article	IF	Citations
1094	Influence of the reaction temperature on the oxygen reduction reaction on nitrogen-doped carbon nanotube catalysts. Catalysis Today, 2015, 249, 236-243.	2.2	22
1095	Graphene-supported platinum catalysts for fuel cells. Science Bulletin, 2015, 60, 864-876.	4.3	88
1096	Microwave Enabled Oneâ€Pot, Oneâ€Step Fabrication and Nitrogen Doping of Holey Graphene Oxide for Catalytic Applications. Small, 2015, 11, 3358-3368.	5.2	106
1097	Fluidizedâ€bed CVD of unstacked doubleâ€layer templated graphene and its application in supercapacitors. AICHE Journal, 2015, 61, 747-755.	1.8	48
1098	Thermal Cyclodebromination of Polybromopyrroles to Polymer with High Performance for Supercapacitor. Journal of Physical Chemistry C, 2015, 119, 3881-3891.	1.5	22
1099	Low temperature combustion synthesis of nitrogen-doped graphene for metal-free catalytic oxidation. Journal of Materials Chemistry A, 2015, 3, 3432-3440.	5.2	194
1100	Electrochemical synthesis of sulfur-doped graphene sheets for highly efficient oxygen reduction. Science China Chemistry, 2015, 58, 417-424.	4.2	19
1101	A Superlattice of Alternately Stacked Niâ€“Fe Hydroxide Nanosheets and Graphene for Efficient Splitting of Water. ACS Nano, 2015, 9, 1977-1984.	7.3	635
1102	Advanced Physical Chemistry of Carbon Nanotubes. Annual Review of Physical Chemistry, 2015, 66, 331-356.	4.8	42
1103	High Surface Iron/Cobaltâ€Containing Nitrogenâ€Doped Carbon Aerogels as Nonâ€Precious Advanced Electrocatalysts for Oxygen Reduction. ChemElectroChem, 2015, 2, 584-591.	1.7	63
1104	Nitrogen-doped carbon dots decorated on graphene: a novel all-carbon hybrid electrocatalyst for enhanced oxygen reduction reaction. Chemical Communications, 2015, 51, 3419-3422.	2.2	157
1105	Well-defined two dimensional covalent organic polymers: rational design, controlled syntheses, and potential applications. Polymer Chemistry, 2015, 6, 1896-1911.	1.9	189
1106	One-step pyrolytic synthesis of small iron carbide nanoparticles/3D porous nitrogen-rich graphene for efficient electrocatalysis. Journal of Materials Chemistry A, 2015, 3, 4976-4982.	5.2	48
1107	3-Dimensional porous N-doped graphene foam as a non-precious catalyst for the oxygen reduction reaction. Journal of Materials Chemistry A, 2015, 3, 3343-3350.	5.2	163
1108	Enhancements of Catalyst Distribution and Functioning Upon Utilization of Conducting Polymers as Supporting Matrices in DMFCs: A Review. Polymer Reviews, 2015, 55, 1-56.	5.3	74
1109	Nitrogen-Doped Graphene for Generation and Evolution of Reactive Radicals by Metal-Free Catalysis. ACS Applied Materials & Interfaces, 2015, 7, 4169-4178.	4.0	677
1110	Highly active nitrogen-doped nanocarbon electrocatalysts for alkaline direct methanol fuel cell. Journal of Power Sources, 2015, 281, 94-102.	4.0	58
1111	Nitrogenâ€Doped Annealed Nanodiamonds with Varied sp²/sp³ Ratio as Metalâ€Free Electrocatalyst for the Oxygen Reduction Reaction. ChemCatChem, 2015, 7, 2840-2845.	1.8	38

#	Article	IF	Citations
1112	Boron- and Nitrogen-Substituted Graphene Nanoribbons as Efficient Catalysts for Oxygen Reduction Reaction. Chemistry of Materials, 2015, 27, 1181-1186.	3.2	219
1113	Rational design of three-dimensional nitrogen-doped carbon nanoleaf networks for high-performance oxygen reduction. Journal of Materials Chemistry A, 2015, 3, 5617-5627.	5.2	32
1114	Recent advancements in Pt and Pt-free catalysts for oxygen reduction reaction. Chemical Society Reviews, 2015, 44, 2168-2201.	18.7	1,858
1115	CMK3/graphene-N-Co â€“ a low-cost and high-performance catalytic system. Journal of Materials Chemistry A, 2015, 3, 2978-2984.	5.2	22
1116	Recent Advances in Heteroatom-Doped Metal-Free Electrocatalysts for Highly Efficient Oxygen Reduction Reaction. Electrocatalysis, 2015, 6, 132-147.	1.5	128
1118	Graphene modifications in polylactic acid nanocomposites: a review. Polymer Bulletin, 2015, 72, 931-961.	1.7	75
1119	CuO nanoparticles on sulfur-doped graphene for nonenzymatic glucose sensing. Electrochimica Acta, 2015, 156, 244-251.	2.6	119
1120	Half-filled energy bands induced negative differential resistance in nitrogen-doped graphene. Nanoscale, 2015, 7, 4156-4162.	2.8	32
1121	Feâ€“N-doped graphene as a superior catalyst for H2O2 reduction reaction in neutral solution. Journal of Catalysis, 2015, 323, 55-64.	3.1	9
1122	Efficient Bifunctional Fe/C/N Electrocatalysts for Oxygen Reduction and Evolution Reaction. Journal of Physical Chemistry C, 2015, 119, 2583-2588.	1.5	150
1123	Preparation and characterization of optically transparent and photoluminescent electrospun nanofiber composed of carbon quantum dots and polyacrylonitrile blend with polyacrylic acid. Polymer, 2015, 59, 35-41.	1.8	44
1124	Controlled Synthesis of Nitrogen-Doped Graphene from a Heteroatom Polymer and Its Mechanism of Formation. Chemistry of Materials, 2015, 27, 716-725.	3.2	33
1125	Simple approach to advanced binder-free nitrogen-doped graphene electrode for lithium batteries. RSC Advances, 2015, 5, 3881-3887.	1.7	14
1126	Performance and durability of carbon black-supported Pd catalyst covered with silica layers in membrane-electrode assemblies of proton exchange membrane fuel cells. Journal of Power Sources, 2015, 279, 100-106.	4.0	6
1127	Properties of Pyrolyzed Carbon-Supported Cobalt-Polypyrrole as Electrocatalyst toward Oxygen Reduction Reaction in Alkaline Media. Journal of the Electrochemical Society, 2015, 162, F359-F365.	1.3	11
1128	Surface-modified single wall carbon nanohorn as an effective electrocatalyst for platinum-free fuel cell cathodes. Journal of Materials Chemistry A, 2015, 3, 4361-4367.	5.2	47
1129	Comparative Study of Oxygen Reduction Reaction Mechanism on Nitrogen-, Phosphorus-, and Boron-Doped Graphene Surfaces for Fuel Cell Applications. Journal of Physical Chemistry C, 2015, 119, 2004-2009.	1.5	85
1130	Low Temperature Critical Growth of High Quality Nitrogen Doped Graphene on Dielectrics by Plasma-Enhanced Chemical Vapor Deposition. ACS Nano, 2015, 9, 164-171.	7.3	125

#	Article	IF	Citations
1131	Increasing the reversibility of Liâ€“O2 batteries with caterpillar structured Î±â€“MnO2/Nâ€“GNF bifunctional electrocatalysts. Electrochimica Acta, 2015, 157, 299-306.	2.6	23
1132	N-doped graphitic layer encased cobalt nanoparticles as efficient oxygen reduction catalysts in alkaline media. Nanoscale, 2015, 7, 5607-5611.	2.8	53
1133	Nitrogen-doped carbon shell structure derived from natural leaves as a potential catalyst for oxygen reduction reaction. Nano Energy, 2015, 13, 518-526.	8.2	132
1134	N-Doped Carbon-Wrapped Cobalt Nanoparticles on N-Doped Graphene Nanosheets for High-Efficiency Hydrogen Production. Chemistry of Materials, 2015, 27, 2026-2032.	3.2	305
1135	Practical, cost-effective and large-scale production of nitrogen-doped porous carbon particles and their use as metal-free electrocatalysts for oxygen reduction. Electrochimica Acta, 2015, 165, 29-35.	2.6	26
1136	Exploration of the catalytically active site structures of animal biomass-modified on cheap carbon nanospheres for oxygen reduction reaction with high activity, stability and methanol-tolerant performance in alkaline medium. Carbon, 2015, 85, 279-288.	5.4	91
1137	Expandable-graphite-derived graphene for next-generation battery chemistries. Journal of Power Sources, 2015, 284, 60-67.	4.0	25
1138	A Pt-free Electrocatalyst Based on Pyrolized Vinazene-Carbon Composite for Oxygen Reduction Reaction. Electrochimica Acta, 2015, 161, 305-311.	2.6	14
1139	Nitrogen-doped hierarchically porous carbon spheres as efficient metal-free electrocatalysts for an oxygen reduction reaction. Journal of Power Sources, 2015, 283, 389-396.	4.0	79
1140	Synthesis of Nitrogen Doped Multilayered Graphene Flakes: Selective Nonâ€enzymatic Electrochemical Determination of Dopamine and Uric Acid in presence of Ascorbic Acid.. Electroanalysis, 2015, 27, 1253-1261.	1.5	12
1141	Carbon (Nano)materials forÂCatalysis. RSC Catalysis Series, 2015, , 1-45.	0.1	22
1142	A Universal Photochemical Approach to Ultraâ€Small, Wellâ€Dispersed Nanoparticle/Reduced Graphene Oxide Hybrids with Enhanced Nonlinear Optical Properties. Advanced Optical Materials, 2015, 3, 836-841.	3.6	31
1143	Perovskiteâ€“Nitrogenâ€Doped Carbon Nanotube Composite as Bifunctional Catalysts for Rechargeable Lithiumâ€“Air Batteries. ChemSusChem, 2015, 8, 1058-1065.	3.6	92
1144	Synthesis of graphene with both high nitrogen content and high surface area by annealing composite of graphene oxide and g-C3N4. Journal of the Iranian Chemical Society, 2015, 12, 807-814.	1.2	12
1145	Effect of boronâ€“nitrogen bonding on oxygen reduction reaction activity of BN Co-doped activated porous carbons. RSC Advances, 2015, 5, 24661-24669.	1.7	39
1146	Enhanced electrocatalytic activity of PANI and CoFe 2 O 4 /PANI composite supported on graphene for fuel cell applications. Journal of Power Sources, 2015, 284, 383-391.	4.0	47
1147	Improving Capacitance by Introducing Nitrogen Species and Defects into Graphene. ChemElectroChem, 2015, 2, 859-866.	1.7	12
1148	Low-temperature synthesized nitrogen-doped iron/iron carbide/partly-graphitized carbon as stable cathode catalysts for enhancing bioelectricity generation. Carbon, 2015, 89, 8-19.	5.4	43

#	Article	IF	Citations
1149	Silver/iron oxide/graphitic carbon composites as bacteriostatic catalysts for enhancing oxygen reduction in microbial fuel cells. Journal of Power Sources, 2015, 283, 74-83.	4.0	76
1150	Nitrogenated holey two-dimensional structures. Nature Communications, 2015, 6, 6486.	5.8	923
1151	Nitrogen-Doped Carbon Nanodots@Nanospheres as An Efficient Electrocatalyst for Oxygen Reduction Reaction. Electrochimica Acta, 2015, 165, 7-13.	2.6	41
1152	Nanostructured Carbon Materials for Energy Conversion and Storage. RSC Catalysis Series, 2015, , 445-506.	0.1	0
1153	Doped Nanostructured Carbon Materials as Catalysts. RSC Catalysis Series, 2015, , 268-311.	0.1	3
1154	Highâ€Performance Electrocatalysts for Oxygen Reduction Based on Nitrogenâ€Doped Porous Carbon from Hydrothermal Treatment of Glucose and Dicyandiamide. ChemElectroChem, 2015, 2, 803-810.	1.7	61
1155	Effects of boron oxidation state on electrocatalytic activity of carbons synthesized from CO₂. Journal of Materials Chemistry A, 2015, 3, 5843-5849.	5.2	27
1156	Highly nitrogen doped carbon nanosheets as an efficient electrocatalyst for the oxygen reduction reaction. Chemical Communications, 2015, 51, 11791-11794.	2.2	52
1157	Nitrogen Doped Reduced Graphene Oxide Based Ptâ€“TiO₂ Nanocomposites for Enhanced Hydrogen Evolution. Journal of Physical Chemistry C, 2015, 119, 19117-19125.	1.5	81
1158	Design of N-doped graphene-coated cobalt-based nanoparticles supported on ceria. Journal of Materials Chemistry A, 2015, 3, 17728-17737.	5.2	17
1159	A single-step room-temperature electrochemical synthesis of nitrogen-doped graphene nanoribbons from carbon nanotubes. Journal of Materials Chemistry A, 2015, 3, 18222-18228.	5.2	18
1160	Mechanochemically driven iodination of activated charcoal for metal-free electrocatalyst for fuel cells and hybrid Li-air cells. Carbon, 2015, 93, 465-472.	5.4	12
1161	Oxygen reduction reaction activity of nitrogen, oxygen and sulphur containing carbon derived from low-temperature pyrolysis of poultry featherfiber. Electrochimica Acta, 2015, 176, 1054-1064.	2.6	25
1162	Nitrogen-doped ordered mesoporous carbon sphere with short channel as an efficient metal-free catalyst for oxygen reduction reaction. RSC Advances, 2015, 5, 70010-70016.	1.7	29
1163	Functionalization of multiwall carbon nanotubes with nitrogen containing polyelectrolyte by a simple method. Journal of Physics and Chemistry of Solids, 2015, 85, 155-159.	1.9	8
1164	g-C₃N₄ and Others: Predicting New Nanoporous Carbon Nitride Planar Structures with Distinct Electronic Properties. Journal of Physical Chemistry C, 2015, 119, 19743-19751.	1.5	24
1165	A highly N-doped carbon phase â€œdressingâ€•of macroscopic supports for catalytic applications. Chemical Communications, 2015, 51, 14393-14396.	2.2	43
1166	Hydrothermal synthesis of Fe 2 O 3 /polypyrrole/graphene oxide composites as highly efficient electrocatalysts for oxygen reduction reaction in alkaline electrolyte. Electrochimica Acta, 2015, 178, 179-189.	2.6	54

#	Article	IF	Citations
1167	Heteroatom-Doped Graphene-Based Materials for Energy-Relevant Electrocatalytic Processes. ACS Catalysis, 2015, 5, 5207-5234.	5.5	800
1168	Tuning of fluorine content in graphene: towards large-scale production of stoichiometric fluorographene. Nanoscale, 2015, 7, 13646-13655.	2.8	153
1169	In situ synthesis of mesoporous manganese oxide/sulfur-doped graphitized carbon as a bifunctional catalyst for oxygen evolution/reduction reactions. Carbon, 2015, 94, 1028-1036.	5.4	72
1170	Polymerizable Ionic Liquid as Nitrogen-Doping Precursor for Coâ€“Nâ€“C Catalyst with Enhanced Oxygen Reduction Activity. Industrial & Engineering Chemistry Research, 2015, 54, 7984-7989.	1.8	36
1171	One Dimensional Graphitic Carbon Nitrides as Effective Metal-Free Oxygen Reduction Catalysts. Scientific Reports, 2015, 5, 12389.	1.6	81
1172	One-step synthesis of boron nitride carbon nanosheets containing zinc oxide for catalysis of the oxygen reduction reaction and degradation of organic dyes. RSC Advances, 2015, 5, 69394-69399.	1.7	18
1173	Shock-wave synthesis of multilayer graphene and nitrogen-doped graphene materials from carbonate. Carbon, 2015, 94, 928-935.	5.4	29
1174	N-, P- and S-tridoped graphene as metal-free electrocatalyst for oxygen reduction reaction. Journal of Electroanalytical Chemistry, 2015, 753, 21-27.	1.9	67
1175	Dual hetero atom containing bio-carbon: Multifunctional electrode material for High Performance Sodium-ion Batteries and Oxygen Reduction Reaction. Electrochimica Acta, 2015, 176, 670-678.	2.6	21
1176	Sandwiched graphene with nitrogen, sulphur co-doped CQDs: an efficient metal-free material for energy storage and conversion applications. Journal of Materials Chemistry A, 2015, 3, 16961-16970.	5.2	100
1177	A novel Ni₃N/graphene nanocomposite as supercapacitor electrode material with high capacitance and energy density. Journal of Materials Chemistry A, 2015, 3, 16633-16641.	5.2	110
1178	Platinum and platinumâ€“iron alloy nanoparticles dispersed nitrogen-doped graphene as high performance room temperature hydrogen sensor. International Journal of Hydrogen Energy, 2015, 40, 10346-10353.	3.8	27
1179	Vibrational spectroscopy at electrolyte/electrode interfaces with graphene gratings. Nature Communications, 2015, 6, 7593.	5.8	15
1180	Nitrogen-doped graphene-supported copper complex: a novel photocatalyst for CO₂ reduction under visible light irradiation. RSC Advances, 2015, 5, 54929-54935.	1.7	47
1181	Introduction and theoretical investigation of new azafullerene structures with nitrogen belts. Computational and Theoretical Chemistry, 2015, 1067, 148-157.	1.1	8
1182	Customized casting of unstacked graphene with high surface area (>1300 m2gâ^'1) and its application in oxygen reduction reaction. Carbon, 2015, 93, 702-712.	5.4	20
1183	Facile Synthesis of Nitrogen and Sulfur Dual-doped Hierarchical Micro/mesoporous Carbon Foams as Efficient Metal-free Electrocatalysts for Oxygen Reduction Reaction. Electrochimica Acta, 2015, 174, 826-836.	2.6	42
1184	Nanodiamond/nitrogen-doped graphene (core/shell) as an effective and stable metal-free electrocatalyst for oxygen reduction reaction. Electrochimica Acta, 2015, 174, 1017-1022.	2.6	19

#	Article	IF	Citations
1185	Organo functionalized graphene with Pd nanoparticles and its excellent catalytic activity for Suzuki coupling reaction. Applied Catalysis A: General, 2015, 505, 539-547.	2.2	66
1186	Effect of oxygen and nitrogen functionalization on the physical and electronic structure of graphene. Nano Research, 2015, 8, 2620-2635.	5.8	47
1187	Single Pt atom stabilized on nitrogen doped graphene: CO oxidation readily occurs via the tri-molecular Eleyâ€“Rideal mechanism. Physical Chemistry Chemical Physics, 2015, 17, 20006-20013.	1.3	91
1188	Synthesis and X-ray Characterization of Cobalt Phosphide (Co₂P) Nanorods for the Oxygen Reduction Reaction. ACS Nano, 2015, 9, 8108-8115.	7.3	132
1189	Efficient exfoliation N-doped graphene from N-containing bamboo-like carbon nanotubes for anode materials of Li-ion battery and Na-ion battery. Applied Physics A: Materials Science and Processing, 2015, 120, 471-478.	1.1	8
1190	From Hemoglobin to Porous Nâ€“Sâ€“Fe-Doped Carbon for Efficient Oxygen Electroreduction. Journal of Physical Chemistry C, 2015, 119, 13545-13550.	1.5	26
1191	Nitrogen-Doped Graphene with Pyridinic Dominance as a Highly Active and Stable Electrocatalyst for Oxygen Reduction. ACS Applied Materials & Interfaces, 2015, 7, 14763-14769.	4.0	248
1192	Highly active oxygen reduction non-platinum group metal electrocatalyst without direct metalâ€“nitrogen coordination. Nature Communications, 2015, 6, 7343.	5.8	583
1193	A technology review of electrodes and reaction mechanisms in vanadium redox flow batteries. Journal of Materials Chemistry A, 2015, 3, 16913-16933.	5.2	565
1194	Layered titanium diboride: towards exfoliation and electrochemical applications. Nanoscale, 2015, 7, 12527-12534.	2.8	36
1195	PtFe/nitrogen-doped graphene for high-performance electrooxidation of formic acid with composition sensitive electrocatalytic activity. RSC Advances, 2015, 5, 60237-60245.	1.7	28
1196	Graphene-based electrode materials for microbial fuel cells. Science China Materials, 2015, 58, 496-509.	3.5	60
1197	Spinel LiMn 2 O 4 nanoparticles dispersed on nitrogen-doped reduced graphene oxide nanosheets as an efficient electrocatalyst for aluminium-air battery. International Journal of Hydrogen Energy, 2015, 40, 9225-9234.	3.8	51
1198	Electronic Structure of Nitrogen-Doped Graphene in the Ground and Core-Excited States from First-Principles Simulations. Journal of Physical Chemistry C, 2015, 119, 16660-16666.	1.5	31
1199	A room temperature volatile organic compound sensor with enhanced performance, fast response and recovery based on N-doped graphene quantum dots and poly(3,4-ethylenedioxythiophene)â€“poly(styrenesulfonate) nanocomposite. RSC Advances, 2015, 5, 57559-57567.	1.7	78
1200	Flexible and porous catalyst electrodes constructed by Co nanoparticles@nitrogen-doped graphene films for highly efficient hydrogen evolution. Journal of Materials Chemistry A, 2015, 3, 15962-15968.	5.2	74
1201	A Density Functional Theory Study on Mechanism of Electrochemical Oxygen Reduction on FeN₄-Graphene. Journal of the Electrochemical Society, 2015, 162, F796-F801.	1.3	33
1202	Tuning the Magnetic Properties of Carbon by Nitrogen Doping of Its Graphene Domains. Journal of the American Chemical Society, 2015, 137, 7678-7685.	6.6	82

#	Article	IF	Citations
1203	Insight into the Mechanism of the Thermal Reduction of Graphite Oxide: Deuterium-Labeled Graphite Oxide Is the Key. ACS Nano, 2015, 9, 5478-5485.	7.3	46
1204	CdS/Graphene Nanocomposite Photocatalysts. Advanced Energy Materials, 2015, 5, 1500010.	10.2	694
1205	Two-dimensional iron-phthalocyanine (Fe-Pc) monolayer as a promising single-atom-catalyst for oxygen reduction reaction: a computational study. Nanoscale, 2015, 7, 11633-11641.	2.8	164
1206	Oxidized carbon nanotubes as an efficient metal-free electrocatalyst for the oxygen reduction reaction. RSC Advances, 2015, 5, 41901-41904.	1.7	34
1207	The effect of different nitrogen sources on the electrocatalytic properties of nitrogen-doped electrospun carbon nanofibers for the oxygen reduction reaction. International Journal of Hydrogen Energy, 2015, 40, 4673-4682.	3.8	50
1208	Preparation of graphene/nile blue nanocomposite: Application for oxygen reduction reaction and biosensing. Electrochimica Acta, 2015, 173, 354-363.	2.6	17
1209	Synthesis and characterization of Pd(<scp>ii</scp>) dispersed over diamine functionalized graphene oxide and its scope as a catalyst for selective oxidation. Catalysis Science and Technology, 2015, 5, 3235-3241.	2.1	43
1210	Few layered graphene Sheet decorated by ZnO Nanoparticles for anti-bacterial application. Superlattices and Microstructures, 2015, 83, 776-784.	1.4	46
1211	Highly efficient oxygen reduction on porous nitrogen-doped nanocarbons directly synthesized from cellulose nanocrystals and urea. Electrochimica Acta, 2015, 170, 234-241.	2.6	34
1212	Iron-embedded boron nitride nanosheet as a promising electrocatalyst for the oxygen reduction reaction (ORR): A density functional theory (DFT) study. Journal of Power Sources, 2015, 287, 431-438.	4.0	99
1213	Sulfur-doped carbon nanotubes as catalysts for the oxygen reduction reaction in alkaline medium. Electrochimica Acta, 2015, 165, 191-197.	2.6	73
1214	N-doped porous carbon nanosheets with embedded iron carbide nanoparticles for oxygen reduction reaction in acidic media. International Journal of Hydrogen Energy, 2015, 40, 4531-4539.	3.8	55
1215	Carbon surface functionalities and SEI formation during Li intercalation. Carbon, 2015, 92, 193-244.	5.4	97
1216	Oxygen-deficient BaTiO3â˜' perovskite as an efficient bifunctional oxygen electrocatalyst. Nano Energy, 2015, 13, 423-432.	8.2	221
1217	Certain nitrogen functionalities on carbon nanofiber support for improving platinum performance. Catalysis Today, 2015, 256, 193-202.	2.2	8
1218	Unusual High Oxygen Reduction Performance in All-Carbon Electrocatalysts. Scientific Reports, 2014, 4, 6289.	1.6	67
1219	Sulfur-doped graphene-supported Ag nanoparticles for nonenzymatic hydrogen peroxide detection. Journal of Nanoparticle Research, 2015, 17, 1.	0.8	20
1220	MoS2/Nitrogen-doped graphene as efficient electrocatalyst for oxygen reduction reaction. Electrochimica Acta, 2015, 169, 142-149.	2.6	77

#	Article	IF	Citations
1221	Functionalization of carbon nanotubes using aminobenzene acids and electrochemical methods. Electroactivity for the oxygen reduction reaction. International Journal of Hydrogen Energy, 2015, 40, 11242-11253.	3.8	34
1222	Photochemical doping of graphene oxide thin films with nitrogen for electrical conductivity improvement. Journal of Materials Science: Materials in Electronics, 2015, 26, 1770-1775.	1.1	5
1223	Electrochemical stability of the polymer-derived nitrogen-doped carbon: an elusive goal?. Materials for Renewable and Sustainable Energy, 2015, 4, 1.	1.5	22
1224	Oxygen Activation by N-doped Graphitic Carbon Nanostructures. Materials Research Society Symposia Proceedings, 2015, 1725, 12.	0.1	0
1225	Mesoporous N-Doped Carbons Prepared with Thermally Removable Nanoparticle Templates: An Efficient Electrocatalyst for Oxygen Reduction Reaction. Journal of the American Chemical Society, 2015, 137, 5555-5562.	6.6	628
1226	Ruthenium nanoparticles mounted on multielement co-doped graphene: an ultra-high-efficiency cathode catalyst for Liâ€“O₂batteries. Journal of Materials Chemistry A, 2015, 3, 11224-11231.	5.2	61
1227	Graphene oxide as a corrosion-inhibitive coating on magnesium alloys. RSC Advances, 2015, 5, 44149-44159.	1.7	54
1228	A systematic study of metal-supported boron nitride materials for the oxygen reduction reaction. Physical Chemistry Chemical Physics, 2015, 17, 12722-12727.	1.3	65
1229	Oxidative Unzipping of Stacked Nitrogen-Doped Carbon Nanotube Cups. ACS Applied Materials & Interfaces, 2015, 7, 10734-10741.	4.0	10
1230	N-doped mesoporous carbon nanosheets obtained by pyrolysis of a chitosanâ€“melamine mixture for the oxygen reduction reaction in alkaline media. RSC Advances, 2015, 5, 44969-44977.	1.7	72
1231	Scalable synthesis of bi-functional high-performance carbon nanotube sponge catalysts and electrodes with optimum Câ€“Nâ€“Fe coordination for oxygen reduction reaction. Energy and Environmental Science, 2015, 8, 1799-1807.	15.6	138
1232	Effects of structural disorder and nitrogen content on the oxygen reduction activity of polyvinylpyrrolidone-derived multi-doped carbon. Journal of Materials Chemistry A, 2015, 3, 11948-11959.	5.2	40
1233	Graphene Filled Polymers in Photovoltaic. , 2015, , 157-191.		0
1234	Nitrogen and phosphorus co-doped graphene quantum dots: synthesis from adenosine triphosphate, optical properties, and cellular imaging. Nanoscale, 2015, 7, 8159-8165.	2.8	174
1235	N- and S-doped high surface area carbon derived from soya chunks as scalable and efficient electrocatalysts for oxygen reduction. Science and Technology of Advanced Materials, 2015, 16, 014803.	2.8	28
1236	One-pot synthesis of B-doped three-dimensional reduced graphene oxide via supercritical fluid for oxygen reduction reaction. Green Chemistry, 2015, 17, 3552-3560.	4.6	105
1237	High performance of supercapacitor based on nitrogen-doped graphene/p-aminophenol electrodes. Ionics, 2015, 21, 2639-2645.	1.2	7
1238	Fast and fully-scalable synthesis of reduced graphene oxide. Scientific Reports, 2015, 5, 10160.	1.6	486

#	Article	IF	Citations
1239	N-doped carbon-coated cobalt nanorod arrays supported on a titanium mesh as highly active electrocatalysts for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2015, 3, 1915-1919.	5.2	105
1240	Review on application of PEDOTs and PEDOT:PSS in energy conversion and storage devices. Journal of Materials Science: Materials in Electronics, 2015, 26, 4438-4462.	1.1	464
1241	Boron/Nitrogen Co-Doped Helically Unzipped Multiwalled Carbon Nanotubes as Efficient Electrocatalyst for Oxygen Reduction. ACS Applied Materials & Interfaces, 2015, 7, 7786-7794.	4.0	85
1242	Efficient approach to iron/nitrogen co-doped graphene materials as efficient electrochemical catalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2015, 3, 7767-7772.	5.2	78
1243	A Co-N-doped carbonized egg white as a high-performance, non-precious metal, electrocatalyst for oxygen reduction. Journal of Solid State Electrochemistry, 2015, 19, 1727-1733.	1.2	27
1244	Sulfur and Nitrogen Co-Doped Graphene for Metal-Free Catalytic Oxidation Reactions. Small, 2015, 11, 3036-3044.	5.2	567
1245	High-performance dye-sensitized solar cells using edge-halogenated graphene nanoplatelets as counter electrodes. Nano Energy, 2015, 13, 336-345.	8.2	85
1246	Anomalous Stabilization in Nitrogen-Doped Graphene. Journal of Physical Chemistry C, 2015, 119, 6288-6292.	1.5	11
1247	An Fe/N co-doped graphitic carbon bulb for high-performance oxygen reduction reaction. Chemical Communications, 2015, 51, 7516-7519.	2.2	107
1248	Bioinspired reduced graphene oxide nanosheets using Terminalia chebula seeds extract. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 145, 117-124.	2.0	93
1249	N-doped carbon nanomaterials are durable catalysts for oxygen reduction reaction in acidic fuel cells. Science Advances, 2015, 1, e1400129.	4.7	583
1250	The doping effect on the catalytic activity of graphene for oxygen evolution reaction in a lithiumâ€“air battery: a first-principles study. Physical Chemistry Chemical Physics, 2015, 17, 14605-14612.	1.3	77
1251	Delineating the roles of Co₃O₄and N-doped carbon nanoweb (CNW) in bifunctional Co₃O₄/CNW catalysts for oxygen reduction and oxygen evolution reactions. Journal of Materials Chemistry A, 2015, 3, 11615-11623.	5.2	91
1252	Oxygen Reduction at Very Low Overpotential on Nanoporous Ag Catalysts. Advanced Energy Materials, 2015, 5, 1500149.	10.2	68
1253	Manganese oxide/functionalised carbon nanotubes nanocomposite as catalyst for oxygen reduction reaction in microbial fuel cell. International Journal of Hydrogen Energy, 2015, 40, 11625-11632.	3.8	62
1254	Activation of Graphenic Carbon Due to Substitutional Doping by Nitrogen: Mechanistic Understanding from First Principles. Journal of Physical Chemistry Letters, 2015, 6, 1653-1660.	2.1	11
1255	Eggplant-derived microporous carbon sheets: towards mass production of efficient bifunctional oxygen electrocatalysts at low cost for rechargeable Znâ€“air batteries. Chemical Communications, 2015, 51, 8841-8844.	2.2	104
1256	Metal-Free Catalysts for Oxygen Reduction Reaction. Chemical Reviews, 2015, 115, 4823-4892.	23.0	2,083

#	Article	IF	Citations
1257	One-pot green synthesis of oxygen-rich nitrogen-doped graphene quantum dots and their potential application in pH-sensitive photoluminescence and detection of mercury(II) ions. Talanta, 2015, 142, 131-139.	2.9	151
1258	Electrochemical doping of three-dimensional graphene networks used as efficient electrocatalysts for oxygen reduction reaction. Nanoscale, 2015, 7, 9394-9398.	2.8	50
1259	N-doped carbon nanocages with high catalytic activity and durability for oxygen reduction. Journal of Materials Chemistry A, 2015, 3, 12427-12435.	5.2	25
1260	Prediction of quantum anomalous Hall effect on graphene nanomesh. RSC Advances, 2015, 5, 9875-9880.	1.7	26
1261	Graphene and hydroxyapatite self-assemble into homogeneous, free standing nanocomposite hydrogels for bone tissue engineering. Nanoscale, 2015, 7, 7992-8002.	2.8	124
1262	MnO₂ Nanosheets Grown on Nitrogenâ€Doped Hollow Carbon Shells as a Highâ€Performance Electrode for Asymmetric Supercapacitors. Chemistry - A European Journal, 2015, 21, 7119-7126.	1.7	56
1263	Graphene oxide electrocatalyst on MnO2 air cathode as an efficient electron pump for enhanced oxygen reduction in alkaline solution. Scientific Reports, 2015, 5, 9108.	1.6	30
1264	Strongly coupled Pt nanotubes/N-doped graphene as highly active and durable electrocatalysts for oxygen reduction reaction. Nano Energy, 2015, 13, 318-326.	8.2	62
1265	Cobalt- and iron-containing nitrogen-doped carbon aerogels as non-precious metal catalysts for electrochemical reduction of oxygen. Journal of Electroanalytical Chemistry, 2015, 746, 9-17.	1.9	74
1266	A high-performance Fe and nitrogen doped catalyst derived from diazoniapentaphene salt and phenolic resin mixture for oxygen reduction reaction. Catalysis Science and Technology, 2015, 5, 1764-1774.	2.1	27
1267	Comparative Study of Potential Applications of Graphene, MoS₂, and Other Two-Dimensional Materials in Energy Devices, Sensors, and Related Areas. ACS Applied Materials & Interfaces, 2015, 7, 7809-7832.	4.0	362
1268	High temperature superconducting materials as bi-functional catalysts for hydrogen evolution and oxygen reduction. Journal of Materials Chemistry A, 2015, 3, 8346-8352.	5.2	25
1269	Printing nanostructured carbon for energy storage and conversion applications. Carbon, 2015, 92, 150-176.	5.4	89
1270	Functionalized CVD monolayer graphene for label-free impedimetric biosensing. Nano Research, 2015, 8, 1698-1709.	5.8	59
1271	Wet-chemical nitrogen-doping of graphene nanoplatelets as electrocatalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2015, 3, 7659-7665.	5.2	40
1272	An overview of the electrochemical performance of modified graphene used as an electrocatalyst and as a catalyst support in fuel cells. Applied Catalysis A: General, 2015, 497, 198-210.	2.2	88
1273	Heteroatom substituted and decorated graphene: preparation and applications. Physical Chemistry Chemical Physics, 2015, 17, 32077-32098.	1.3	64
1274	Modification Strategies with Inorganic Acids for Efficient Photocatalysts by Promoting the Adsorption of O₂. ACS Applied Materials & Interfaces, 2015, 7, 22727-22740.	4.0	68

#	Article	IF	Citations
1275	Novel left-handed double-helical chiral carbon nanotubes for electrochemical biosensing study. Analytical Methods, 2015, 7, 9310-9316.	1.3	3
1276	Aminothiazole-derived N,S,Fe-doped graphene nanosheets as high performance electrocatalysts for oxygen reduction. Chemical Communications, 2015, 51, 17092-17095.	2.2	85
1277	A nitrogen and sulfur co-doped graphene-supported nickel tetrapyridyloxyphthalocyanine hybrid fabricated by a solvothermal method and its application for the detection of bisphenol A. RSC Advances, 2015, 5, 84457-84464.	1.7	14
1278	Hydrophilic non-precious metal nitrogen-doped carbon electrocatalysts for enhanced efficiency in oxygen reduction reaction. Chemical Communications, 2015, 51, 17285-17288.	2.2	56
1279	Iron Carbide Nanoparticles Encapsulated in Mesoporous Feâ€“N-Doped Graphene-Like Carbon Hybrids as Efficient Bifunctional Oxygen Electrocatalysts. ACS Applied Materials & Interfaces, 2015, 7, 21511-21520.	4.0	262
1280	Electronic structure and optical properties of boron-sulfur symmetric codoping in 4 Ã— 4 graphene systems. European Physical Journal B, 2015, 88, 1.	0.6	11
1281	A new C=C embedded porphyrin sheet with superior oxygen reduction performance. Nano Research, 2015, 8, 2901-2912.	5.8	35
1282	Ultrathin Two-Dimensional Nanomaterials. ACS Nano, 2015, 9, 9451-9469.	7.3	1,726
1283	Structural Evolution from Metalâ€“Organic Framework to Hybrids of Nitrogen-Doped Porous Carbon and Carbon Nanotubes for Enhanced Oxygen Reduction Activity. Chemistry of Materials, 2015, 27, 7610-7618.	3.2	217
1284	Preparation of zinc oxide nanoparticleâ€“reduced graphene oxideâ€“gold nanoparticle hybrids for detection of NO₂. RSC Advances, 2015, 5, 91760-91765.	1.7	49
1285	Ultrasensitive gas detection of large-area boron-doped graphene. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14527-14532.	3.3	177
1286	Recent advances in surface and interface engineering for electrocatalysis. Chinese Journal of Catalysis, 2015, 36, 1476-1493.	6.9	48
1287	Self-Size-Limiting Nanoscale Perforation of Graphene for Dense Heteroatom Doping. ACS Applied Materials & Interfaces, 2015, 7, 25898-25905.	4.0	24
1288	Nitrogen-doped graphene/carbon nanotube/Co₃O₄ hybrids: one-step synthesis and superior electrocatalytic activity for the oxygen reduction reaction. RSC Advances, 2015, 5, 94615-94622.	1.7	30
1290	Heteroatom-Doped Graphitic Carbon Catalysts for Efficient Electrocatalysis of Oxygen Reduction Reaction. ACS Catalysis, 2015, 5, 7244-7253.	5.5	500
1291	Modulating charge transport in semiconductor photocatalysts by spatial deposition of reduced graphene oxide and platinum. Journal of Catalysis, 2015, 332, 101-111.	3.1	26
1292	Structural and Chemical Dynamics of Pyridinic-Nitrogen Defects in Graphene. Nano Letters, 2015, 15, 7408-7413.	4.5	204
1293	Influence of enolate/epoxy configuration, doping and vacancy on the catalytic activity of graphene. RSC Advances, 2015, 5, 93215-93225.	1.7	20

#	Article	IF	Citations
1294	Graphene oxide aided structural tailoring of 3-D N-doped amorphous carbon network for enhanced energy storage. RSC Advances, 2015, 5, 93423-93432.	1.7	30
1295	The atomic and electronic structure of nitrogen- and boron-doped phosphorene. Physical Chemistry Chemical Physics, 2015, 17, 27210-27216.	1.3	38
1296	Metal-organic framework derived hierarchically porous nitrogen-doped carbon nanostructures as novel electrocatalyst for oxygen reduction reaction. Electrochimica Acta, 2015, 178, 287-293.	2.6	50
1297	The Effects of a Low-Level Boron, Phosphorus, and Nitrogen Doping on the Oxygen Reduction Activity of Ordered Mesoporous Carbons. Electrocatalysis, 2015, 6, 498-511.	1.5	35
1298	Strong-coupled Co-g-C₃N₄/SWCNTs composites as high-performance electrocatalysts for oxygen reduction reaction. RSC Advances, 2015, 5, 65303-65307.	1.7	18
1299	Urchin-like CoP Nanocrystals as Hydrogen Evolution Reaction and Oxygen Reduction Reaction Dual-Electrocatalyst with Superior Stability. Nano Letters, 2015, 15, 7616-7620.	4.5	425
1300	Design of an active and durable catalyst for oxygen reduction reactions using encapsulated Cu with N-doped carbon shells (Cu@N-C) activated by CO₂ treatment. Journal of Materials Chemistry A, 2015, 3, 22031-22034.	5.2	77
1301	Phosphorusâ€Doped Graphene Oxide Layer as a Highly Efficient Flame Retardant. Chemistry - A European Journal, 2015, 21, 15480-15485.	1.7	85
1302	Significant Contribution of Intrinsic Carbon Defects to Oxygen Reduction Activity. ACS Catalysis, 2015, 5, 6707-6712.	5.5	519
1303	NiRh nanoparticles supported on nitrogen-doped porous carbon as highly efficient catalysts for dehydrogenation of hydrazine in alkaline solution. Nano Research, 2015, 8, 3472-3479.	5.8	40
1304	Photochemical doping of graphene oxide thin film with nitrogen for photoconductivity enhancement. Carbon, 2015, 94, 1037-1043.	5.4	10
1305	B, N-codoped 3D micro-/mesoporous carbon nanofibers web as efficient metal-free catalysts for oxygen reduction. Current Applied Physics, 2015, 15, 1606-1614.	1.1	34
1306	Al-coordination polymer-derived nanoporous nitrogen-doped carbon microfibers as metal-free catalysts for oxygen electroreduction and acetalization reactions. Journal of Materials Chemistry A, 2015, 3, 23716-23724.	5.2	54
1307	Enhanced oxygen reduction from the insertion of cobalt into nitrogen-doped porous carbons. RSC Advances, 2015, 5, 87971-87980.	1.7	9
1308	Layered double hydroxides toward electrochemical energy storage and conversion: design, synthesis and applications. Chemical Communications, 2015, 51, 15880-15893.	2.2	361
1309	Transformation of worst weed into N-, S-, and P-tridoped carbon nanorings as metal-free electrocatalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2015, 3, 23376-23384.	5.2	48
1310	Cross-linked polymer-derived B/N co-doped carbon materials with selective capture of CO2. Journal of Materials Chemistry A, 2015, 3, 23352-23359.	5.2	36
1311	Carbon-based electrocatalysts for advanced energy conversion and storage. Science Advances, 2015, 1, e1500564.	4.7	567

#	Article	IF	Citations
1312	Graphene-Based Bulk-Heterojunction Solar Cells: A Review. Journal of Nanoscience and Nanotechnology, 2015, 15, 6237-6278.	0.9	71
1313	Easy conversion of protein-rich enoki mushroom biomass to a nitrogen-doped carbon nanomaterial as a promising metal-free catalyst for oxygen reduction reaction. Nanoscale, 2015, 7, 15990-15998.	2.8	149
1314	A carbon sandwich electrode with graphene filling coated by N-doped porous carbon layers for lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2015, 3, 20218-20224.	5.2	83
1315	Electrochemical-reduction-assisted assembly of ternary Ag nanoparticles/polyoxometalate/graphene nanohybrids and their activity in the electrocatalysis of oxygen reduction. RSC Advances, 2015, 5, 74447-74456.	1.7	38
1316	Porous nitrogen doped carbon foam with excellent resilience for self-supported oxygen reduction catalyst. Carbon, 2015, 95, 388-395.	5.4	77
1317	Electrochemical Potential Stabilization of Reconstructed Au(111) Structure by Monolayer Coverage with Graphene. Journal of Physical Chemistry Letters, 2015, 6, 3403-3409.	2.1	21
1318	Hydrothermal Synthesis of Boron and Nitrogen Codoped Hollow Graphene Microspheres with Enhanced Electrocatalytic Activity for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2015, 7, 19398-19407.	4.0	83
1319	Structural stability and O2 dissociation on nitrogen-doped graphene with transition metal atoms embedded: A first-principles study. AIP Advances, 2015, 5, .	0.6	37
1320	Direct Transformation from Graphitic C₃N₄ to Nitrogen-Doped Graphene: An Efficient Metal-Free Electrocatalyst for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2015, 7, 19626-19634.	4.0	182
1321	Facile Fabrication of N-Doped Graphene as Efficient Electrocatalyst for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2015, 7, 19619-19625.	4.0	63
1322	Carbon nanotube-supported Cu₃N nanocrystals as a highly active catalyst for oxygen reduction reaction. Journal of Materials Chemistry A, 2015, 3, 18983-18990.	5.2	52
1323	A Density Functional Theory Study on Mechanism of Electrochemical Oxygen Reduction on FeN₃-Graphene. Journal of the Electrochemical Society, 2015, 162, F1262-F1267.	1.3	18
1324	Surface-Tuned Co₃O₄ Nanoparticles Dispersed on Nitrogen-Doped Graphene as an Efficient Cathode Electrocatalyst for Mechanical Rechargeable Zincâ€“Air Battery Application. ACS Applied Materials & Interfaces, 2015, 7, 21138-21149.	4.0	145
1325	Layer-separated MoS₂bearing reduced graphene oxide formed by an in situ intercalation-cum-anchoring route mediated by Co(OH)₂as a Pt-free electrocatalyst for oxygen reduction. Nanoscale, 2015, 7, 16729-16736.	2.8	36
1326	Metal-free, carbon-based catalysts for oxygen reduction reactions. Frontiers of Chemical Science and Engineering, 2015, 9, 280-294.	2.3	22
1327	Iodine/nitrogen co-doped graphene as metal free catalyst for oxygen reduction reaction. Carbon, 2015, 95, 930-939.	5.4	91
1328	Nonstoichiometric Oxides as Low-Cost and Highly-Efficient Oxygen Reduction/Evolution Catalysts for Low-Temperature Electrochemical Devices. Chemical Reviews, 2015, 115, 9869-9921.	23.0	770
1329	Boron-doped onion-like carbon with enriched substitutional boron: the relationship between electronic properties and catalytic performance. Journal of Materials Chemistry A, 2015, 3, 21805-21814.	5.2	81

#	Article	IF	Citations
1330	Swelling-induced synthesis of nitrogen-doped graphene for oxygen reduction reaction. Electrochimica Acta, 2015, 180, 29-36.	2.6	17
1331	Nitrogen doped graphene sheets as metal free anode catalysts for the high performance microbial fuel cells. International Journal of Hydrogen Energy, 2015, 40, 13061-13070.	3.8	96
1332	Synthesis of Boron-Doped Polycyclic Aromatic Hydrocarbons by Tandem Intramolecular Electrophilic Arene Borylation. Organic Letters, 2015, 17, 6158-6161.	2.4	93
1333	Near-Infrared- and Visible-Light-Enhanced Metal-Free Catalytic Degradation of Organic Pollutants over Carbon-Dot-Based Carbocatalysts Synthesized from Biomass. ACS Applied Materials & Interfaces, 2015, 7, 27703-27712.	4.0	70
1334	Anti-stacking dense conversion of solid organic sodium salt particles into graphene with excellent electrode performance. RSC Advances, 2015, 5, 57576-57580.	1.7	4
1335	Effect of the N content of Fe/N/graphene catalysts for the oxygen reduction reaction in alkaline media. Journal of Materials Chemistry A, 2015, 3, 24487-24494.	5.2	44
1336	The influence of nitrogen doping on thermal conductivity of carbon nanotubes. Thermochimica Acta, 2015, 617, 163-168.	1.2	20
1337	Atomic Mechanism of Electrocatalytically Active Coâ€“N Complexes in Graphene Basal Plane for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2015, 7, 27405-27413.	4.0	139
1338	Nanomaterials in Proton Exchange Fuel Cells. Journal of Engineering Physics and Thermophysics, 2015, 88, 1554-1568.	0.2	5
1339	Nitrogen-Doped Reduced Graphene Oxide Prepared by Simultaneous Thermal Reduction and Nitrogen Doping of Graphene Oxide in Air and Its Application as an Electrocatalyst. ACS Applied Materials & Interfaces, 2015, 7, 26952-26958.	4.0	103
1340	Heating Treated Carbon Nanotubes As Highly Active Electrocatalysts for Oxygen Reduction Reaction. Electrochimica Acta, 2015, 154, 177-183.	2.6	30
1341	Synergistic Bifunctional Catalyst Design based on Perovskite Oxide Nanoparticles and Intertwined Carbon Nanotubes for Rechargeable Zincâ€“Air Battery Applications. ACS Applied Materials & Interfaces, 2015, 7, 902-910.	4.0	176
1342	High Catalytic Activity of Nitrogen and Sulfur Coâ€Doped Nanoporous Graphene in the Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2015, 54, 2131-2136.	7.2	760
1343	Effects of Oxygen Vacancies and Reaction Conditions on Oxygen Reduction Reaction on Pyrochlore-Type Lead-Ruthenium Oxide. Journal of the Electrochemical Society, 2015, 162, F129-F135.	1.3	36
1344	Charge and energy transfer interplay in hybrid sensitized solar cells mediated by graphene quantum dots. Electrochimica Acta, 2015, 153, 306-315.	2.6	80
1345	Metal-free graphene-based catalystâ€”Insight into the catalytic activity: A short review. Applied Catalysis A: General, 2015, 492, 1-9.	2.2	123
1346	How Much N-Doping Can Graphene Sustain?. Journal of Physical Chemistry Letters, 2015, 6, 106-112.	2.1	62
1347	Metalâ€“Support Interaction in Platinum and Palladium Nanoparticles Loaded on Nitrogen-Doped Mesoporous Carbon for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2015, 7, 1170-1179.	4.0	158

#	Article	IF	Citations
1348	Photoluminescent carbonâ€“nitrogen quantum dots as efficient electrocatalysts for oxygen reduction. Nanoscale, 2015, 7, 2003-2008.	2.8	41
1349	Enhanced electrochemical sensing of thiols based on cobalt phthalocyanine immobilized on nitrogen-doped graphene. Biosensors and Bioelectronics, 2015, 66, 438-444.	5.3	84
1350	Effect of the Number of Benzene-Ring, the Functional Groups and the Absorbent Material on the Performance of Pt Nanoparticles Supported on Modified Graphite Nanoplatelet. Electrochimica Acta, 2015, 153, 439-447.	2.6	5
1351	Sulfurâ€Doped Graphene Derived from Cycled Lithiumâ€“Sulfur Batteries as a Metalâ€Free Electrocatalyst for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2015, 54, 1888-1892.	7.2	328
1352	Graphene supported heterogeneous catalysts: An overview. International Journal of Hydrogen Energy, 2015, 40, 948-979.	3.8	412
1353	The mechanisms of oxygen reduction reaction on phosphorus doped graphene: A first-principles study. Journal of Power Sources, 2015, 276, 222-229.	4.0	165
1354	Beryllium doping graphene, graphene-nanoribbons, C60-fullerene, and carbon nanotubes. Carbon, 2015, 84, 317-326.	5.4	27
1356	Nanodelivery of parthenolide using functionalized nanographene enhances its anticancer activity. RSC Advances, 2015, 5, 2411-2420.	1.7	25
1357	Tuning electronic properties of carbon nanotubes by nitrogen grafting: Chemistry and chemical stability. Carbon, 2015, 83, 118-127.	5.4	54
1358	From two-dimensional materials to heterostructures. Progress in Surface Science, 2015, 90, 21-45.	3.8	123
1359	Hybrid nanoarchitecture of rutile TiO2 nanoneedle/graphene for advanced lithium-ion batteries. Solid State Ionics, 2015, 269, 44-50.	1.3	34
1360	Facile one-pot synthesis of platinum nanoparticles decorated nitrogen-graphene with high electrocatalytic performance for oxygen reduction and anodic fuels oxidation. Journal of Power Sources, 2015, 277, 268-276.	4.0	29
1362	Boosting Activation of Oxygen Molecules on C₆₀ Fullerene by Boron Doping. ChemPhysChem, 2015, 16, 390-395.	1.0	22
1363	Hydrogen microexplosion synthesis of platinum nanoparticles/nitrogen doped graphene nanoscrolls as new amperometric glucose biosensor. Electrochimica Acta, 2015, 152, 330-337.	2.6	49
1364	Electrical conduction of palladium-decorated multi-layered graphene oxide effected by hydrogen dissociation. Synthetic Metals, 2015, 199, 74-78.	2.1	5
1365	Bacterial cellulose derived nitrogen-doped carbon nanofiber aerogel: An efficient metal-free oxygen reduction electrocatalyst for zinc-air battery. Nano Energy, 2015, 11, 366-376.	8.2	395
1366	Co₃O₄ nanoparticles decorated carbon nanofiber mat as binder-free air-cathode for high performance rechargeable zinc-air batteries. Nanoscale, 2015, 7, 1830-1838.	2.8	226
1367	Highly stable electrocatalysts supported on nitrogen-self-doped three-dimensional graphene-like networks with hierarchical porous structures. Journal of Materials Chemistry A, 2015, 3, 1492-1497.	5.2	34

#	Article	IF	Citations
1368	Synthesis of nitrogen-doped grapheneâ€“ZnS quantum dots composites with highly efficient visible light photodegradation. Materials Chemistry and Physics, 2015, 151, 34-42.	2.0	25
1369	Potential of metal-free â€œgraphene alloyâ€• as electrocatalysts for oxygen reduction reaction. Journal of Materials Chemistry A, 2015, 3, 1795-1810.	5.2	133
1370	Chemical Fabrication and Electrochemical Characterization of Graphene Nanosheets Using a Lithium Battery Platform. Journal of Chemical Education, 2015, 92, 355-359.	1.1	8
1371	pâ€Elementâ€Doped Graphene: Heteroatoms for Electrochemical Enhancement. ChemElectroChem, 2015, 2, 190-199.	1.7	40
1372	Agx@WO3 core-shell nanostructure for LSP enhanced chemical sensors. Scientific Reports, 2014, 4, 6745.	1.6	116
1373	Transforming organic-rich amaranthus waste into nitrogen-doped carbon with superior performance of the oxygen reduction reaction. Energy and Environmental Science, 2015, 8, 221-229.	15.6	307
1374	New approach of nitrogen and sulfur-doped graphene synthesis using dipyrrolemethane and their electrocatalytic activity for oxygen reduction in alkaline media. Journal of Power Sources, 2015, 275, 73-79.	4.0	95
1375	Preparation and application of iron oxide/graphene based composites for electrochemical energy storage and energy conversion devices: Current status and perspective. Nano Energy, 2015, 11, 277-293.	8.2	146
1376	Facile synthesis of laminated graphene for advanced supercapacitor electrode material via simultaneous reduction and N-doping. Journal of Power Sources, 2015, 274, 851-861.	4.0	50
1377	High activity electrocatalysts from metalâ€“organic framework-carbon nanotube templates for the oxygen reduction reaction. Carbon, 2015, 82, 417-424.	5.4	140
1378	Fe-containing polyimide-based high-performance ORR catalysts in acidic medium: a kinetic approach to study the durability of catalysts. Catalysis Science and Technology, 2015, 5, 475-483.	2.1	76
1379	Emerging applications of graphene and its derivatives in carbon capture and conversion: Current status and future prospects. Renewable and Sustainable Energy Reviews, 2015, 41, 1515-1545.	8.2	58
1380	Synthesis of C₆₀/Graphene Composite as Electrode in Supercapacitors. Fullerenes Nanotubes and Carbon Nanostructures, 2015, 23, 477-482.	1.0	71
1381	Coreâ€“shell Co@Co3O4nanoparticle-embedded bamboo-like nitrogen-doped carbon nanotubes (BNCNTs) as a highly active electrocatalyst for the oxygen reduction reaction. Nanoscale, 2015, 7, 7056-64.	2.8	95
1382	Graphene-based transition metal oxide nanocomposites for the oxygen reduction reaction. Nanoscale, 2015, 7, 1250-1269.	2.8	290
1383	Nitrogen-doped graphene-supported cobalt carbonitride@oxide coreâ€“shell nanoparticles as a non-noble metal electrocatalyst for an oxygen reduction reaction. Journal of Materials Chemistry A, 2015, 3, 1142-1151.	5.2	55
1384	Synthesis of Phosphorusâ€Doped Graphene and its Wide Potential Window in Aqueous Supercapacitors. Chemistry - A European Journal, 2015, 21, 80-85.	1.7	230
1385	Continuous synthesis of graphene sheets by spray pyrolysis and their use as catalysts for fuel cells. Chemical Communications, 2015, 51, 741-744.	2.2	13

#	Article	IF	Citations
1386	Single and Multiple Doping in Graphene Quantum Dots: Unraveling the Origin of Selectivity in the Oxygen Reduction Reaction. ACS Catalysis, 2015, 5, 129-144.	5.5	166
1387	Graphene-supported platinum catalyst prepared with ionomer as surfactant for anion exchange membrane fuel cells. Journal of Power Sources, 2015, 275, 506-515.	4.0	26
1388	High nitrogen-doped carbon/Mn₃O₄hybrids synthesized from nitrogen-rich coordination polymer particles as supercapacitor electrodes. Dalton Transactions, 2015, 44, 151-157.	1.6	32
1389	Template-free synthesis of hollow nitrogen-doped carbon as efficient electrocatalysts for oxygen reduction reaction. Journal of Power Sources, 2015, 274, 645-650.	4.0	53
1390	A facile approach to produce holey graphene and its application in supercapacitors. Carbon, 2015, 81, 347-356.	5.4	89
1391	Facile fabrication of molybdenum dioxide/nitrogen-doped graphene hybrid as high performance anode material for lithium ion batteries. Journal of Power Sources, 2015, 274, 142-148.	4.0	58
1392	One- and two-photon luminescence in graphene oxide quantum dots. New Journal of Chemistry, 2015, 39, 98-101.	1.4	24
1393	Alveoliâ€Inspired Facile Transport Structure of Nâ€Doped Porous Carbon for Electrochemical Energy Applications. Advanced Energy Materials, 2015, 5, 1401309.	10.2	104
1394	Quantitatively estimating defects in graphene devices using discharge current analysis method. Scientific Reports, 2015, 4, 4886.	1.6	15
1395	Tunable, self-assembled 3D reduced graphene oxide structures fabricated via boiling. Carbon, 2015, 81, 357-366.	5.4	17
1396	Synthesis and Applications of Semiconducting Graphene. Journal of Nanomaterials, 2016, 2016, 1-19.	1.5	29
1397	The Potential Role of Graphene in Developing the Next Generation of Endomaterials. BioMed Research International, 2016, 2016, 1-7.	0.9	11
1398	Nitrogen-Doped Carbon Composites as Metal-Free Catalysts. , 2016, , 273-311.		0
1399	An Oxygen Reduction Study of Graphene-Based Nanomaterials of Different Origin. Catalysts, 2016, 6, 108.	1.6	50
1400	Non-Precious Electrocatalysts for Oxygen Reduction Reaction in Alkaline Media: Latest Achievements on Novel Carbon Materials. Catalysts, 2016, 6, 159.	1.6	49
1401	Applications of Graphene-Modified Electrodes in Microbial Fuel Cells. Materials, 2016, 9, 807.	1.3	55
1402	Methanol-Tolerant Platinum-Palladium Catalyst Supported on Nitrogen-Doped Carbon Nanofiber for High Concentration Direct Methanol Fuel Cells. Nanomaterials, 2016, 6, 148.	1.9	15
1403	Gas Sensing Analysis of Ag-Decorated Graphene for Sulfur Hexafluoride Decomposition Products Based on the Density Functional Theory. Sensors, 2016, 16, 1830.	2.1	25

#	Article	IF	Citations
1404	Covalently Functionalized Nano-Graphene Oxide for Fine Chemical Synthesis. , 0, , .		3
1405	Applications of Nanomaterials in Microbial Fuel Cells. Nanostructure Science and Technology, 2016, , 551-575.	0.1	5
1406	Progress in modified carbon support materials for Pt and Pt-alloy cathode catalysts in polymer electrolyte membrane fuel cells. Progress in Materials Science, 2016, 82, 445-498.	16.0	160
1407	The Application of Graphene and Its Derivatives to Energy Conversion, Storage, and Environmental and Biosensing Devices. Chemical Record, 2016, 16, 1591-1634.	2.9	58
1408	Pyridinicâ€Nitrogenâ€Dominated Graphene Aerogels with Feâ€“Nâ€“C Coordination for Highly Efficient Oxygen Reduction Reaction. Advanced Functional Materials, 2016, 26, 5708-5717.	7.8	360
1409	Sulfurâ€Enriched Conjugated Polymer Nanosheet Derived Sulfur and Nitrogen coâ€Doped Porous Carbon Nanosheets as Electrocatalysts for Oxygen Reduction Reaction and Zincâ€“Air Battery. Advanced Functional Materials, 2016, 26, 5893-5902.	7.8	214
1410	A General and Extremely Simple Remote Approach toward Graphene Bulks with In Situ Multifunctionalization. Advanced Materials, 2016, 28, 3305-3312.	11.1	79
1411	Grapheneâ€Based Nanocomposites for Energy Storage. Advanced Energy Materials, 2016, 6, 1502159.	10.2	306
1412	Nitrogenâ€Doped Graphene for Photocatalytic Hydrogen Generation. Chemistry - an Asian Journal, 2016, 11, 1125-1137.	1.7	63
1413	Highly Selective and Stable Reduction of CO₂ to CO by a Graphitic Carbon Nitride/Carbon Nanotube Composite Electrocatalyst. Chemistry - A European Journal, 2016, 22, 11991-11996.	1.7	132
1414	FeNi Layered Double-Hydroxide Nanosheets on a 3D Carbon Network as an Efficient Electrocatalyst for the Oxygen Evolution Reaction. Particle and Particle Systems Characterization, 2016, 33, 158-166.	1.2	43
1415	Evolution of N-Coordinated Ironâ€“Carbon (FeNC) Catalysts and Their Oxygen Reduction (ORR) Performance in Acidic Media at Various Stages of Catalyst Synthesis: An Attempt at Benchmarking. Catalysis Letters, 2016, 146, 1749-1770.	1.4	40
1416	Graphene-based materials for polymer solar cells. Chinese Chemical Letters, 2016, 27, 1259-1270.	4.8	34
1417	CO Poisoning Effects on FeNC and CN_x ORR Catalysts: A Combined Experimentalâ€“Computational Study. Journal of Physical Chemistry C, 2016, 120, 15173-15184.	1.5	57
1418	Electrochemical Reduction of Oxygen on Hydrophobic Ultramicroporous PolyHIPE Carbon. ACS Catalysis, 2016, 6, 5618-5628.	5.5	67
1419	A Hydrogenâ€Bonded Organicâ€Frameworkâ€Derived Mesoporous Nâ€Doped Carbon for Efficient Electroreduction of Oxygen. ChemElectroChem, 2016, 3, 1116-1123.	1.7	24
1420	Facile Synthesis of Fe₃C@Graphene Hybrid Nanorods as an Efficient and Robust Catalyst for Oxygen Reduction Reaction. ChemPlusChem, 2016, 81, 646-651.	1.3	12
1421	Recent Strategies for Improving the Catalytic Activity of 2D TMD Nanosheets Toward the Hydrogen Evolution Reaction. Advanced Materials, 2016, 28, 6197-6206.	11.1	769

#	Article	IF	Citations
1422	N,Pâ€Codoped Carbon Networks as Efficient Metalâ€free Bifunctional Catalysts for Oxygen Reduction and Hydrogen Evolution Reactions. Angewandte Chemie - International Edition, 2016, 55, 2230-2234.	7.2	748
1423	Nitrogen-doped cobalt phosphate@nanocarbon hybrids for efficient electrocatalytic oxygen reduction. Energy and Environmental Science, 2016, 9, 2563-2570.	15.6	216
1424	Electronic structures and quantum capacitance of monolayer and multilayer graphenes influenced by Al, B, N and P doping, and monovacancy: Theoretical study. Carbon, 2016, 108, 7-20.	5.4	99
1425	Single-Electron Activation of CO₂ on Graphene-Supported ZnO Nanoclusters: Effects of Doping in the Support. Journal of Physical Chemistry C, 2016, 120, 16732-16740.	1.5	14
1426	Nanomaterials for Fuel Cell Catalysis. Nanostructure Science and Technology, 2016, , .	0.1	11
1427	Fabrication of electrocatalyst based on nitrogen doped graphene as highly efficient and durable support for using in polymer electrolyte fuel cell. Journal of Power Sources, 2016, 325, 808-815.	4.0	34
1428	Metalâ€free Nanoporous Carbon as a Catalyst for Electrochemical Reduction of CO₂ to CO and CH₄. ChemSusChem, 2016, 9, 606-616.	3.6	149
1429	Fe₃O₄â€Decorated Co₉S₈ Nanoparticles In Situ Grown on Reduced Graphene Oxide: A New and Efficient Electrocatalyst for Oxygen Evolution Reaction. Advanced Functional Materials, 2016, 26, 4712-4721.	7.8	348
1430	Topological Defects in Metalâ€Free Nanocarbon for Oxygen Electrocatalysis. Advanced Materials, 2016, 28, 6845-6851.	11.1	629
1431	Synthesis and characterization of nitrogen-functionalized graphene oxide in high-temperature and high-pressure ammonia. RSC Advances, 2016, 6, 113924-113932.	1.7	21
1432	Phosphomolybdate@Carbon-Based Nanocomposites as Electrocatalysts for Oxygen Reduction Reaction. ChemistrySelect, 2016, 1, 6257-6266.	0.7	15
1433	Nitrogen-Doped Carbon Foam as a Highly Durable Metal-Free Electrocatalyst for the Oxygen Reduction Reaction in Alkaline Solution. Electrochimica Acta, 2016, 220, 554-561.	2.6	28
1434	Time-dependent evolution of the nitrogen configurations in N-doped graphene films. RSC Advances, 2016, 6, 106914-106920.	1.7	119
1435	Core Level Shifts of Hydrogenated Pyridinic and Pyrrolic Nitrogen in the Nitrogen-Containing Graphene-Based Electrocatalysts: In-Plane vs Edge Defects. Journal of Physical Chemistry C, 2016, 120, 29225-29232.	1.5	123
1437	Plasma engineering of graphene. Applied Physics Reviews, 2016, 3, 021301.	5.5	123
1438	Napkin Paper Derived Nitrogen-Doped Carbon Sheets: A High-Performance Electrocatalyst for Oxygen Reduction Reaction. Journal of the Electrochemical Society, 2016, 163, H1204-H1209.	1.3	3
1439	Dual Electrocatalytic Behavior of Oxovanadium(IV) Salen Immobilized Carbon Materials Towards Cysteine Oxidation and Cystine Reduction: Graphene Versus Single Walled Carbon Nanotubes. ChemistrySelect, 2016, 1, 6726-6734.	0.7	10
1440	Adsorption behavior of Bâ€doped/Nâ€doped graphene sheets toward NO₂, NO and NH₃ molecules: A firstâ€principles study. Physica Status Solidi C: Current Topics in Solid State Physics, 2017, 14, 1600110.	0.8	12

#	Article	IF	Citations
1441	A metal-free electrocatalyst for carbon dioxide reduction to multi-carbon hydrocarbons and oxygenates. Nature Communications, 2016, 7, 13869.	5.8	505
1442	Coexistence of negative photoconductivity and hysteresis in semiconducting graphene. AIP Advances, 2016, 6, .	0.6	14
1443	Mechanism of stabilization and magnetization of impurity-doped zigzag graphene nanoribbons. Journal of Applied Physics, 2016, 120, .	1.1	6
1444	Pyridine on flat Pt(111) and stepped Pt(355)â€"An in situ HRXPS investigation of adsorption and thermal evolution. Journal of Chemical Physics, 2016, 144, 014702.	1.2	10
1447	Interaction Induced High Catalytic Activities of CoO Nanoparticles Grown on Nitrogen-Doped Hollow Graphene Microspheres for Oxygen Reduction and Evolution Reactions. Scientific Reports, 2016, 6, 27081.	1.6	76
1449	Noncovalent Functionalization of Graphene and Graphene Oxide for Energy Materials, Biosensing, Catalytic, and Biomedical Applications. Chemical Reviews, 2016, 116, 5464-5519.	23.0	1,942
1450	Bifunctional Perovskite Oxide Catalysts for Oxygen Reduction and Evolution in Alkaline Media. Chemistry - an Asian Journal, 2016, 11, 10-21.	1.7	190
1451	Microbe-engaged synthesis of carbon dot-decorated reduced graphene oxide as high-performance oxygen reduction catalysts. Journal of Materials Chemistry A, 2016, 4, 7222-7229.	5.2	56
1452	N-, P- and Fe-tridoped nanoporous carbon derived from plant biomass: an excellent oxygen reduction electrocatalyst for zincâ€"air batteries. Journal of Materials Chemistry A, 2016, 4, 8602-8609.	5.2	112
1453	Molecular dynamic simulation of layered graphene clusters formation from polyimides under extreme conditions. Carbon, 2016, 104, 47-55.	5.4	92
1454	Effect of nitrogen precursors on the electrochemical performance of nitrogen-doped reduced graphene oxide towards oxygen reduction reaction. Journal of Alloys and Compounds, 2016, 677, 112-120.	2.8	61
1455	Silk-derived graphene-like carbon with high electrocatalytic activity for oxygen reduction reaction. RSC Advances, 2016, 6, 34219-34224.	1.7	22
1456	Co@N-CNTs derived from triple-role CoAl-layered double hydroxide as an efficient catalyst for oxygen reduction reaction. Carbon, 2016, 107, 162-170.	5.4	60
1457	Efficiency and long-term durability of a nitrogen-doped single-walled carbon nanotube electrocatalyst synthesized by defluorination-assisted nanotube-substitution for oxygen reduction reaction. Journal of Materials Chemistry A, 2016, 4, 9184-9195.	5.2	21
1458	Nitrogen-doped functional graphene nanocomposites for capacitive deionization of NaCl aqueous solutions. Journal of Solid State Electrochemistry, 2016, 20, 2351-2362.	1.2	15
1459	Edge-halogenated graphene nanoplatelets with F, Cl, or Br as electrocatalysts for all-vanadium redox flow batteries. Nano Energy, 2016, 26, 233-240.	8.2	105
1460	High catalytic activity of Co₃O₄ nanoparticles encapsulated in a graphene supported carbon matrix for oxygen reduction reaction. RSC Advances, 2016, 6, 50349-50357.	1.7	13
1461	Incorporating Graphene into Fuel Cell Design. Nanoscience and Technology, 2016, , 293-312.	1.5	0

#	Article	IF	Citations
1462	Manganese dioxide-supported silver bismuthate as an efficient electrocatalyst for oxygen reduction reaction in zinc-oxygen batteries. Electrochimica Acta, 2016, 197, 68-76.	2.6	26
1463	Insight into the nitrogen-doped carbon as oxygen reduction reaction catalyst: The choice of carbon/nitrogen source and active sites. International Journal of Hydrogen Energy, 2016, 41, 8563-8575.	3.8	43
1464	Au/ZnO hybrid nanocatalysts impregnated in N-doped graphene for simultaneous determination of ascorbic acid, acetaminophen and dopamine. Materials Science and Engineering C, 2016, 65, 80-89.	3.8	75
1465	Charge transfer induced activity of graphene for oxygen reduction. Nanotechnology, 2016, 27, 185402.	1.3	19
1466	Fe/Fe2O3 nanoparticles anchored on Fe-N-doped carbon nanosheets as bifunctional oxygen electrocatalysts for rechargeable zinc-air batteries. Nano Research, 2016, 9, 2123-2137.	5.8	116
1467	Metal-organic framework derived nitrogen-doped porous carbon@graphene sandwich-like structured composites as bifunctional electrocatalysts for oxygen reduction and evolution reactions. Carbon, 2016, 106, 74-83.	5.4	206
1468	Nitrogen, Iron-codoped Mesoporous Carbon with bimodal-pores as an Efficient Catalyst for the Oxygen Reduction Reaction. Electrochimica Acta, 2016, 209, 551-556.	2.6	11
1469	Feâ€“N-Doped Carbon Capsules with Outstanding Electrochemical Performance and Stability for the Oxygen Reduction Reaction in Both Acid and Alkaline Conditions. ACS Nano, 2016, 10, 5922-5932.	7.3	403
1470	Nonporous MOF-derived dopant-free mesoporous carbon as an efficient metal-free electrocatalyst for the oxygen reduction reaction. Journal of Materials Chemistry A, 2016, 4, 9370-9374.	5.2	85
1471	Effective seed-assisted synthesis of gold nanoparticles anchored nitrogen-doped graphene for electrochemical detection of glucose and dopamine. Biosensors and Bioelectronics, 2016, 81, 259-267.	5.3	152
1472	Is reduced graphene oxide favorable for nonprecious metal oxygen-reduction catalysts?. Carbon, 2016, 102, 346-356.	5.4	41
1473	Control of nitrogen content and its effects on the electrochemical behavior of nitrogen-doped carbon nanofibers. Journal of Electroanalytical Chemistry, 2016, 768, 34-40.	1.9	11
1474	Catalysis with two-dimensional materials and their heterostructures. Nature Nanotechnology, 2016, 11, 218-230.	15.6	1,833
1475	Tuning Î±-Fe2O3 nanotube arrays for the oxygen reduction reaction in alkaline media. RSC Advances, 2016, 6, 41878-41884.	1.7	32
1476	One-pot synthesis of N-doped graphene for metal-free advanced oxidation processes. Carbon, 2016, 102, 279-287.	5.4	148
1477	Understanding the chemisorption-based activation mechanism of the oxygen reduction reaction on nitrogen-doped graphitic materials. Electrochimica Acta, 2016, 204, 245-254.	2.6	28
1478	Electrochemical Exfoliation of Graphite into Nitrogen-doped Graphene in Glycine Solution and its Energy Storage Properties. Electrochimica Acta, 2016, 204, 100-107.	2.6	70
1479	Iron incorporation on graphene nanoflakes for the synthesis of a non-noble metal fuel cell catalyst. Applied Catalysis B: Environmental, 2016, 193, 9-15.	10.8	11

#	Article	IF	Citations
1480	Bifunctional Ag/Fe/N/C Catalysts for Enhancing Oxygen Reduction via Cathodic Biofilm Inhibition in Microbial Fuel Cells. ACS Applied Materials & Interfaces, 2016, 8, 6992-7002.	4.0	78
1481	Rational design of graphitic carbon based nanostructures for advanced electrocatalysis. Journal of Materials Chemistry A, 2016, 4, 8497-8511.	5.2	73
1482	Nitrogen and boron co-doped hollow carbon catalyst for the oxygen reduction reaction. Carbon, 2016, 105, 1-7.	5.4	55
1483	Ironâ€“polypyrrole electrocatalyst with remarkable activity and stability for ORR in both alkaline and acidic conditions: a comprehensive assessment of catalyst preparation sequence. Journal of Materials Chemistry A, 2016, 4, 8645-8657.	5.2	90
1484	First-Principle Framework for Total Charging Energies in Electrocatalytic Materials and Charge-Responsive Molecular Binding at Gasâ€“Surface Interfaces. ACS Applied Materials & Interfaces, 2016, 8, 10897-10903.	4.0	18
1485	Natural tea-leaf-derived, ternary-doped 3D porous carbon as a high-performance electrocatalyst for the oxygen reduction reaction. Nano Research, 2016, 9, 1244-1255.	5.8	54
1486	Poly(styrene sulfonate) and Pt bifunctionalized graphene nanosheets as an artificial enzyme to construct a colorimetric chemosensor for highly sensitive glucose detection. Sensors and Actuators B: Chemical, 2016, 233, 438-444.	4.0	48
1487	An electrochemical sensor for selective detection of dopamine based on nickel tetrasulfonated phthalocyanine functionalized nitrogen-doped graphene nanocomposites. Journal of Electroanalytical Chemistry, 2016, 779, 92-98.	1.9	63
1488	Bulk Production of Nonprecious Metal Catalysts from Cheap Starch as Precursor and Their Excellent Electrochemical Activity. ACS Sustainable Chemistry and Engineering, 2016, 4, 3235-3244.	3.2	22
1489	A review of harvesting clean fuels from enzymatic CO₂reduction. RSC Advances, 2016, 6, 44170-44194.	1.7	87
1490	Doping sp² carbon to boost the activity for oxygen reduction in an acidic medium: a theoretical exploration. RSC Advances, 2016, 6, 48498-48503.	1.7	13
1491	High graphite N content in nitrogen-doped graphene as an efficient metal-free catalyst for reduction of nitroarenes in water. Green Chemistry, 2016, 18, 4254-4262.	4.6	109
1492	Photo-thermal oxidation of single layer graphene. RSC Advances, 2016, 6, 42545-42553.	1.7	32
1493	ZIF-8@Polyvinylpyrrolidone Nanocomposites Based N-Doped Porous Carbon for Highly Efficient Oxygen Reduction Reaction in Alkaline Solution. Journal of the Electrochemical Society, 2016, 163, H459-H464.	1.3	19
1494	N-doped zeolite-templated carbon as a metal-free electrocatalyst for oxygen reduction. RSC Advances, 2016, 6, 43091-43097.	1.7	24
1495	Synergistically enhanced activity of graphene quantum dots/graphene hydrogel composites: a novel all-carbon hybrid electrocatalyst for metal/air batteries. Nanoscale, 2016, 8, 11398-11402.	2.8	59
1496	Understanding the ammonia sensing behavior of filter coffee powder derived N-doped carbon nanoparticles using the Freundlich-like isotherm. Journal of Materials Chemistry A, 2016, 4, 8860-8865.	5.2	19
1497	Self-assembled reduced graphene hydrogels by facile chemical reduction using acetaldehyde oxime for electrode materials in supercapacitors. RSC Advances, 2016, 6, 48276-48282.	1.7	7

#	Article	IF	Citations
1498	Carbon nanotubes containing oxygenated decorating defects as metal-free catalyst for selective oxidation of H2S. Applied Catalysis B: Environmental, 2016, 191, 29-41.	10.8	58
1499	Carbon nanotube modification of microbial fuel cell electrodes. Biosensors and Bioelectronics, 2016, 85, 536-552.	5.3	116
1500	Ultrafine Co₃O₄embedded in nitrogen-doped graphene with synergistic effect and high stability for supercapacitors. RSC Advances, 2016, 6, 48357-48364.	1.7	30
1501	Volatilizable template-assisted scalable preparation of honeycomb-like porous carbons for efficient oxygen electroreduction. Journal of Materials Chemistry A, 2016, 4, 10820-10827.	5.2	54
1502	A nickel cobaltate nanoparticle-decorated hierarchical porous N-doped carbon nanofiber film as a binder-free self-supported cathode for nonaqueous Liâ€“O₂batteries. Journal of Materials Chemistry A, 2016, 4, 9106-9112.	5.2	72
1503	Optical Biosensors Based on Nitrogenâ€Doped Graphene Functionalized with Magnetic Nanoparticles. Advanced Materials Interfaces, 2016, 3, 1600590.	1.9	40
1504	Progress on the graphene-involved catalytic hydrogenation reactions. Journal of the Taiwan Institute of Chemical Engineers, 2016, 67, 126-139.	2.7	11
1505	Tuning graphene for energy and environmental applications: Oxygen reduction reaction and greenhouse gas mitigation. Journal of Power Sources, 2016, 328, 472-481.	4.0	16
1506	China rose-derived tri-heteroatom co-doped porous carbon as an efficient electrocatalysts for oxygen reduction reaction. RSC Advances, 2016, 6, 86401-86409.	1.7	11
1507	Metalloid tellurium-doped graphene nanoplatelets as ultimately stable electrocatalysts for cobalt reduction reaction in dye-sensitized solar cells. Nano Energy, 2016, 30, 867-876.	8.2	49
1508	In Situ Growth of Co₃O₄ Nanoparticles on Interconnected Nitrogenâ€Doped Graphene Nanoribbons as Efficient Oxygen Reduction Reaction Catalyst. ChemNanoMat, 2016, 2, 972-979.	1.5	10
1509	The mechanism of oxygen reduction reaction on CoN4 embedded graphene: A combined kinetic and atomistic thermodynamic study. International Journal of Hydrogen Energy, 2016, 41, 21212-21220.	3.8	51
1510	Carboxylic acid terminated, solution exfoliated graphite by organic acylation and its application in drug delivery. Journal of Chemical Sciences, 2016, 128, 1345-1354.	0.7	5
1511	Recent progress in electrocatalysts with mesoporous structures for application in polymer electrolyte membrane fuel cells. Journal of Materials Chemistry A, 2016, 4, 16272-16287.	5.2	55
1512	Facile self-assembly N-doped graphene quantum dots/graphene for oxygen reduction reaction. Electrochimica Acta, 2016, 216, 102-109.	2.6	90
1513	Electrochemical catalysis at low dimensional carbons: Graphene, carbon nanotubes and beyond â€“ A review. Applied Materials Today, 2016, 5, 134-141.	2.3	79
1514	A facile method to fabricate N-doped graphene-like carbon as efficient electrocatalyst using spent montmorillonite. Applied Clay Science, 2016, 132-133, 731-738.	2.6	16
1515	Electronic Coupling of Cobalt Nanoparticles to Nitrogenâ€Doped Graphene for Oxygen Reduction and Evolution Reactions. ChemSusChem, 2016, 9, 3067-3073.	3.6	21

#	Article	IF	Citations
1516	Pt nanoparticle and Fe,N-codoped 3D graphene as synergistic electrocatalyst for oxygen reduction reaction. Journal of Power Sources, 2016, 335, 31-37.	4.0	32
1517	Kohlenstoffbasierte Metallfreie Katalysatoren fÃ¼r die Elektrokatalyse jenseits der ORR. Angewandte Chemie, 2016, 128, 11910-11933.	1.6	58
1518	Nanostructured Bifunctional Redox Electrocatalysts. Small, 2016, 12, 5656-5675.	5.2	174
1519	Nitrogen, Phosphorus, and Fluorine Triâ€doped Graphene as a Multifunctional Catalyst for Selfâ€Powered Electrochemical Water Splitting. Angewandte Chemie, 2016, 128, 13490-13494.	1.6	104
1520	Three-dimensional porous metalâ€“nitrogen doped carbon nanostructure as a superior non-precious electrocatalyst in oxygen reduction reaction. Journal of Industrial and Engineering Chemistry, 2016, 43, 170-176.	2.9	21
1521	Purely substitutional nitrogen on graphene/Pt(111) unveiled by STM and first principles calculations. Nanoscale, 2016, 8, 17686-17693.	2.8	14
1522	Insights into the Catalytic Activity of Barium Carbonate for Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2016, 120, 22895-22902.	1.5	15
1523	Novel self-nitrogen-doped porous carbon from waste leather as highly active metal-free electrocatalyst for the ORR. International Journal of Hydrogen Energy, 2016, 41, 23409-23416.	3.8	48
1524	Reducing emission of carcinogenic by-products in the production of thermally reduced graphene oxide. Green Chemistry, 2016, 18, 6618-6629.	4.6	11
1525	Functionalized carbon nanotubes and graphene-based materials for energy storage. Chemical Communications, 2016, 52, 14350-14360.	2.2	53
1526	Synthesis of nitrogen-doped reduced graphene oxide as metal-free electrocatalyst for oxygen reduction reactions. International Journal of Nanomanufacturing, 2016, 12, 252.	0.3	0
1527	Highly Efficient Electrocatalysts for Oxygen Reduction Reaction Based on 1D Ternary Doped Porous Carbons Derived from Carbon Nanotube Directed Conjugated Microporous Polymers. Advanced Functional Materials, 2016, 26, 8255-8265.	7.8	65
1528	Microbial Electrochemical Systems with Future Perspectives using Advanced Nanomaterials and Microfluidics. Advanced Energy Materials, 2016, 6, 1600690.	10.2	20
1529	Nitrogen-doped hierarchically porous carbon networks: synthesis and applications in lithium-ion battery, sodium-ion battery and zinc-air battery. Electrochimica Acta, 2016, 219, 592-603.	2.6	151
1530	Simple synthesis of nitrogen doped graphene/ordered mesoporous metal oxides hybrid architecture as high-performance electrocatalysts for biosensing study. RSC Advances, 2016, 6, 96963-96973.	1.7	4
1531	NaSn₂As₂: An Exfoliatable Layered van der Waals Zintl Phase. ACS Nano, 2016, 10, 9500-9508.	7.3	39
1532	Silver nanoparticles supported on a nitrogen-doped graphene aerogel composite catalyst for an oxygen reduction reaction in aluminum air batteries. RSC Advances, 2016, 6, 99179-99183.	1.7	33
1533	Controllable localization of carbon nanotubes on the holey edge of graphene: an efficient oxygen reduction electrocatalyst for Znâ€“air batteries. Journal of Materials Chemistry A, 2016, 4, 18240-18247.	5.2	31

#	Article	IF	Citations
1534	In Situ Confinement Pyrolysis Transformation of ZIFâ€8 to Nitrogenâ€Enriched Mesoâ€Microporous Carbon Frameworks for Oxygen Reduction. Advanced Functional Materials, 2016, 26, 8334-8344.	7.8	281
1535	Functionalized-Graphene Composites: Fabrication and Applications in Sustainable Energy and Environment. Chemistry of Materials, 2016, 28, 8082-8118.	3.2	179
1536	A novel nitrogen-doped graphene fiber microelectrode with ultrahigh sensitivity for the detection of dopamine. Electrochemistry Communications, 2016, 72, 122-125.	2.3	32
1537	Honeycomb-like hierarchical carbon derived from livestock sewage sludge as oxygen reduction reaction catalysts in microbial fuel cells. International Journal of Hydrogen Energy, 2016, 41, 22328-22336.	3.8	39
1538	Nitrogen, Phosphorus, and Fluorine Triâ€doped Graphene as a Multifunctional Catalyst for Selfâ€Powered Electrochemical Water Splitting. Angewandte Chemie - International Edition, 2016, 55, 13296-13300.	7.2	517
1539	Electron transfer number control of the oxygen reduction reaction on nitrogen-doped reduced graphene oxides for the air electrodes of zinc-air batteries and organic degradation. Materials Chemistry and Physics, 2016, 183, 551-560.	2.0	7
1540	3D graphene-based hybrid materials: synthesis and applications in energy storage and conversion. Nanoscale, 2016, 8, 15414-15447.	2.8	127
1541	The direct growth of highly dispersed CoO nanoparticles on mesoporous carbon as a high-performance electrocatalyst for the oxygen reduction reaction. RSC Advances, 2016, 6, 70763-70769.	1.7	12
1542	A Facile Route to Bimetal and Nitrogenâ€Codoped 3D Porous Graphitic Carbon Networks for Efficient Oxygen Reduction. Small, 2016, 12, 4193-4199.	5.2	150
1543	Cu,N-codoped Hierarchical Porous Carbons as Electrocatalysts for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2016, 8, 21431-21439.	4.0	205
1544	Yolk-shell N/P/B ternary-doped biocarbon derived from yeast cells for enhanced oxygen reduction reaction. Carbon, 2016, 107, 907-916.	5.4	59
1545	Recent progress in 2D or 3D N-doped graphene synthesis and the characterizations, properties, and modulations of N species. Journal of Materials Science, 2016, 51, 10323-10349.	1.7	77
1546	Highly efficient iron phthalocyanine based porous carbon electrocatalysts for the oxygen reduction reaction. RSC Advances, 2016, 6, 78737-78742.	1.7	14
1547	Nâ€doped Carbon Nanotubes for the Oxygen Reduction Reaction in Alkaline Medium: Synergistic Relationship between Pyridinic and Quaternary Nitrogen. ChemistrySelect, 2016, 1, 2522-2530.	0.7	36
1548	Hollow Amorphous MnSnO3 Nanohybrid with Nitrogen-Doped Graphene for High-Performance Lithium Storage. Electrochimica Acta, 2016, 214, 1-10.	2.6	27
1549	Electrical and Optical Properties and Applications of Doped Graphene Sheets. , 2016, , 197-224.		4
1550	3D Macroscopic Graphene Assemblies. , 2016, , 281-294.		0
1551	Effect of boronâ€“carbonâ€“nitride as a negative additive for lead acid batteries operating under high-rate partial-state-of-charge conditions. RSC Advances, 2016, 6, 75122-75125.	1.7	12

#	Article	IF	Citations
1552	Two-Dimensional Materials as Catalysts for Energy Conversion. Catalysis Letters, 2016, 146, 1917-1921.	1.4	58
1553	Kinetic Modulation of Outer-Sphere Electron Transfer Reactions on Graphene Electrode with a Sub-surface Metal Substrate. Electrochimica Acta, 2016, 211, 1016-1023.	2.6	37
1554	2D Nanoporous Feâ^'N/C Nanosheets as Highly Efficient Non-Platinum Electrocatalysts for Oxygen Reduction Reaction in Zn-Air Battery. Small, 2016, 12, 5710-5719.	5.2	95
1555	Preparation of nitrogen-doped carbon nanoblocks with high electrocatalytic activity for oxygen reduction reaction in alkaline solution. Chinese Journal of Catalysis, 2016, 37, 1275-1282.	6.9	9
1556	Highly Active and Stable Graphene Tubes Decorated with FeCoNi Alloy Nanoparticles via a Templateâ€Free Graphitization for Bifunctional Oxygen Reduction and Evolution. Advanced Energy Materials, 2016, 6, 1601198.	10.2	224
1557	Fluorine and nitrogen co-doped ordered mesoporous carbon as a metal-free electrocatalyst for oxygen reduction reaction. RSC Advances, 2016, 6, 79928-79933.	1.7	19
1558	Substrateâ€Assisted Deposition of Metal Oxides on Threeâ€Dimensional Porous Reduced Graphene Oxide Networks as Bifunctional Hybrid Electrocatalysts for the Oxygen Evolution and Oxygen Reduction Reactions. ChemCatChem, 2016, 8, 2808-2816.	1.8	12
1559	Polyhydroxylated few layer graphene for the preparation of flexible conductive carbon paper. RSC Advances, 2016, 6, 87767-87777.	1.7	18
1560	A Review on Metalâ€Free Doped Carbon Materials Used as Oxygen Reduction Catalysts in Solid Electrolyte Proton Exchange Fuel Cells. Fuel Cells, 2016, 16, 522-529.	1.5	42
1561	Electrocatalytic performances of heteroatom-containing functionalities in N-doped reduced graphene oxides. Journal of Industrial and Engineering Chemistry, 2016, 42, 149-156.	2.9	22
1562	When Inert Becomes Active: A Fascinating Route for Catalyst Design. Chemical Record, 2016, 16, 2324-2337.	2.9	22
1563	One-Step Synthesis of Pt/Graphene Composites from Pt Acid Dissolved Ethanol via Microwave Plasma Spray Pyrolysis. Scientific Reports, 2016, 6, 33236.	1.6	20
1564	Nanostructured energy materials for electrochemical energy conversion and storage: A review. Journal of Energy Chemistry, 2016, 25, 967-984.	7.1	409
1565	Ultrafine N-doped carbon nanoparticles with controllable size to enhance electrocatalytic activity for oxygen reduction reaction. RSC Advances, 2016, 6, 110758-110764.	1.7	10
1566	Cobalt diselenide nanoparticles embedded within porous carbon polyhedra as advanced electrocatalyst for oxygen reduction reaction. Journal of Power Sources, 2016, 330, 132-139.	4.0	34
1567	An effective poly(p-phenylenevinylene) polymer adhesion route toward three-dimensional nitrogen-doped carbon nanotube/reduced graphene oxide composite for direct electrocatalytic oxygen reduction. Nano Research, 2016, 9, 3364-3376.	5.8	19
1568	High-activity oxygen reduction catalyst based on low-cost bagasse, nitrogen and large specific surface area. Energy, 2016, 115, 397-403.	4.5	30
1569	Nitrogen-doped carbon-embedded TiO2 nanofibers as promising oxygen reduction reaction electrocatalysts. Journal of Power Sources, 2016, 330, 292-303.	4.0	78

#	Article	IF	Citations
1570	Probing the Oxygen Reduction Reaction Active Sites over Nitrogen-Doped Carbon Nanostructures (CN_x) in Acidic Media Using Phosphate Anion. ACS Catalysis, 2016, 6, 7249-7259.	5.5	123
1571	Nitrogen Functionalized Few Layer Graphene Derived from Metal-Organic Compound: A Catalyst for Oxygen Reduction Reaction. Electrochimica Acta, 2016, 216, 457-466.	2.6	13
1572	Self-Assembly of Nitrogen-doped Graphene-Wrapped Carbon Nanoparticles as an Efficient Electrocatalyst for Oxygen Reduction Reaction. Electrochimica Acta, 2016, 216, 347-354.	2.6	19
1573	Few-Layer Graphene Island Seeding for Dendrite-Free Li Metal Electrodes. ACS Applied Materials & Interfaces, 2016, 8, 26895-26901.	4.0	63
1574	Defect Graphene as a Trifunctional Catalyst for Electrochemical Reactions. Advanced Materials, 2016, 28, 9532-9538.	11.1	961
1575	Synthesis procedure and type of graphite oxide strongly influence resulting graphene properties. Applied Materials Today, 2016, 4, 45-53.	2.3	87
1576	The role of chelating ligands and central metals in the oxygen reduction reaction activity: a DFT study. Russian Journal of Electrochemistry, 2016, 52, 555-559.	0.3	2
1577	Carbonâ€Based Metalâ€Free Catalysts for Electrocatalysis beyond the ORR. Angewandte Chemie - International Edition, 2016, 55, 11736-11758.	7.2	598
1578	Potential Application of Novel Boron-Doped Graphene Nanoribbon as Oxygen Reduction Reaction Catalyst. Journal of Physical Chemistry C, 2016, 120, 17427-17434.	1.5	131
1579	Cobaltâ€“Nitrogen Coâ€doped Carbon Nanotube Cathode Catalyst for Alkaline Membrane Fuel Cells. ChemElectroChem, 2016, 3, 1455-1465.	1.7	66
1580	Experimental and theoretical studies on the effect of functional groups on carbon nanotubes to its oxygen reduction reaction activity. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 506, 476-484.	2.3	25
1581	Flame synthesis of nitrogen doped carbon for the oxygen reduction reaction and non-enzymatic methyl parathion sensor. RSC Advances, 2016, 6, 71507-71516.	1.7	38
1582	High-Quality Graphene Sheets from Graphene Oxide Hot Pressing and Its Applications. , 2016, , 393-402.		1
1583	Hydrogenated Graphene: Preparation, Properties, and Applications. , 2016, , 449-468.		0
1584	Synthesis Strategies for Graphene. , 2016, , 73-114.		0
1585	The Effect of KOH Treatment on the Chemical Structure and Electrocatalytic Activity of Reduced Graphene Oxide Materials. Chemistry - A European Journal, 2016, 22, 11435-11440.	1.7	5
1586	Graphene/nitrogen-doped porous carbon sandwiches for the metal-free oxygen reduction reaction: conductivity versus active sites. Journal of Materials Chemistry A, 2016, 4, 12658-12666.	5.2	99
1587	Tunable plasmons in few-layer nitrogen-doped graphene nanostructures: A time-dependent density functional theory study. Physical Review B, 2016, 93, .	1.1	11

#	Article	IF	Citations
1588	Physical properties of low-dimensional<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mi>s</mml:mi><mml:mi>p</mml:mi></mml:mrow><mml:m carbon nanostructures. Reviews of Modern Physics, 2016, 88, .	1.4	160
1589	Ternary Hollow Mesoporous TiN/N-Graphene/Pt Hybrid Results in Enhanced Electrocatalytic Performance for Methanol Oxidation and Oxygen Reduction Reaction. Electrochimica Acta, 2016, 213, 771-782.	2.6	21
1590	Enhanced electrocatalytic activity of nitrogen-doped olympicene/graphene hybrids for the oxygen reduction reaction. Physical Chemistry Chemical Physics, 2016, 18, 22799-22804.	1.3	7
1591	Nonâ€Pt Nanostructured Catalysts for Oxygen Reduction Reaction: Synthesis, Catalytic Activity and its Key Factors. Advanced Energy Materials, 2016, 6, 1600458.	10.2	160
1592	An Efficient Electrocatalyst Derived from Bamboo Leaves for the Oxygen Reduction Reaction. ChemElectroChem, 2016, 3, 1466-1470.	1.7	14
1593	Computational electrochemistry of doped graphene as electrocatalytic material in fuel cells. International Journal of Quantum Chemistry, 2016, 116, 1623-1640.	1.0	28
1594	Cobalt and Nitrogen Codoped Graphene with Inserted Carbon Nanospheres as an Efficient Bifunctional Electrocatalyst for Oxygen Reduction and Evolution. ACS Sustainable Chemistry and Engineering, 2016, 4, 4131-4136.	3.2	101
1595	Oxygen reduction reaction on nitrogen-doped graphene nanoribbons: A density functional theory study. Chemical Physics Letters, 2016, 663, 123-127.	1.2	28
1596	Highly doped and exposed Cu(<scp>i</scp>)â€“N active sites within graphene towards efficient oxygen reduction for zincâ€“air batteries. Energy and Environmental Science, 2016, 9, 3736-3745.	15.6	374
1597	Synthesis, properties and applications of 3D carbon nanotubeâ€“graphene junctions. Journal Physics D: Applied Physics, 2016, 49, 443001.	1.3	18
1598	A â€œSolid Dualâ€Ionsâ€Transformationâ€•Route to S,N Coâ€Doped Carbon Nanotubes as Highly Efficient â€œMetalâ€Freeâ€•Catalysts for Organic Reactions. Advanced Materials, 2016, 28, 10679-10683.	11.1	107
1599	Honeyâ€Based P, N and Si Triâ€Doped Graphitic Carbon Electrocatalysts for Oxygen Reduction Reaction in Alkaline Conditions. ChemistrySelect, 2016, 1, 3527-3534.	0.7	3
1600	Charting the Outer Helmholtz Plane and the Role of Nitrogen Doping in the Oxygen Reduction Reaction Conducted in Alkaline Media Using Nonprecious Metal Catalysts. Journal of Physical Chemistry C, 2016, 120, 24511-24520.	1.5	5
1601	Modulation of Oxygen Content in Graphene Surfaces Using Temperature-Programmed Reductive Annealing: Electron Paramagnetic Resonance and Electrochemical Study. Langmuir, 2016, 32, 11672-11680.	1.6	24
1602	Microwave Exfoliation of Graphite Oxides in H₂S Plasma for the Synthesis of Sulfur-Doped Graphenes as Oxygen Reduction Catalysts. ACS Applied Materials & Interfaces, 2016, 8, 31849-31855.	4.0	39
1603	A comparative DFT study of oxygen reduction reaction on mononuclear and binuclear cobalt and iron phthalocyanines. Russian Journal of Physical Chemistry A, 2016, 90, 2413-2417.	0.1	14
1604	Tunable electronic properties of graphene through controlling bonding configurations of doped nitrogen atoms. Scientific Reports, 2016, 6, 28330.	1.6	48
1605	The electrochemical 4-chlorophenol sensing properties of a plasma-treated multilayer graphene modified photolithography patterned platinum electrode. RSC Advances, 2016, 6, 105920-105929.	1.7	20

#	Article	IF	Citations
1606	Manipulation of defect density and nitrogen doping on few-layer graphene sheets using the plasma methodology for electrochemical applications. Electrochimica Acta, 2016, 221, 144-153.	2.6	13
1607	Surface-nitrogen-rich ordered mesoporous carbon as an efficient metal-free electrocatalyst for oxygen reduction reaction. Nanotechnology, 2016, 27, 445402.	1.3	20
1608	S and N codoped three-dimensional graphene-MnS hybrids with high electrocatalytic activity for oxygen reduction reaction. Synthetic Metals, 2016, 221, 55-60.	2.1	22
1609	Elemental superdoping of graphene and carbon nanotubes. Nature Communications, 2016, 7, 10921.	5.8	238
1610	Electrochemically synthesized sulfur-doped graphene as a superior metal-free cathodic catalyst for oxygen reduction reaction in microbial fuel cells. RSC Advances, 2016, 6, 103446-103454.	1.7	31
1611	Nanocomposite membranes of sulfonated poly(phthalalizinone ether ketone)â€“sulfonated graphite nanofibers as electrolytes for direct methanol fuel cells. RSC Advances, 2016, 6, 107507-107518.	1.7	25
1612	Control over fuel cell performance through modulation of pore accessibility: investigation and modeling of carbon nanotubes effects on oxygen reduction at N-graphene-based nanocomposite. Nanotechnology, 2016, 27, 475401.	1.3	3
1613	Heteroatom (N or Nâ€Ś)â€Doping Induced Layered and Honeycomb Microstructures of Porous Carbons for CO₂ Capture and Energy Applications. Advanced Functional Materials, 2016, 26, 8651-8661.	7.8	182
1614	Nitrogen-doped carbon xerogels as novel cathode electrocatalysts for oxygen reduction reaction in direct borohydride fuel cells. Electrochimica Acta, 2016, 222, 438-445.	2.6	25
1615	Critical role of intercalated water for electrocatalytically active nitrogen-doped graphitic systems. Science Advances, 2016, 2, e1501178.	4.7	36
1616	A homogeneous assay for highly sensitive detection of CaMV35S promoter in transgenic soybean by fÃ¶rster resonance energy transfer between nitrogen-doped graphene quantum dots and Ag nanoparticles. Analytica Chimica Acta, 2016, 948, 90-97.	2.6	28
1617	Influence of plasma process on the nitrogen configuration in graphene. Diamond and Related Materials, 2016, 70, 211-218.	1.8	23
1618	Carbon-based metal-free catalysts. Nature Reviews Materials, 2016, 1, .	23.3	1,042
1619	Graphene: Tunable superdoping. Nature Energy, 2016, 1, .	19.8	35
1620	Dissociative adsorption of O₂ on negatively charged nitrogen-doped single-walled carbon nanotubes: first-principles calculations. RSC Advances, 2016, 6, 84155-84163.	1.7	8
1621	Improved oxygen reduction reaction activity of three-dimensional porous N-doped graphene from a soft-template synthesis strategy in microbial fuel cells. RSC Advances, 2016, 6, 105211-105221.	1.7	15
1622	High-performance oxygen reduction catalyst derived from porous, nitrogen-doped carbon nanosheets. Nanotechnology, 2016, 27, 405401.	1.3	9
1623	Comparative Study of the Catalytic Activities of Three Distinct Carbonaceous Materials through Photocatalytic Oxidation, CO Conversion, Dye Degradation, and Electrochemical Measurements. Scientific Reports, 2016, 6, 35500.	1.6	7

#	Article	IF	Citations
1624	Simple Synthesis of Fluorinated Graphene: Thermal Exfoliation of Fluorographite. Chemistry - A European Journal, 2016, 22, 17696-17703.	1.7	26
1625	Graphene in Photocatalysis: A Review. Small, 2016, 12, 6640-6696.	5.2	836
1626	Oxygen Reduction Reaction Mechanisms on Al-Doped X-Graphene (X = N, P, and S) Catalysts in Acidic Medium: A Comparative DFT Study. Journal of Physical Chemistry C, 2016, 120, 26435-26441.	1.5	30
1627	Ice-templated synthesis of multifunctional three dimensional graphene/noble metal nanocomposites and their mechanical, electrical, catalytic and electromagnetic shielding properties. Scientific Reports, 2016, 5, 17726.	1.6	59
1628	Differences in intermediate structures and electronic states associated with oxygen adsorption onto Pt, Cu, and Au clusters as oxygen reduction catalysts. Journal Physics D: Applied Physics, 2016, 49, 415305.	1.3	5
1629	Rationally Designed 3D Fe and N Codoped Graphene with Superior Electrocatalytic Activity toward Oxygen Reduction. Small, 2016, 12, 2549-2553.	5.2	33
1630	Nanoporous Graphene Enriched with Fe/Coâ€N Active Sites as a Promising Oxygen Reduction Electrocatalyst for Anion Exchange Membrane Fuel Cells. Advanced Functional Materials, 2016, 26, 2150-2162.	7.8	305
1631	Edge Functionalization of Graphene and Twoâ€Dimensional Covalent Organic Polymers for Energy Conversion and Storage. Advanced Materials, 2016, 28, 6253-6261.	11.1	148
1632	Tuning the Electrochemical Reactivity of Boronâ€and Nitrogenâ€Substituted Graphene. Advanced Materials, 2016, 28, 6239-6246.	11.1	107
1633	Prospects of Supercritical Fluids in Realizing Grapheneâ€Based Functional Materials. Advanced Materials, 2016, 28, 2663-2691.	11.1	66
1634	Theoretical Studies of Oxygen Reactivity of Freeâ€Standing and Supported Boronâ€Doped Graphene. ChemSusChem, 2016, 9, 1061-1077.	3.6	12
1635	Preparation of N-Doped Nanoporous Carbon from Crude Biomass and its Electrochemical Activity. Nano, 2016, 11, 1650028.	0.5	3
1636	Nitrogen-Doped Holey Graphene for High-Performance Rechargeable Liâ€“O₂ Batteries. ACS Energy Letters, 2016, 1, 260-265.	8.8	116
1637	Synthesis of silver/nitrogen-doped reduced graphene oxide through a one-step thermal solid-state reaction for oxygen reduction in an alkaline medium. Journal of Power Sources, 2016, 324, 412-420.	4.0	45
1638	Antibody conjugated metal nanoparticle decorated graphene sheets for a mycotoxin sensor. RSC Advances, 2016, 6, 56518-56526.	1.7	21
1639	Heterocarbon nanosheets incorporating iron phthalocyanine for oxygen reduction reaction in both alkaline and acidic media. Physical Chemistry Chemical Physics, 2016, 18, 10856-10863.	1.3	30
1640	Nitrogen Doped Graphene as Metal Free Electrocatalyst for Efficient Oxygen Reduction Reaction in Alkaline Media and Its Application in Anion Exchange Membrane Fuel Cells. Journal of the Electrochemical Society, 2016, 163, F848-F855.	1.3	76
1641	Catalytic conversion of CHx and CO2 on non-noble metallic impurities in graphene. Physical Chemistry Chemical Physics, 2016, 18, 16998-17009.	1.3	6

#	Article	IF	Citations
1642	Graphene as a chain extender of polyurethanes for biomedical applications. RSC Advances, 2016, 6, 58628-58640.	1.7	27
1643	Antimicrobial Perspectives for Graphene-Based Nanomaterials. , 2016, , 45-58.		1
1644	Effect of External Electric Fields on the Multifunctional Applications of Graphene. , 2016, , 253-272.		0
1645	Chemistry and Applications of Supramolecular Graphene Derivatives. , 2016, , 355-370.		2
1646	Design and Applications of Graphene- and Biomolecule-Based Nanosensors and Nanodevices. , 2016, , 21-30.		0
1647	Free-standing palladium-nickel alloy wavy nanosheets. Nano Research, 2016, 9, 2244-2250.	5.8	45
1648	Template-free synthesis of three-dimensional nanoporous N-doped graphene for high performance fuel cell oxygen reduction reaction in alkaline media. Applied Energy, 2016, 175, 405-413.	5.1	43
1649	A reactive-template strategy for high yield synthesis of N-doped graphene and its modification by introduction of cobalt species for significantly enhanced oxygen reduction reaction. Electrochimica Acta, 2016, 210, 328-336.	2.6	32
1650	Structure of nitrogen-doped graphene synthesized by combination of imidazole and melamine solid precursors. Materials Letters, 2016, 177, 89-93.	1.3	17
1651	A synchrotron-based spectroscopic study of the electronic structure of N-doped HOPG and PdY/N-doped HOPG. Surface Science, 2016, 646, 132-139.	0.8	16
1652	Eco-friendly synthesis of nitrogen-doped carbon nanodots from wool for multicolor cell imaging, patterning, and biosensing. Sensors and Actuators B: Chemical, 2016, 235, 316-324.	4.0	51
1653	Activated-Nitrogen-Doped Graphene-Based Aerogel Composites as Cathode Materials for High Energy Density Lithium-Ion Supercapacitor. Journal of the Electrochemical Society, 2016, 163, A1736-A1742.	1.3	34
1654	Tuning the electronic structure of graphene through nitrogen doping: experiment and theory. RSC Advances, 2016, 6, 56721-56727.	1.7	21
1655	Direct fabrication of metal-free hollow graphene balls with a self-supporting structure as efficient cathode catalysts of fuel cell. Journal of Nanoparticle Research, 2016, 18, 1.	0.8	8
1656	How theory and simulation can drive fuel cell electrocatalysis. Nano Energy, 2016, 29, 334-361.	8.2	71
1657	Emerging new generation electrocatalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2016, 4, 11156-11178.	5.2	174
1658	N-doped graphene grown on silk cocoon-derived interconnected carbon fibers for oxygen reduction reaction and photocatalytic hydrogen production. Nano Research, 2016, 9, 2498-2509.	5.8	70
1659	Catalytic properties of graphitic and pyridinic nitrogen doped on carbon black for oxygen reduction reaction. Chinese Journal of Catalysis, 2016, 37, 1119-1126.	6.9	68

#	Article	IF	Citations
1660	Substrate-induced structures of bismuth adsorption on graphene: a first principles study. Physical Chemistry Chemical Physics, 2016, 18, 18978-18984.	1.3	7
1661	A Largeâ€Area, Flexible, and Flameâ€Retardant Graphene Paper. Advanced Functional Materials, 2016, 26, 1470-1476.	7.8	144
1662	N,Pâ€Codoped Carbon Networks as Efficient Metalâ€free Bifunctional Catalysts for Oxygen Reduction and Hydrogen Evolution Reactions. Angewandte Chemie, 2016, 128, 2270-2274.	1.6	224
1663	Coarse-grained molecular simulation of self-assembly nanostructures of CTAB on nanoscale graphene. Molecular Simulation, 2016, 42, 31-38.	0.9	15
1664	Effect of metal and nonmetal on adsorption of hydrogen in torus-type C120. Chemical Physics Letters, 2016, 645, 187-191.	1.2	1
1665	Characterization of nitrogen species incorporated into graphite using low energy nitrogen ion sputtering. Physical Chemistry Chemical Physics, 2016, 18, 458-465.	1.3	25
1666	Pyridine derivative/graphene nanoribbon composites as molecularly tunable heterogeneous electrocatalysts for the oxygen reduction reaction. Physical Chemistry Chemical Physics, 2016, 18, 5040-5047.	1.3	11
1667	Exploring the nitrogen species of nitrogen doped graphene as electrocatalysts for oxygen reduction reaction in Alâ€“air batteries. International Journal of Hydrogen Energy, 2016, 41, 10354-10365.	3.8	51
1668	The influence of pore size distribution on the oxygen reduction reaction performance in nitrogen doped carbon microspheres. Journal of Materials Chemistry A, 2016, 4, 2581-2589.	5.2	195
1669	New Electro-Fenton Gas Diffusion Cathode based on Nitrogen-doped Graphene@Carbon Nanotube Composite Materials. Electrochimica Acta, 2016, 194, 228-238.	2.6	102
1670	Controlled growth cerium oxide nanoparticles on reduced graphene oxide for oxygen catalytic reduction. Electrochimica Acta, 2016, 191, 669-676.	2.6	42
1671	Nitrogen-doped graphene/CoNi alloy encased within bamboo-like carbon nanotube hybrids as cathode catalysts in microbial fuel cells. Journal of Power Sources, 2016, 307, 561-568.	4.0	128
1672	Mussel-inspired one-pot synthesis of transition metal and nitrogen co-doped carbon (M/Nâ€“C) as efficient oxygen catalysts for Zn-air batteries. Nanoscale, 2016, 8, 5067-5075.	2.8	109
1673	Synthesis of heteroatom-carbon nanosheets by solution plasma processing using N-methyl-2-pyrrolidone as precursor. RSC Advances, 2016, 6, 6990-6996.	1.7	27
1674	Ordered mesoporous carbon supported bifunctional PtM (M = Ru, Fe, Mo) electrocatalysts for a fuel cell anode. Chinese Journal of Catalysis, 2016, 37, 43-53.	6.9	26
1675	Electrochemical study of a novel high performance supercapacitor based on MnO2/nitrogen-doped graphene nanocomposite. Applied Surface Science, 2016, 366, 552-560.	3.1	188
1676	Carbon nanocomposite catalysts for oxygen reduction and evolution reactions: From nitrogen doping to transition-metal addition. Nano Energy, 2016, 29, 83-110.	8.2	650
1677	Electrochemistry of ferrocene derivatives on highly oriented pyrolytic graphite (HOPG): quantification and impacts of surface adsorption. Physical Chemistry Chemical Physics, 2016, 18, 4966-4977.	1.3	42

#	Article	IF	Citations
1678	Shrimp-shell derived carbon nanodots as carbon and nitrogen sources to fabricate three-dimensional N-doped porous carbon electrocatalysts for the oxygen reduction reaction. Physical Chemistry Chemical Physics, 2016, 18, 4095-4101.	1.3	97
1679	Controlled synthesis of hollow micro/meso-pore nitrogen-doped carbon with tunable wall thickness and specific surface area as efficient electrocatalysts for oxygen reduction reaction. Journal of Materials Chemistry A, 2016, 4, 2433-2437.	5.2	61
1680	Small-sized tungsten nitride anchoring into a 3D CNT-rGO framework as a superior bifunctional catalyst for the methanol oxidation and oxygen reduction reactions. Nano Research, 2016, 9, 329-343.	5.8	75
1681	Active sites of nitrogen-doped carbon materials for oxygen reduction reaction clarified using model catalysts. Science, 2016, 351, 361-365.	6.0	3,435
1682	Pure inorganic Dâ€“A type polyoxometalate/reduced graphene oxide nanocomposite for the photoanode of dye-sensitized solar cells. Journal of Materials Chemistry A, 2016, 4, 3297-3303.	5.2	37
1683	Functionalized graphene oxide and multi-walled carbon nanotubes in hexadecyl trimethyl ammonium bromide and chitosan matrix as metal-free catalyst for enhanced oxygen reduction reaction. Fullerenes Nanotubes and Carbon Nanostructures, 2016, 24, 144-148.	1.0	2
1684	Microbe-derived carbon materials for electrical energy storage and conversion. Journal of Energy Chemistry, 2016, 25, 191-198.	7.1	44
1685	N-Doped Food-Grade-Derived 3D Mesoporous Foams as Metal-Free Systems for Catalysis. ACS Catalysis, 2016, 6, 1408-1419.	5.5	73
1686	Microporous Organic Polymers Derived Microporous Carbon Supported Pd Catalysts for Oxygen Reduction Reaction: Impact of Framework and Heteroatom. Journal of Physical Chemistry C, 2016, 120, 2187-2197.	1.5	54
1687	Defect-driven oxygen reduction reaction (ORR) of carbon without any element doping. Inorganic Chemistry Frontiers, 2016, 3, 417-421.	3.0	146
1688	Three-dimensional (3D) interconnected networks fabricated via in-situ growth of N-doped graphene/carbon nanotubes on Co-containing carbon nanofibers for enhanced oxygen reduction. Nano Research, 2016, 9, 317-328.	5.8	70
1689	Catalytic activities enhanced by abundant structural defects and balanced N distribution of N-doped graphene in oxygen reduction reaction. Journal of Power Sources, 2016, 306, 85-91.	4.0	59
1690	Direct formation of LiFePO4/graphene composite via microwave-assisted polyol process. Journal of Power Sources, 2016, 304, 354-359.	4.0	35
1691	Incorporation of Nitrogen Defects for Efficient Reduction of CO₂ via Two-Electron Pathway on Three-Dimensional Graphene Foam. Nano Letters, 2016, 16, 466-470.	4.5	435
1692	Synthesis of TCPPâ€“Fe3O4@S/RGO and its application for purification of water. Research on Chemical Intermediates, 2016, 42, 5441-5455.	1.3	18
1693	Towards high-efficiency nanoelectrocatalysts for oxygen reduction through engineering advanced carbon nanomaterials. Chemical Society Reviews, 2016, 45, 1273-1307.	18.7	589
1694	Sandwich-structured nanocomposite constructed by fabrication of exfoliation Î±-ZrP nanosheets and cobalt porphyrin utilized for electrocatalytic oxygen reduction. Microporous and Mesoporous Materials, 2016, 223, 213-218.	2.2	16
1695	Study of nitrogen doping of graphene via in-situ transport measurements. Physica B: Condensed Matter, 2016, 490, 21-24.	1.3	9

#	Article	IF	Citations
1696	The Synthesis, Properties, and Applications of Heteroatom-Doped Graphenes. Advanced Structured Materials, 2016, , 103-133.	0.3	3
1697	Nitrogen-doped hierarchical porous carbon derived from block copolymer for supercapacitor. Energy Storage Materials, 2016, 3, 140-148.	9.5	67
1698	Design of Low Pt Concentration Electrocatalyst Surfaces with High Oxygen Reduction Reaction Activity Promoted by Formation of a Heterogeneous Interface between Pt and CeO_x Nanowire. ACS Applied Materials & Interfaces, 2016, 8, 9059-9070.	4.0	44
1699	Nitrogenâ€Doped Graphene Nanosheets with FeN Coreâ€“Shell Nanoparticles as Highâ€Performance Counter Electrode Materials for Dyeâ€Sensitized Solar Cells. Advanced Materials Interfaces, 2016, 3, 1500348.	1.9	92
1700	A Facile Synthesis of Nitrogen/Sulfur Coâ€Doped Graphene for the Oxygen Reduction Reaction. ChemCatChem, 2016, 8, 163-170.	1.8	50
1701	Carbonâ€Supported Zirconium Oxide as a Cathode for Microbial Fuel Cell Applications. ChemPlusChem, 2016, 81, 80-85.	1.3	47
1702	Vertically aligned graphitic carbon nanosheet arrays fabricated from graphene oxides for supercapacitors and Liâ€“O₂ batteries. Chemical Communications, 2016, 52, 6403-6406.	2.2	3
1703	Graphene coated with controllable N-doped carbon layer by molecular layer deposition as electrode materials for supercapacitors. Journal of Power Sources, 2016, 315, 254-260.	4.0	34
1704	Mesoporous nitrogen containing carbon materials for the simultaneous detection of ascorbic acid, dopamine and uric acid. Sensors and Actuators B: Chemical, 2016, 230, 544-555.	4.0	82
1705	In situ formation of nitrogen-doped onion-like carbon as catalyst support for enhanced oxygen reduction activity and durability. Carbon, 2016, 101, 420-430.	5.4	43
1706	Electrocatalysis enhancement of iron-based catalysts induced by synergy of methanol and oxygen-containing groups. Nano Energy, 2016, 21, 265-275.	8.2	12
1707	CO Oxidation Prefers the Eleyâ€“Rideal or Langmuirâ€“Hinshelwood Pathway: Monolayer vs Thin Film of SiC. ACS Applied Materials & Interfaces, 2016, 8, 5290-5299.	4.0	44
1708	New trends in the development of heterogeneous catalysts for electrochemical CO 2 reduction. Catalysis Today, 2016, 270, 19-30.	2.2	259
1709	Mechanism for Forming B,C,N,O Rings from NH₃BH₃ and CO₂ via Reaction Discovery Computations. Journal of Physical Chemistry A, 2016, 120, 1135-1144.	1.1	15
1710	The catalyst layer and its dimensionality â€“ A look into its ingredients and how to characterize their effects. Journal of Power Sources, 2016, 309, 141-159.	4.0	69
1711	Synergistic effect of boron/nitrogen co-doping into graphene and intercalation of carbon black for Pt-BCN-Gr/CB hybrid catalyst on cell performance of polymer electrolyte membrane fuel cell. Energy, 2016, 96, 314-324.	4.5	37
1712	Pyridine-functionalized graphene oxide, an efficient metal free electrocatalyst for oxygen reduction reaction. Electrochimica Acta, 2016, 194, 95-103.	2.6	51
1713	Design Principles for Dual-Element-Doped Carbon Nanomaterials as Efficient Bifunctional Catalysts for Oxygen Reduction and Evolution Reactions. ACS Catalysis, 2016, 6, 1553-1558.	5.5	179

#	Article	IF	Citations
1714	Growth of N-doped graphene from nitrogen containing aromatic compounds: the effect of precursors on the doped site. RSC Advances, 2016, 6, 13392-13398.	1.7	29
1715	First-principles study of structural and work function properties for nitrogen-doped single-walled carbon nanotubes. Applied Surface Science, 2016, 368, 477-482.	3.1	17
1716	Functionalized graphene nanoplatelets from ball milling for energy applications. Current Opinion in Chemical Engineering, 2016, 11, 52-58.	3.8	89
1717	Efficient oxygen reduction reaction electrocatalysts synthesized from an iron-coordinated aromatic polymer framework. Journal of Materials Chemistry A, 2016, 4, 3858-3864.	5.2	20
1718	Smectic liquid crystal polymers as a template for ultrathin CaCO₃ nanolayers. RSC Advances, 2016, 6, 13953-13956.	1.7	6
1719	Synthesis of hollow carbon nanostructures as a non-precious catalyst for oxygen reduction reaction. Electrochimica Acta, 2016, 191, 805-812.	2.6	30
1720	Precious-metal-free Coâ€“Feâ€“O_x coupled nitrogen-enriched porous carbon nanosheets derived from Schiff-base porous polymers as superior electrocatalysts for the oxygen evolution reaction. Journal of Materials Chemistry A, 2016, 4, 6505-6512.	5.2	89
1721	One-step synthesis of shell/core structural boron and nitrogen co-doped graphitic carbon/nanodiamond as efficient electrocatalyst for the oxygen reduction reaction in alkaline media. Electrochimica Acta, 2016, 194, 161-167.	2.6	34
1722	Nitrogen-Doped Carbon Nanoparticleâ€“Carbon Nanofiber Composite as an Efficient Metal-Free Cathode Catalyst for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2016, 8, 6962-6971.	4.0	158
1723	Formation Mechanisms of Graphitic-N: Oxygen Reduction and Nitrogen Doping of Graphene Oxides. Journal of Physical Chemistry C, 2016, 120, 5673-5681.	1.5	29
1724	Microwave-Assisted Synthesis of Nitrogen-Doped Multi-Layer Graphene Quantum Dots with Oxygen-Rich Functional Groups. Australian Journal of Chemistry, 2016, 69, 357.	0.5	37
1725	Synthesis of Ag@Pt coreâ€“shell nanoparticles loaded onto reduced graphene oxide and investigation of its electrosensing properties. Analytical Methods, 2016, 8, 1084-1090.	1.3	17
1726	Three dimensional nanocomposite of reduced graphene oxide and hexagonal boron nitride as an efficient metal-free catalyst for oxygen electroreduction. Journal of Materials Chemistry A, 2016, 4, 4506-4515.	5.2	56
1727	The origin of the enhanced performance of nitrogen-doped MoS₂in lithium ion batteries. Nanotechnology, 2016, 27, 175402.	1.3	58
1728	Electron transport study on functionalized armchair graphene nanoribbons: DFT calculations. RSC Advances, 2016, 6, 21954-21960.	1.7	24
1729	Mechanochemical Treatment of Precursors of Carbon-Nanoshell-Containing Catalysts for the Oxygen Reduction Reaction. Journal of the Electrochemical Society, 2016, 163, H223-H227.	1.3	2
1730	Density Functional Theory Study of Iron Phthalocyanine Porous Layer Deposited on Graphene Substrate: A Pt-Free Electrocatalyst for Hydrogen Fuel Cells. Journal of Physical Chemistry C, 2016, 120, 5384-5391.	1.5	41
1731	Effects of crystallite structure and interface band alignment on the photocatalytic property of bismuth ferrite/ (N-doped) graphene composites. Journal of Alloys and Compounds, 2016, 672, 497-504.	2.8	31

#	Article	IF	Citations
1732	Aligned Nanofibers from Polypyrrole/Graphene as Electrodes for Regeneration of Optic Nerve via Electrical Stimulation. ACS Applied Materials & Interfaces, 2016, 8, 6834-6840.	4.0	102
1733	An iron porphyrin-based conjugated network wrapped around carbon nanotubes as a noble-metal-free electrocatalyst for efficient oxygen reduction reaction. Inorganic Chemistry Frontiers, 2016, 3, 821-827.	3.0	39
1734	Nitrogen- and Sulfur-Codoped Hierarchically Porous Carbon for Adsorptive and Oxidative Removal of Pharmaceutical Contaminants. ACS Applied Materials & Interfaces, 2016, 8, 7184-7193.	4.0	224
1735	Indium- and Platinum-Free Counter Electrode for Green Mesoscopic Photovoltaics through Graphene Electrode and Graphene Composite Catalysts: Interfacial Compatibility. ACS Applied Materials & Interfaces, 2016, 8, 5314-5319.	4.0	33
1736	Carbon dioxide activated carbon nanofibers with hierarchical micro-/mesoporosity towards electrocatalytic oxygen reduction. Journal of Materials Chemistry A, 2016, 4, 5553-5560.	5.2	35
1737	Graphene-supported non-precious metal electrocatalysts for oxygen reduction reactions: the active center and catalytic mechanism. Journal of Materials Chemistry A, 2016, 4, 7148-7154.	5.2	17
1738	Novel synthesis of N-doped graphene as an efficient electrocatalyst towards oxygen reduction. Nano Research, 2016, 9, 808-819.	5.8	81
1739	Nitrogen-doped carbon nanofibers on expanded graphite as oxygen reduction electrocatalysts. Carbon, 2016, 101, 191-202.	5.4	62
1740	Hierarchically Porous N-doped Carbon Derived from ZIF-8 Nanocomposites for Electrochemical Applications. Electrochimica Acta, 2016, 196, 699-707.	2.6	182
1741	Further Understanding of Nitrogen-Doped Carbon Catalytic Property towards Oxygen Reduction Reaction (ORR). Materials Today: Proceedings, 2016, 3, 691-695.	0.9	11
1742	Single non-noble-metal cobalt atom stabilized by pyridinic vacancy graphene: An efficient catalyst for CO oxidation. Journal of Molecular Catalysis A, 2016, 417, 28-35.	4.8	68
1743	Nitrogen-doped nanoporous carbon derived from waste pomelo peel as a metal-free electrocatalyst for the oxygen reduction reaction. Nanoscale, 2016, 8, 8704-8711.	2.8	78
1744	Convenient and controllable preparation of a novel uniformly nitrogen doped porous graphene/Pt nanoflower material and its highly-efficient electrochemical biosensing. Analyst, The, 2016, 141, 2741-2747.	1.7	9
1745	Polystyrene Microspheres-Templated Nitrogen-Doped Graphene Hollow Spheres as Metal-Free Catalyst for Oxygen Reduction Reaction. Electrochimica Acta, 2016, 188, 230-239.	2.6	29
1746	Simultaneous doping of nitrogen and fluorine into reduced graphene oxide: A highly active metal-free electrocatalyst for oxygen reduction. Carbon, 2016, 99, 272-279.	5.4	65
1747	GO-induced assembly of gelatin toward stacked layer-like porous carbon for advanced supercapacitors. Nanoscale, 2016, 8, 2418-2427.	2.8	69
1748	Enhanced hydrogen production in microbial electrolysis cell with 3D self-assembly nickel foam-graphene cathode. Biosensors and Bioelectronics, 2016, 80, 118-122.	5.3	87
1749	Nitrogen-doped activated carbon derived from prawn shells for high-performance supercapacitors. Electrochimica Acta, 2016, 190, 1134-1141.	2.6	217

#	Article	IF	Citations
1750	Production of N-graphene by microwave N₂-Ar plasma. Journal Physics D: Applied Physics, 2016, 49, 055307.	1.3	31
1751	Electron Transfer and Catalytic Mechanism of Organic Molecule-Adsorbed Graphene Nanoribbons as Efficient Catalysts for Oxygen Reduction and Evolution Reactions. Journal of Physical Chemistry C, 2016, 120, 2166-2175.	1.5	42
1752	Nitrogen/sulfur co-doped helical graphene nanoribbons for efficient oxygen reduction in alkaline and acidic electrolytes. Carbon, 2016, 100, 99-108.	5.4	64
1753	MoS 2 /sulfur and nitrogen co-doped reduced graphene oxide nanocomposite for enhanced electrocatalytic hydrogen evolution. International Journal of Hydrogen Energy, 2016, 41, 916-923.	3.8	40
1754	Self-Assembled N/S Codoped Flexible Graphene Paper for High Performance Energy Storage and Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2016, 8, 2078-2087.	4.0	113
1755	Graphene decorated with multiple nanosized active species as dual function electrocatalysts for lithium-oxygen batteries. Electrochimica Acta, 2016, 188, 718-726.	2.6	14
1756	N-Doped graphene frameworks with superhigh surface area: excellent electrocatalytic performance for oxygen reduction. Nanoscale, 2016, 8, 2795-2803.	2.8	52
1757	Facile synthesis of N-rich carbon quantum dots by spontaneous polymerization and incision of solvents as efficient bioimaging probes and advanced electrocatalysts for oxygen reduction reaction. Nanoscale, 2016, 8, 2219-2226.	2.8	61
1758	Catalytic Activity for Oxygen Reduction Reaction on CoN₂-Graphene: A Density Functional Theory Study. Journal of the Electrochemical Society, 2016, 163, F160-F165.	1.3	15
1759	Edge-rich and dopant-free graphene as a highly efficient metal-free electrocatalyst for the oxygen reduction reaction. Chemical Communications, 2016, 52, 2764-2767.	2.2	547
1760	Electrochemical sensing performance of nanodiamond-derived carbon nano-onions: Comparison with multiwalled carbon nanotubes, graphite nanoflakes, and glassy carbon. Carbon, 2016, 98, 74-82.	5.4	44
1761	Communicationâ€"Synthesis of Self-Doped Metal-Free Electrocatalysts from Waste Leather with High ORR Activity. Journal of the Electrochemical Society, 2016, 163, H15-H17.	1.3	12
1762	Nitrogen-doped carbons prepared from eutectic mixtures as metal-free oxygen reduction catalysts. Journal of Materials Chemistry A, 2016, 4, 478-488.	5.2	35
1763	Mechanism of boron and nitrogen in situ doping during graphene chemical vapor deposition growth. Carbon, 2016, 98, 633-637.	5.4	16
1764	Review on recent advances in nitrogen-doped carbons: preparations and applications in supercapacitors. Journal of Materials Chemistry A, 2016, 4, 1144-1173.	5.2	879
1765	One-step electrochemical synthesis of tunable nitrogen-doped graphene. Journal of Materials Chemistry A, 2016, 4, 1233-1243.	5.2	69
1766	Efficient nitrogen doping of graphene by plasma treatment. Carbon, 2016, 96, 196-202.	5.4	136
1767	Grain structures of nitrogen-doped graphene synthesized by solid source-based chemical vapor deposition. Carbon, 2016, 96, 448-453.	5.4	45

#	Article	IF	Citations
1768	The application of graphene and its composites in oxygen reduction electrocatalysis: a perspective and review of recent progress. Energy and Environmental Science, 2016, 9, 357-390.	15.6	456
1769	Multi-component electrocatalyst for low-temperature fuel cells synthesized via sonochemical reactions. Ultrasonics Sonochemistry, 2016, 29, 401-412.	3.8	21
1770	Mesoporous nitrogen-doped carbons with high nitrogen contents and ultrahigh surface areas: synthesis and applications in catalysis. Green Chemistry, 2016, 18, 1976-1982.	4.6	120
1771	A novel N-doped porous carbon microsphere composed of hollow carbon nanospheres. Carbon, 2016, 96, 864-870.	5.4	62
1772	Nano Devices and Circuit Techniques for Low-Energy Applications and Energy Harvesting. KAIST Research Series, 2016, , .	1.5	7
1773	Tailoring the surface-oxygen defects of a tin dioxide support towards an enhanced electrocatalytic performance of platinum nanoparticles. Physical Chemistry Chemical Physics, 2016, 18, 5932-5937.	1.3	15
1774	Prussian blue as a single precursor for synthesis of Fe/Fe₃C encapsulated N-doped graphitic nanostructures as bi-functional catalysts. Green Chemistry, 2016, 18, 427-432.	4.6	152
1775	Graphene and Two-Dimensional Transition Metal Dichalcogenide Materials for Energy-Related Applications. KAIST Research Series, 2016, , 253-291.	1.5	0
1776	3D nitrogen-doped graphene aerogel: A low-cost, facile prepared direct electrode for H2O2 sensing. Sensors and Actuators B: Chemical, 2016, 222, 567-573.	4.0	68
1777	Self-constructed carbon nanoparticles-coated porous biocarbon from plant moss as advanced oxygen reduction catalysts. Applied Catalysis B: Environmental, 2016, 181, 635-643.	10.8	88
1778	Nanocarbon-intercalated and Feâ€"N-codoped graphene as a highly active noble-metal-free bifunctional electrocatalyst for oxygen reduction and evolution. Journal of Materials Chemistry A, 2017, 5, 1930-1934.	5.2	88
1779	Facile electrochemical synthesis of few layered graphene from discharged battery electrode and its application for energy storage. Arabian Journal of Chemistry, 2017, 10, 556-565.	2.3	46
1780	Synthesis of graphene and related two-dimensional materials for bioelectronics devices. Biosensors and Bioelectronics, 2017, 89, 28-42.	5.3	54
1781	A review on g-C 3 N 4 -based photocatalysts. Applied Surface Science, 2017, 391, 72-123.	3.1	2,318
1782	Polymerizable ionic liquid-derived carbon for oxygen reduction and evolution. Journal of Applied Electrochemistry, 2017, 47, 351-359.	1.5	9
1783	High crystallinity graphene synthesis from graphene oxide. Carbon, 2017, 114, 750.	5.4	5
1784	Two-Dimensional C₄N Global Minima: Unique Structural Topologies and Nanoelectronic Properties. Journal of Physical Chemistry C, 2017, 121, 2669-2674.	1.5	49
1785	Fe-Cluster Pushing Electrons to N-Doped Graphitic Layers with Fe₃C(Fe) Hybrid Nanostructure to Enhance O₂ Reduction Catalysis of Zn-Air Batteries. ACS Applied Materials & Interfaces, 2017, 9, 4587-4596.	4.0	117

#	Article	IF	Citations
1786	Doping with Graphitic Nitrogen Triggers Ferromagnetism in Graphene. Journal of the American Chemical Society, 2017, 139, 3171-3180.	6.6	202
1787	Nanocarbon for Oxygen Reduction Electrocatalysis: Dopants, Edges, and Defects. Advanced Materials, 2017, 29, 1604103.	11.1	701
1788	Nonlinear Interactions of Zinc Phthalocyanine-Graphene Quantum Dots Nanocomposites: Investigation of Effects of Surface Functionalization with Heteroatoms. Journal of Fluorescence, 2017, 27, 755-766.	1.3	14
1789	From bulk to nano metal phthalocyanine by recrystallization with enhanced nucleation. Dyes and Pigments, 2017, 139, 97-101.	2.0	13
1790	High electrocatalytic performance of nitrogen-doped carbon nanofiber-supported nickel oxide nanocomposite for methanol oxidation in alkaline medium. Applied Surface Science, 2017, 401, 306-313.	3.1	35
1791	Effect of Nâ€Doped Graphene for Properties of Pt/Nâ€Doped Graphene Catalyst. ChemistrySelect, 2017, 2, 1188-1195.	0.7	18
1792	Structure-activity relationship of doped-nitrogen (N)-based metal-free active sites on carbon for oxygen reduction reaction. Carbon, 2017, 115, 763-772.	5.4	119
1793	Graphene Metal Nanoclusters in Cutting-Edge Theranostics Nanomedicine Applications. Advanced Structured Materials, 2017, , 429-477.	0.3	0
1794	Heteroatoms doped graphene for catalytic ozonation of sulfamethoxazole by metal-free catalysis: Performances and mechanisms. Chemical Engineering Journal, 2017, 317, 632-639.	6.6	107
1795	Nitrogen-doped carbon quantum dot/graphene hybrid nanocomposite as an efficient catalyst support for the oxygen reduction reaction. International Journal of Hydrogen Energy, 2017, 42, 2931-2942.	3.8	47
1797	Microwave and electrochemical assisted synthesis of chlorinated iron phthalocyanine nanoparticles. Pigment and Resin Technology, 2017, 46, 156-160.	0.5	5
1798	Ni (111)-supported graphene as a potential catalyst for high-efficient CO oxidation. Carbon, 2017, 116, 201-209.	5.4	13
1799	The oxygen reduction reaction mechanism on Sn doped graphene as an electrocatalyst in fuel cells: a DFT study. RSC Advances, 2017, 7, 729-734.	1.7	27
1800	Bottom-up synthesis of nitrogen-doped porous carbon scaffolds for lithium and sodium storage. Nanoscale, 2017, 9, 1972-1977.	2.8	42
1801	Free-standing vertically-aligned nitrogen-doped carbon nanotube arrays/graphene as air-breathing electrodes for rechargeable zincâ€“air batteries. Journal of Materials Chemistry A, 2017, 5, 2488-2495.	5.2	83
1802	Reduced graphene oxide intercalated Co₂C or Co₄N nanoparticles as an efficient and durable fuel cell catalyst for oxygen reduction. Journal of Materials Chemistry A, 2017, 5, 2972-2980.	5.2	85
1803	Highly porous nitrogen-doped carbon nanoparticles synthesized via simple thermal treatment and their electrocatalytic activity for oxygen reduction reaction. Carbon, 2017, 115, 515-525.	5.4	35
1804	Propelling polysulfides transformation for high-rate and long-life lithiumâ€“sulfur batteries. Nano Energy, 2017, 33, 306-312.	8.2	352

#	Article	IF	Citations
1805	Iron-carbon nanohybrid particles as environmentally benign electrode for supercapacitor. Journal of Solid State Electrochemistry, 2017, 21, 1665-1674.	1.2	2
1806	Trivalent cerium-preponderant CeO₂/graphene sandwich-structured nanocomposite with greatly enhanced catalytic activity for the oxygen reduction reaction. Journal of Materials Chemistry A, 2017, 5, 6656-6663.	5.2	66
1807	2,3-diaminopyridine functionalized reduced graphene oxide-supported palladium nanoparticles with high activity for electrocatalytic oxygen reduction reaction. Applied Surface Science, 2017, 406, 226-234.	3.1	15
1808	The necessity of structural irregularities for the chemical applications of graphene. Materials Today Chemistry, 2017, 4, 1-16.	1.7	95
1809	Synthesis and characterization of ironâ€•and nitrogenâ€functionalized graphene catalysts for oxygen reduction reaction. Applied Organometallic Chemistry, 2017, 31, e3738.	1.7	7
1810	Adaptively Compressed Exchange Operator for Large-Scale Hybrid Density Functional Calculations with Applications to the Adsorption of Water on Silicene. Journal of Chemical Theory and Computation, 2017, 13, 1188-1198.	2.3	38
1811	H₂O₂â€Assisted Synthesis of Porous Nâ€Doped Graphene/Molybdenum Nitride Composites with Boosted Oxygen Reduction Reaction. Advanced Materials Interfaces, 2017, 4, 1601227.	1.9	35
1812	Co3O4 nanoparticles anchored on nitrogen-doped reduced graphene oxide as a multifunctional catalyst for H2O2 reduction, oxygen reduction and evolution reaction. Scientific Reports, 2017, 7, 43638.	1.6	104
1813	Pyridinic and pyrrolic nitrogen-rich ordered mesoporous carbon for efficient oxygen reduction in microbial fuel cells. RSC Advances, 2017, 7, 14669-14677.	1.7	24
1814	Ironâ€“nitrogen co-doped hierarchically mesoporous carbon spheres as highly efficient electrocatalysts for the oxygen reduction reaction. RSC Advances, 2017, 7, 8879-8885.	1.7	15
1815	Highly uniform and monodisperse carbon nanospheres enriched with cobaltâ€“nitrogen active sites as a potential oxygen reduction electrocatalyst. Journal of Power Sources, 2017, 346, 80-88.	4.0	42
1816	Low content Pt nanoparticles anchored on N-doped reduced graphene oxide with high and stable electrocatalytic activity for oxygen reduction reaction. Scientific Reports, 2017, 7, 43352.	1.6	51
1817	Nitrogen doped graphite felt decorated with porous Ni_{1.4}Co_{1.6}S₄ nanosheets for 3D pseudocapacitor electrodes. RSC Advances, 2017, 7, 13406-13415.	1.7	8
1818	Co(<scp>ii</scp>)-porphyrin-decorated carbon nanotubes as catalysts for oxygen reduction reactions: an approach for fuel cell improvement. Journal of Materials Chemistry A, 2017, 5, 6263-6276.	5.2	121
1819	3D graphene preparation via covalent amide functionalization for efficient metal-free electrocatalysis in oxygen reduction. Scientific Reports, 2017, 7, 43279.	1.6	44
1820	Low cost iodine intercalated graphene for fuel cells electrodes. Applied Surface Science, 2017, 424, 93-100.	3.1	23
1821	Oxygen-induced doping on reduced PEDOT. Journal of Materials Chemistry A, 2017, 5, 4404-4412.	5.2	97
1822	Tailoring thermal transport properties of graphene by nitrogen doping. Journal of Nanoparticle Research, 2017, 19, 1.	0.8	8

#	Article	IF	Citations
1823	Reactive template synthesis of nitrogen-doped graphene-like carbon nanosheets derived from hydroxypropyl methylcellulose and dicyandiamide as efficient oxygen reduction electrocatalysts. Journal of Power Sources, 2017, 345, 120-130.	4.0	30
1824	Facile production of graphene nanosheets comprising nitrogen-doping through in situ cathodic plasma formation during electrochemical exfoliation. Journal of Materials Chemistry C, 2017, 5, 2597-2602.	2.7	31
1825	Nanosecond Laserâ€Assisted Nitrogen Doping of Graphene Oxide Dispersions. ChemPhysChem, 2017, 18, 935-941.	1.0	17
1826	A DFT study on the central-ring doped HBC nanographenes. Journal of Molecular Graphics and Modelling, 2017, 73, 101-107.	1.3	33
1827	Nitrogen-functionalized reduced graphene oxide as carbocatalysts with enhanced activity for polyaromatic hydrocarbon hydrogenation. Catalysis Science and Technology, 2017, 7, 1217-1226.	2.1	34
1828	A Brief Review of the Synthesis and Catalytic Applications of Grapheneâ€Coated Oxides. ChemCatChem, 2017, 9, 2432-2442.	1.8	33
1829	Polyaniline silver nanoparticle coffee waste extracted porous graphene oxide nanocomposite structures as novel electrode material for rechargeable batteries. Materials Research Express, 2017, 4, 035501.	0.8	22
1830	Potential of Si-doped boron nitride nanotubes as a highly active and metal-free electrocatalyst for oxygen reduction reaction: A DFT study. Synthetic Metals, 2017, 226, 129-138.	2.1	16
1831	Mechanisms of direct hydrogen peroxide synthesis on silicon and phosphorus dual-doped graphene: a DFT-D study. Physical Chemistry Chemical Physics, 2017, 19, 9007-9015.	1.3	18
1832	Highly uniform distribution of Pt nanoparticles on N-doped hollow carbon spheres with enhanced durability for oxygen reduction reaction. RSC Advances, 2017, 7, 6303-6308.	1.7	44
1833	On the Catalytic Activity of Pt Supported by Graphyne in the Oxidation of Ethanol. ChemistrySelect, 2017, 2, 2311-2321.	0.7	7
1834	Unusual Assembly and Conversion of Graphene Quantum Dots into Crystalline Graphite Nanocapsules. Chemistry - an Asian Journal, 2017, 12, 1272-1276.	1.7	4
1835	Aerobic oxidation of cyclohexane catalyzed by graphene oxide: Effects of surface structure and functionalization. Molecular Catalysis, 2017, 431, 1-8.	1.0	29
1836	H2 generation from NaBH4 methanolysis via magnetic field sensitive ionic liquid coated silica particles as catalyst. Surfaces and Interfaces, 2017, 8, 36-44.	1.5	13
1837	Tridoped Reduced Graphene Oxide as a Metalâ€Free Catalyst for Oxygen Reduction Reaction Demonstrated in Acidic and Alkaline Polymer Electrolyte Fuel Cells. Advanced Sustainable Systems, 2017, 1, 1600038.	2.7	50
1838	Geometric stability of PtFe/PdFe embedded in graphene and catalytic activity for CO oxidation. Applied Organometallic Chemistry, 2017, 31, e3808.	1.7	9
1839	Well dispersed Fe₂N nanoparticles on surface of nitrogen-doped reduced graphite oxide for highly efficient electrochemical hydrogen evolution. Journal of Materials Research, 2017, 32, 1770-1776.	1.2	19
1840	Nitrogen-Doped Ordered Mesoporous Carbon as Metal-Free Catalyst for Power Generation in Single Chamber Microbial Fuel Cells. Journal of the Electrochemical Society, 2017, 164, F620-F627.	1.3	13

#	Article	IF	Citations
1841	Substrate induced tuning of compressive strain and phonon modes in large area MoS 2 and WS 2 van der Waals epitaxial thin films. Journal of Crystal Growth, 2017, 470, 51-57.	0.7	18
1842	An investigation of growth mechanism of coal derived graphene films. Materials Today Communications, 2017, 11, 147-155.	0.9	27
1843	Controlled Synthesis of Nitrogen-Doped Graphene on Ruthenium from Azafullerene. Nano Letters, 2017, 17, 2887-2894.	4.5	25
1844	Adsorption properties of fission gases Xe and Kr on pristine and doped graphene: A first principle DFT study. Journal of Nuclear Materials, 2017, 490, 174-180.	1.3	14
1845	In situ hybridization of CoO_X nanoparticles on N-doped graphene through one step mineralization of co-responsive hydrogels. Dalton Transactions, 2017, 46, 6163-6167.	1.6	11
1846	A Kinetic Pathway toward High-Density Ordered N Doping of Epitaxial Graphene on Cu(111) Using C₅NCl₅ Precursors. Journal of the American Chemical Society, 2017, 139, 7196-7202.	6.6	16
1847	Nitrogen-doped reduced graphene oxide intertwined with V₂O₃ nanoflakes as self-supported electrodes for flexible all-solid-state supercapacitors. RSC Advances, 2017, 7, 25732-25739.	1.7	25
1848	The role of iron nitrides in the Feâ€“Nâ€“C catalysis system towards the oxygen reduction reaction. Nanoscale, 2017, 9, 7641-7649.	2.8	96
1850	Defect Chemistry of Nonpreciousâ€Metal Electrocatalysts for Oxygen Reactions. Advanced Materials, 2017, 29, 1606459.	11.1	1,260
1851	A promising N-doped carbon-metal oxide hybrid electrocatalyst derived from crustaceanâ€™s shells: Oxygen reduction and oxygen evolution. Applied Catalysis B: Environmental, 2017, 214, 137-147.	10.8	45
1852	The synthesis and electro-catalytic activity for ORR of the structured electrode material: CP/Fe-N-CNFs. Journal of Solid State Electrochemistry, 2017, 21, 2909-2920.	1.2	6
1853	Atomically thin SiC nanoparticles obtained via ultrasonic treatment to realize enhanced catalytic activity for the oxygen reduction reaction in both alkaline and acidic media. RSC Advances, 2017, 7, 22875-22881.	1.7	34
1854	Nanocarbon based composite electrodes and their application in microbial fuel cells. Journal of Materials Chemistry A, 2017, 5, 12673-12698.	5.2	80
1855	Grapheneâ€based Oxygen Reduction Electrodes for Low Temperature Solid Oxide Fuel Cells. Fuel Cells, 2017, 17, 344-352.	1.5	10
1856	Cobalt-nitrogen-activated carbon as catalyst in acetylene hydrochlorination. Catalysis Communications, 2017, 98, 22-25.	1.6	23
1857	Catechol adsorption on graphene nanoplatelets: isotherm, flat to vertical phase transition and desorption kinetics. Chemical Science, 2017, 8, 4771-4778.	3.7	27
1858	Solution processible MoOx-incorporated graphene anode for efficient polymer light-emitting diodes. Nanotechnology, 2017, 28, 235201.	1.3	4
1859	Electrochemical oxygen reduction mechanism on FeN2-graphene. Journal of Molecular Modeling, 2017, 23, 170.	0.8	9

#	Article	IF	Citations
1860	Bio-inspired iron metalâ€“carbon black based nano-electrocatalyst for the oxygen reduction reaction. Pigment and Resin Technology, 2017, 46, 267-275.	0.5	6
1861	Bipolar nitrogen-doped graphene frameworks as high-performance cathodes for lithium ion batteries. Journal of Materials Chemistry A, 2017, 5, 1588-1594.	5.2	21
1862	Electrospun ZIF-based hierarchical carbon fiber as an efficient electrocatalyst for the oxygen reduction reaction. Journal of Materials Chemistry A, 2017, 5, 1211-1220.	5.2	161
1863	Low-temperature plasma exfoliated n-doped graphene for symmetrical electrode supercapacitors. Nano Energy, 2017, 31, 486-494.	8.2	93
1864	A comprehensive review on unitized regenerative fuel cells: Crucial challenges and developments. International Journal of Hydrogen Energy, 2017, 42, 4415-4433.	3.8	109
1865	Trapping of gaseous pollutants on defective N-doped graphene. Physical Chemistry Chemical Physics, 2017, 19, 636-643.	1.3	10
1866	N-Doping of graphene oxide at low temperature for the oxygen reduction reaction. Chemical Communications, 2017, 53, 873-876.	2.2	121
1867	A noble silver nanoflower on nitrogen doped carbon nanotube for enhanced oxygen reduction reaction. International Journal of Hydrogen Energy, 2017, 42, 1075-1084.	3.8	27
1868	Functional Carbon Nanomesh Clusters. Advanced Functional Materials, 2017, 27, 1701514.	7.8	18
1869	Laser in-situ synthesis of SnO2/N-doped graphene nanocomposite with enhanced lithium storage properties based on both alloying and insertion reactions. Applied Surface Science, 2017, 422, 645-653.	3.1	18
1870	Carbon-based catalysts for metal-free electrocatalysis. Current Opinion in Electrochemistry, 2017, 4, 18-25.	2.5	88
1871	Nitrogen-Doped Graphene on Transition Metal Substrates as Efficient Bifunctional Catalysts for Oxygen Reduction and Oxygen Evolution Reactions. ACS Applied Materials & Interfaces, 2017, 9, 22578-22587.	4.0	128
1872	Gram-scale production of nitrogen doped graphene using a 1,3-dipolar organic precursor and its utilisation as a stable, metal free oxygen evolution reaction catalyst. Chemical Communications, 2017, 53, 7748-7751.	2.2	8
1873	Sandwich-structured nanocomposites of N-doped graphene and nearly monodisperse Fe3O4 nanoparticles as high-performance Li-ion battery anodes. Nano Research, 2017, 10, 2923-2933.	5.8	30
1874	CoN₃ embedded graphene, a potential catalyst for the oxygen reduction reaction from a theoretical perspective. Physical Chemistry Chemical Physics, 2017, 19, 17670-17676.	1.3	41
1875	Conductive Carbon Nitride for Excellent Energy Storage. Advanced Materials, 2017, 29, 1701674.	11.1	142
1876	Cobaltâ€Based Active Species Molecularly Immobilized on Carbon Nanotubes for the Oxygen Reduction Reaction. ChemSusChem, 2017, 10, 3473-3481.	3.6	20
1877	Current challenge and perspective of PGM-free cathode catalysts for PEM fuel cells. Frontiers in Energy, 2017, 11, 286-298.	1.2	75

#	Article	IF	Citations
1878	Tailoring the Oxygen Reduction Activity of Hemoglobin through Immobilization within Microporous Organic Polymerâ€“Graphene Composite. ACS Applied Materials & Interfaces, 2017, 9, 27918-27926.	4.0	17
1879	Unique copper and reduced graphene oxide nanocomposite toward the efficient electrochemical reduction of carbon dioxide. Scientific Reports, 2017, 7, 3184.	1.6	64
1881	Structure-Based Selective Adsorption of Graphene on a Gel Surface: Toward Improving the Quality of Graphene Nanosheets. Langmuir, 2017, 33, 5406-5411.	1.6	7
1883	Ultrathin hollow-structured NiCo2O4 nanorod supported on improved N-doped graphene for superior supercapacitor applications. Journal of Alloys and Compounds, 2017, 722, 903-912.	2.8	24
1884	Highly active and durable carbon nitride fibers as metal-free bifunctional oxygen electrodes for flexible Znâ€“air batteries. Nanoscale Horizons, 2017, 2, 333-341.	4.1	73
1885	Fe3+-Clinoptilolite/graphene oxide and layered MoS2@Nitrogen doped graphene as novel graphene based nanocomposites for DMFC. International Journal of Hydrogen Energy, 2017, 42, 16741-16751.	3.8	19
1886	Design Strategies toward Advanced MOFâ€Derived Electrocatalysts for Energyâ€Conversion Reactions. Advanced Energy Materials, 2017, 7, 1700518.	10.2	539
1887	A graphene quantum dot/phthalocyanine conjugate: a synergistic catalyst for the oxygen reduction reaction. RSC Advances, 2017, 7, 26113-26119.	1.7	37
1888	Selective Bromination of Graphene Oxide by the Hunsdiecker Reaction. Chemistry - A European Journal, 2017, 23, 10473-10479.	1.7	21
1889	Highly efficient Fe/N/C catalyst using adenosine as C/N-source for APEFC. Journal of Energy Chemistry, 2017, 26, 616-621.	7.1	10
1890	Ice-templating synthesis of macroporous noble metal/3D-graphene nanocomposites: their fluorescence lifetimes and catalytic study. New Journal of Chemistry, 2017, 41, 7861-7869.	1.4	24
1891	Tunable Type-I and Type-II Dirac Fermions in Graphene with Nitrogen Line Defects. Journal of Physical Chemistry C, 2017, 121, 12476-12482.	1.5	10
1892	Effective control of phosphorus clustersâ€™ electronic and spin properties in graphene/BN heterostructure via electric fields. Journal Physics D: Applied Physics, 2017, 50, 235003.	1.3	0
1893	Doping and reduction of graphene oxide using chitosan-derived volatile N-heterocyclic compounds for metal-free oxygen reduction reaction. Carbon, 2017, 120, 419-426.	5.4	46
1894	A Composite of Pyrroleâ€Doped Carbon Black Modified with Co₃O₄ for Efficient Electrochemical Oxygen Reduction Reaction. ChemElectroChem, 2017, 4, 2260-2268.	1.7	11
1895	Nitrogen doping for facile and effective modification of graphene surfaces. RSC Advances, 2017, 7, 28383-28392.	1.7	45
1896	N,S co-doped 3D mesoporous carbonâ€“Co₃Si₂O₅(OH)₄ architectures for high-performance flexible pseudo-solid-state supercapacitors. Journal of Materials Chemistry A, 2017, 5, 12774-12781.	5.2	160
1897	Mesoporous nitrogen-doped graphene aerogels with enhanced rate capability towards high performance supercapacitors. Ceramics International, 2017, 43, 11563-11568.	2.3	14

#	Article	IF	Citations
1898	Nitrogen/sulfur co-doping assisted chemical activation for synthesis of hierarchical porous carbon as an efficient electrode material for supercapacitors. Electrochimica Acta, 2017, 246, 59-67.	2.6	46
1899	Synthesis, characterization and prospective applications of nitrogen-doped graphene: A short review. Journal of Science: Advanced Materials and Devices, 2017, 2, 141-149.	1.5	123
1900	Influence of various carbon nano-forms as supports for Pt catalyst on proton exchange membrane fuel cell performance. Journal of Power Sources, 2017, 360, 196-205.	4.0	91
1901	Electrocatalytic Activity and Design Principles of Heteroatom-Doped Graphene Catalysts for Oxygen-Reduction Reaction. Journal of Physical Chemistry C, 2017, 121, 14434-14442.	1.5	49
1902	N-doped graphene as a potential catalyst for the direct catalytic decomposition of NO. Catalysis Communications, 2017, 94, 29-32.	1.6	19
1903	Biomass derived porous nitrogen doped carbon for electrochemical devices. Green Energy and Environment, 2017, 2, 84-99.	4.7	141
1904	Fe/N co-doped carbon materials with controllable structure as highly efficient electrocatalysts for oxygen reduction reaction in Al-air batteries. Energy Storage Materials, 2017, 8, 49-58.	9.5	70
1905	Incorporation of dielectric constituents to construct ternary heterojunction structures for high-efficiency electromagnetic response. Journal of Colloid and Interface Science, 2017, 498, 161-169.	5.0	81
1906	First-principles identification of site dependent activity of graphene based electrocatalyst. Molecular Catalysis, 2017, 432, 242-249.	1.0	6
1907	Simultaneous Co-Doping of Nitrogen and Fluorine into MWCNTs: An In-Situ Conversion to Graphene Like Sheets and Its Electro-Catalytic Activity toward Oxygen Reduction Reaction. Journal of the Electrochemical Society, 2017, 164, F568-F576.	1.3	31
1908	3D interconnected hierarchically porous N-doped carbon with NH3 activation for efficient oxygen reduction reaction. Applied Catalysis B: Environmental, 2017, 210, 57-66.	10.8	131
1909	Informing rational design of graphene oxide through surface chemistry manipulations: properties governing electrochemical and biological activities. Green Chemistry, 2017, 19, 2826-2838.	4.6	19
1910	Pyridinic and graphitic nitrogen-rich graphene for high-performance supercapacitors and metal-free bifunctional electrocatalysts for ORR and OER. RSC Advances, 2017, 7, 17950-17958.	1.7	123
1911	Hydrogen storage in Beryllium decorated graphene with double vacancy and porphyrin defect â€" A first principles study. Functional Materials Letters, 2017, 10, 1750023.	0.7	8
1912	Biosynthesis of reduced graphene oxide and its in-vitro cytotoxicity against cervical cancer (HeLa) cell lines. Materials Science and Engineering C, 2017, 78, 198-202.	3.8	16
1913	Sulfur doped graphene as a promising metal-free electrocatalyst for oxygen reduction reaction: a DFT-D study. RSC Advances, 2017, 7, 20398-20405.	1.7	53
1914	Nitrogen-Doped Hollow Carbon Nanospheres for High-Performance Li-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 14180-14186.	4.0	97
1915	Chrysanthemum-derived N and S co-doped porous carbon for efficient oxygen reduction reaction and aluminum-air battery. Electrochimica Acta, 2017, 239, 1-9.	2.6	47

#	Article	IF	Citations
1916	Water on silicene: A hydrogen bond-autocatalyzed physisorptionâ€“chemisorptionâ€“dissociation transition. Nano Research, 2017, 10, 2223-2233.	5.8	21
1917	Distinctive morphology effects of porous-spherical/yolk-shell/hollow Pd-nitrogen-doped-carbon spheres catalyst for catalytic reduction of 4-nitrophenol. Journal of Colloid and Interface Science, 2017, 496, 465-473.	5.0	41
1918	Electrochemical performance of Ti3C2Tx MXene in aqueous media: towards ultrasensitive H2O2 sensing. Electrochimica Acta, 2017, 235, 471-479.	2.6	215
1919	Hybrid formation of graphene oxideâ€“POSS and their effect on the dielectric properties of poly(aryl) Tj ETQq1 1 0.784314 rgBT /Ove	1.4	33
1920	Nitrogen-doped truncated carbon nanotubes inserted into nitrogen-doped graphene nanosheets with a sandwich structure: a highly efficient metal-free catalyst for the HER. Journal of Materials Chemistry A, 2017, 5, 6405-6410.	5.2	38
1921	Two-dimensional nanosheets for electrocatalysis in energy generation and conversion. Journal of Materials Chemistry A, 2017, 5, 7257-7284.	5.2	220
1922	Graphene-Based Nanomaterials for Catalysis. Industrial & Engineering Chemistry Research, 2017, 56, 3477-3502.	1.8	234
1923	One-Step Electrochemical Preparation of Multilayer Graphene Functionalized with Nitrogen. Nanoscale Research Letters, 2017, 12, 175.	3.1	31
1924	Nâ€‚Oâ€‚and Sâ€‘Tridoped Carbonâ€‘Encapsulated Co₉S₈ Nanomaterials: Efficient Bifunctional Electrocatalysts for Overall Water Splitting. Advanced Functional Materials, 2017, 27, 1606585.	7.8	365
1925	Temperature distribution in graphene doped with nitrogen and graphene with grain boundary. Journal of Molecular Graphics and Modelling, 2017, 74, 100-104.	1.3	14
1926	Recent Advances in Ultrathin Two-Dimensional Nanomaterials. Chemical Reviews, 2017, 117, 6225-6331.	23.0	3,940
1927	Metal-Free Motifs for Solar Fuel Applications. Annual Review of Physical Chemistry, 2017, 68, 305-331.	4.8	14
1928	3D Hierarchically Porous Graphitic Carbon Nitride Modified Grapheneâ€‘Pt Hybrid as Efficient Methanol Oxidation Catalysts. Advanced Materials Interfaces, 2017, 4, 1601219.	1.9	27
1929	From Trash to Treasure: Turning Air Pollutants into Materials for Energy Storage. ChemNanoMat, 2017, 3, 392-400.	1.5	4
1930	First-principles study of H, O, and N adsorption on metal embedded carbon nanotubes. Applied Surface Science, 2017, 403, 645-651.	3.1	6
1931	Cobalt oxide nanocubes interleaved reduced graphene oxide as an efficient electrocatalyst for oxygen reduction reaction in alkaline medium. Electrochimica Acta, 2017, 237, 61-68.	2.6	56
1932	Ionic liquid modified N-doped graphene as a potential platform for the electrochemical discrimination of DNA sequences. Sensors and Actuators B: Chemical, 2017, 247, 556-563.	4.0	21
1933	Design and synthesis of porous channel-rich carbon nanofibers for self-standing oxygen reduction reaction and hydrogen evolution reaction bifunctional catalysts in alkaline medium. Journal of Materials Chemistry A, 2017, 5, 7507-7515.	5.2	69

#	Article	IF	Citations
1934	Advanced review of graphene-based nanomaterials in drug delivery systems: Synthesis, modification, toxicity and application. Materials Science and Engineering C, 2017, 77, 1363-1375.	3.8	186
1935	Co₉S₈nanoparticles embedded in a N, S co-doped graphene-unzipped carbon nanotube composite as a high performance electrocatalyst for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2017, 5, 1014-1021.	5.2	99
1936	Multifunctional Carbonâ€Based Metalâ€Free Electrocatalysts for Simultaneous Oxygen Reduction, Oxygen Evolution, and Hydrogen Evolution. Advanced Materials, 2017, 29, 1604942.	11.1	606
1937	Template-directed synthesis of nitrogen- and sulfur-codoped carbon nanowire aerogels with enhanced electrocatalytic performance for oxygen reduction. Nano Research, 2017, 10, 1888-1895.	5.8	34
1938	Regulating the Catalytic Function of Reduced Graphene Oxides Using Capping Agents for Metal-Free Catalysis. ACS Applied Materials & Interfaces, 2017, 9, 1692-1701.	4.0	32
1939	Sacrificial Templating Fabrication of Hierarchically Porous Nitrogenâ€Doped Carbon Nanosheets as Superior Oxygen Reduction Electrocatalysts. ChemNanoMat, 2017, 3, 130-134.	1.5	1
1940	CuO nanoparticles supported on nitrogen and sulfur co-doped graphene nanocomposites for non-enzymatic glucose sensing. Journal of Nanoparticle Research, 2017, 19, 1.	0.8	16
1941	Highly exposed Feâ€“N₄active sites in porous poly-iron-phthalocyanine based oxygen reduction electrocatalyst with ultrahigh performance for air cathode. Dalton Transactions, 2017, 46, 1803-1810.	1.6	32
1942	Zirconia on Reduced Graphene Oxide Sheets: Synergistic Catalyst with High Selectivity for H₂O₂ Electrogeneration. ChemElectroChem, 2017, 4, 508-513.	1.7	19
1943	Improvement of methane uptake inside graphene sheets using nitrogen, boron and lithium-doped structures: A hybrid molecular simulation. Korean Journal of Chemical Engineering, 2017, 34, 876-884.	1.2	8
1944	Nitrogen-doped hollow mesoporous carbon spheres as a highly active and stable metal-free electrocatalyst for oxygen reduction. Carbon, 2017, 114, 177-186.	5.4	122
1945	1D Coâ€and Nâ€Doped Hierarchically Porous Carbon Nanotubes Derived from Bimetallic Metal Organic Framework for Efficient Oxygen and Triâ€iodide Reduction Reactions. Advanced Energy Materials, 2017, 7, 1601979.	10.2	194
1946	A pore-expansion strategy to synthesize hierarchically porous carbon derived from metal-organic framework for enhanced oxygen reduction. Carbon, 2017, 114, 284-290.	5.4	92
1947	New catalyst supports prepared by surface modification of graphene- and carbon nanotube structures with nitrogen containing carbon coatings. Journal of Power Sources, 2017, 341, 240-249.	4.0	28
1948	Highly active and stable single iron site confined in graphene nanosheets for oxygen reduction reaction. Nano Energy, 2017, 32, 353-358.	8.2	234
1949	Facile approach for synthesis of doped carbon electrocatalyst from cellulose nanofibrils toward high-performance metal-free oxygen reduction and hydrogen evolution. Nano Energy, 2017, 32, 336-346.	8.2	132
1950	Insight into the Role of Size Modulation on Tuning the Band Gap and Photocatalytic Performance of Semiconducting Nitrogen-Doped Graphene. Langmuir, 2017, 33, 3161-3169.	1.6	36
1951	An insight into metal organic framework derived N-doped graphene for the oxidative degradation of persistent contaminants: formation mechanism and generation of singlet oxygen from peroxymonosulfate. Environmental Science: Nano, 2017, 4, 315-324.	2.2	372

#	Article	IF	Citations
1952	S, N Dual-Doped Graphene-like Carbon Nanosheets as Efficient Oxygen Reduction Reaction Electrocatalysts. ACS Applied Materials & Interfaces, 2017, 9, 398-405.	4.0	194
1953	Synthesis and characterization of amine functionalized graphene oxide and scope as catalyst for Knoevenagel condensation reaction. Catalysis Communications, 2017, 92, 31-34.	1.6	58
1954	Scalable 3-D Carbon Nitride Sponge as an Efficient Metal-Free Bifunctional Oxygen Electrocatalyst for Rechargeable Znâ€“Air Batteries. ACS Nano, 2017, 11, 347-357.	7.3	369
1955	Polypyrrole-assisted oxygen electrocatalysis on perovskite oxides. Energy and Environmental Science, 2017, 10, 523-527.	15.6	60
1956	Nitrogen doped amorphous carbon as metal free electrocatalyst for oxygen reduction reaction. International Journal of Hydrogen Energy, 2017, 42, 876-885.	3.8	66
1957	Electropolymerization Fabrication of Co Phosphate Nanoparticles Encapsulated in N,P-Codoped Mesoporous Carbon Networks as a 3D Integrated Electrode for Full Water Splitting. ACS Sustainable Chemistry and Engineering, 2017, 5, 571-579.	3.2	34
1958	Graphene and derivatives â€“ Synthesis techniques, properties and their energy applications. Energy, 2017, 140, 766-778.	4.5	119
1959	Synthesis of W2N nanorods-graphene hybrid structure with enhanced oxygen reduction reaction performance. International Journal of Hydrogen Energy, 2017, 42, 25924-25932.	3.8	14
1960	Simultaneous analysis of uric acid, xanthine and hypoxanthine using voltammetric sensor based on nanocomposite of palygorskite and nitrogen doped graphene. Journal of Electroanalytical Chemistry, 2017, 805, 159-170.	1.9	44
1961	Low friction of graphene nanocrystallite embedded carbon nitride coatings prepared with MCECR plasma sputtering. Surface and Coatings Technology, 2017, 332, 153-160.	2.2	14
1962	Fast Synthesis of Highly Oxidized Graphene Oxide. ChemistrySelect, 2017, 2, 9000-9006.	0.7	29
1963	Synthesis of Nitrogen-Doped Porous Carbon Spheres with Improved Porosity toward the Electrocatalytic Oxygen Reduction. ACS Sustainable Chemistry and Engineering, 2017, 5, 11105-11116.	3.2	61
1964	Coffee Waste-Derived Hierarchical Porous Carbon as a Highly Active and Durable Electrocatalyst for Electrochemical Energy Applications. ACS Applied Materials & Interfaces, 2017, 9, 41303-41313.	4.0	74
1965	Platinum-free, graphene based anodes and air cathodes for single chamber microbial fuel cells. Journal of Materials Chemistry A, 2017, 5, 23872-23886.	5.2	45
1966	Achievement of safer palladium nanocrystals by enlargement of {100} crystallographic facets. Nanotoxicology, 2017, 11, 907-922.	1.6	11
1967	A melamine formaldehyderesin route to in situ encapsulate Co2O3 into carbon black for enhanced oxygen reduction in alkaline media. International Journal of Hydrogen Energy, 2017, 42, 25960-25968.	3.8	13
1968	Synthesis of Few-Layer Graphene by Peeling Graphite Flakes via Electron Exchange in Solution Plasma. Journal of Physical Chemistry C, 2017, 121, 23793-23802.	1.5	14
1969	Spectroscopic observation of oxygen dissociation on nitrogen-doped graphene. Scientific Reports, 2017, 7, 7960.	1.6	47

#	Article	IF	Citations
1970	Stability of Pt Nanoparticles on Alternative Carbon Supports for Oxygen Reduction Reaction. Journal of the Electrochemical Society, 2017, 164, F995-F1004.	1.3	59
1971	Heteroatomâ€Doped Carbon Nanotube and Grapheneâ€Based Electrocatalysts for Oxygen Reduction Reaction. Small, 2017, 13, 1702002.	5.2	202
1972	Tailoring platelet carbon nanofibers for high-purity Pyridinic-N doping: A novel method for synthesizing oxygen reduction reaction catalysts. Carbon, 2017, 125, 401-408.	5.4	49
1973	Synthesis of dimethyl carbonate on single Cu atom embedded in N-doped graphene: Effect of nitrogen species. Molecular Catalysis, 2017, 443, 1-13.	1.0	16
1974	The Oxygen Reduction Reaction on Graphene from Quantum Mechanics: Comparing Armchair and Zigzag Carbon Edges. Journal of Physical Chemistry C, 2017, 121, 24408-24417.	1.5	29
1975	Metallic Cobalt@Nitrogen-Doped Carbon Nanocomposites: Carbon-Shell Regulation toward Efficient Bi-Functional Electrocatalysis. ACS Applied Materials & Interfaces, 2017, 9, 37721-37730.	4.0	59
1976	Nitrogenâ€Doped Graphene Nanosheets/S Composites as Cathode in Roomâ€Temperature Sodiumâ€Sulfur Batteries. ChemistrySelect, 2017, 2, 9425-9432.	0.7	30
1977	Phenolic resin/chitosan composite derived nitrogen-doped carbon as highly durable and anti-poisoning electrocatalyst for oxygen reductionÂreaction. International Journal of Hydrogen Energy, 2017, 42, 26704-26712.	3.8	7
1978	Co Nanoparticles Encapsulated in N-Doped Carbon Nanosheets: Enhancing Oxygen Reduction Catalysis without Metalâ€“Nitrogen Bonding. ACS Applied Materials & Interfaces, 2017, 9, 38499-38506.	4.0	42
1979	Single Ni atom incorporated with pyridinic nitrogen graphene as an efficient catalyst for CO oxidation: first-principles investigation. RSC Advances, 2017, 7, 48819-48824.	1.7	49
1980	Enhancing the pyridinic N content of Nitrogen-doped graphene and improving its catalytic activity for oxygen reduction reaction. International Journal of Hydrogen Energy, 2017, 42, 28298-28308.	3.8	132
1982	Robust theoretical modelling of core ionisation edges for quantitative electron energy loss spectroscopy of B- and N-doped graphene. Journal of Physics Condensed Matter, 2017, 29, 225303.	0.7	8
1983	Highly Microporous Nitrogenâ€doped Carbon Synthesized from Azineâ€linked Covalent Organic Framework and its Supercapacitor Function. Chemistry - A European Journal, 2017, 23, 17504-17510.	1.7	67
1984	Efficient and Durable Oxygen Reduction Electrocatalyst Based on CoMn Alloy Oxide Nanoparticles Supported Over N-Doped Porous Graphene. ACS Catalysis, 2017, 7, 6700-6710.	5.5	104
1985	From Chlorella to Nestlike Framework Constructed with Doped Carbon Nanotubes: A Biomass-Derived, High-Performance, Bifunctional Oxygen Reduction/Evolution Catalyst. ACS Applied Materials & Interfaces, 2017, 9, 32168-32178.	4.0	63
1986	Exploring an effective oxygen reduction reaction catalyst via 4eâ” process based on waved-graphene. Science China Materials, 2017, 60, 739-746.	3.5	11
1987	Doping-template approach of porous-walled graphitic nanocages for superior performance anodes of lithium ion batteries. RSC Advances, 2017, 7, 42083-42087.	1.7	15
1988	Porous yolkâ€“shell microspheres as Nâ€“doped carbon matrix for motivating the oxygen reduction activity of oxygen evolution oriented materials. Nanotechnology, 2017, 28, 365403.	1.3	10

#	Article	IF	Citations
1989	One-step rapid in-situ synthesis of nitrogen and sulfur co-doped three-dimensional honeycomb-ordered carbon supported PdNi nanoparticles as efficient electrocatalyst for oxygen reduction reaction in alkaline solution. Electrochimica Acta, 2017, 253, 445-454.	2.6	20
1990	Cobalt Oxide on N-Doped Carbon for 1-Butene Oligomerization to Produce Linear Octenes. ACS Catalysis, 2017, 7, 7479-7489.	5.5	17
1991	Ball-Milled Carbon Nanomaterials for Energy and Environmental Applications. ACS Sustainable Chemistry and Engineering, 2017, 5, 9568-9585.	3.2	187
1992	Highâ€Stability Electrodes for Highâ€Temperature Proton Exchange Membrane Fuel Cells by Using Advanced Nanocarbonaceous Materials. ChemElectroChem, 2017, 4, 3288-3295.	1.7	8
1993	Molecular-Level Insights into Oxygen Reduction Catalysis by Graphite-Conjugated Active Sites. ACS Catalysis, 2017, 7, 7680-7687.	5.5	33
1994	Electronic structure of boron based single and multi-layer two dimensional materials. Journal of Applied Physics, 2017, 122, 104302.	1.1	1
1995	Combined Effect of Porosity and Surface Chemistry on the Electrochemical Reduction of Oxygen on Cellular Vitreous Carbon Foam Catalyst. ACS Catalysis, 2017, 7, 7466-7478.	5.5	42
1996	Identification of the active sites in sulfur-doped graphene for oxygen reduction reaction: The keyrole of dissociated O2 adsorption. Solid State Communications, 2017, 267, 33-38.	0.9	10
1997	Nitrogen and Fluorine-Codoped Porous Carbons as Efficient Metal-Free Electrocatalysts for Oxygen Reduction Reaction in Fuel Cells. ACS Applied Materials & Interfaces, 2017, 9, 32859-32867.	4.0	83
1998	Deep Eutectic Solvent Functionalized Graphene Composite as an Extremely High Potency Flame Retardant. ACS Applied Materials & Interfaces, 2017, 9, 35319-35324.	4.0	88
1999	Deep-Eutectic Solvents Derived Nitrogen-Doped Graphitic Carbon as a Superior Electrocatalyst for Oxygen Reduction. ACS Applied Materials & Interfaces, 2017, 9, 32737-32744.	4.0	35
2000	Thermal properties of graphite oxide, thermally reduced graphene and chemically reduced graphene. AIP Conference Proceedings, 2017, , .	0.3	5
2001	A Facile and Versatile Electrochemical Tuning of Graphene for Oxygen Reduction Reaction in Acidic, Neutral and Alkali media. ChemistrySelect, 2017, 2, 8541-8552.	0.7	2
2002	Catalytic activation of O 2 molecule by transition metal atoms deposited on the outer surface of BN nanocluster. Journal of Molecular Graphics and Modelling, 2017, 77, 218-224.	1.3	27
2003	Theoretical studies on the structure and thermochemistry of cyclicparaphenylenediazenes. RSC Advances, 2017, 7, 40189-40199.	1.7	5
2004	Phosphorus-doped graphene support to enhance electrocatalysis of methanol oxidation reaction on platinum nanoparticles. Chemical Physics Letters, 2017, 687, 1-8.	1.2	45
2005	Metal-free carbon as a catalyst for oxidative coupling: solvent-enhanced poly-coupling with regioselectivity. Green Chemistry, 2017, 19, 4533-4537.	4.6	20
2006	Recent Advances in Conductive Composites Based on Biodegradable Polymers for Regenerative Medicine Applications. , 2017, , 519-542.		0

#	Article	IF	Citations
2007	Porous three-dimensional reduced graphene oxide merged with WO3 for efficient removal of radioactive strontium. Applied Surface Science, 2017, 423, 1203-1211.	3.1	22
2008	Revealing impact of plasma condition on graphite nanostructures and effective charge doping of graphene. Carbon, 2017, 123, 174-185.	5.4	7
2009	Edges of graphene and carbon nanotubes with high catalytic performance for the oxygen reduction reaction. Physical Chemistry Chemical Physics, 2017, 19, 21003-21011.	1.3	15
2010	Graphene/graphitic carbon nitride hybrids for catalysis. Materials Horizons, 2017, 4, 832-850.	6.4	168
2011	The Neglected Significant Role for Grapheneâ€Based Acetylene Hydrochlorination Catalysts â€" Intrinsic Graphene Defects. ChemistrySelect, 2017, 2, 6016-6022.	0.7	21
2012	Low cost iodine doped graphene for fuel cell electrodes. International Journal of Hydrogen Energy, 2017, 42, 26877-26888.	3.8	31
2013	First-principles study of nitrogen-doped nanographene as an efficient charge transport and nonlinear optical material. RSC Advances, 2017, 7, 36632-36643.	1.7	25
2014	Carbon Solving Carbon's Problems: Recent Progress of Nanostructured Carbonâ€Based Catalysts for the Electrochemical Reduction of CO₂. Advanced Energy Materials, 2017, 7, 1700759.	10.2	327
2015	Few-layer MoS₂as nitrogen protective barrier. Nanotechnology, 2017, 28, 415706.	1.3	6
2016	Epoxidation of ethylene over Pt-, Pd- and Ni-doped graphene in the presence of N₂O as an oxidant: a comparative DFT study. New Journal of Chemistry, 2017, 41, 9815-9825.	1.4	16
2017	Metalâ€"organic framework-induced construction of actiniae-like carbon nanotube assembly as advanced multifunctional electrocatalysts for overall water splitting and Zn-air batteries. Nano Energy, 2017, 39, 626-638.	8.2	263
2018	Dual active nitrogen doped hierarchical porous hollow carbon nanospheres as an oxygen reduction electrocatalyst for zincâ€"air batteries. Nanoscale, 2017, 9, 13257-13263.	2.8	80
2019	Electric field modulations of band alignments in arsenene/Ca(OH)₂heterobilayers for multi-functional device applications. Journal Physics D: Applied Physics, 2017, 50, 415304.	1.3	12
2020	First principles study of oxygen molecule interaction with the graphitic active sites of a boron-doped pyrolyzed Feâ€"Nâ€"C catalyst. Physical Chemistry Chemical Physics, 2017, 19, 23497-23504.	1.3	36
2021	Role of Pyridinic-N for Nitrogen-doped graphene quantum dots in oxygen reaction reduction. Journal of Colloid and Interface Science, 2017, 508, 154-158.	5.0	61
2022	Catalytic Activity for Oxygen Reduction Reaction on CoN₂Embedded Graphene: A Density Functional Theory Study. Journal of the Electrochemical Society, 2017, 164, F1122-F1129.	1.3	26
2023	High-performance Waste Biomass-derived Microporous Carbon Electrocatalyst with a Towel-like Surface for Alkaline Metal/air batteries. Electrochimica Acta, 2017, 250, 384-392.	2.6	15
2024	Fe/N/C Nanotubes with Atomic Fe Sites: A Highly Active Cathode Catalyst for Alkaline Polymer Electrolyte Fuel Cells. ACS Catalysis, 2017, 7, 6485-6492.	5.5	141

#	Article	IF	Citations
2025	Controlled electrochemical doping of graphene-based 3D nanoarchitecture electrodes for supercapacitors and capacitive deionisation. Nanoscale, 2017, 9, 14548-14557.	2.8	52
2026	Co,N,S-Codoped Three-Dimensional Graphene as Efficient Bi-Functional Electrocatalyst for Oxygen Reduction/Hydrogen Evolution Reaction. Journal of the Electrochemical Society, 2017, 164, F1110-F1114.	1.3	7
2027	How Nitrogen-Doped Graphene Quantum Dots Catalyze Electroreduction of CO₂ to Hydrocarbons and Oxygenates. ACS Catalysis, 2017, 7, 6245-6250.	5.5	129
2028	An effective strategy for the preparation of nitrogen-doped carbon from Imperata cylindrica panicle and its use as a metal-free catalyst for the oxygen reduction reaction. Energy, 2017, 141, 1324-1331.	4.5	7
2029	Ni-O 4 species anchored on N -doped graphene-based materials as molecular entities and electrocatalytic performances for oxygen reduction reaction. Solid State Sciences, 2017, 74, 56-61.	1.5	4
2030	Catalytic performance of nano-hybrid graphene and titanium dioxide modified cathodes fabricated with facile and green technique in microbial fuel cell. Progress in Natural Science: Materials International, 2017, 27, 647-651.	1.8	64
2031	Nitrogen doped nanoporous graphene: an efficient metal-free electrocatalyst for the oxygen reduction reaction. RSC Advances, 2017, 7, 55555-55566.	1.7	15
2032	Platinum nanoparticles anchored on graphene oxide-dispersed pristine carbon nanotube supports: High-performance electrocatalysts toward methanol electrooxidation. Electrochimica Acta, 2017, 258, 919-926.	2.6	37
2033	Enhanced enzymatic andex situbiodegradation of petroleum hydrocarbons in solutions usingAlcanivorax borkumensisenzymes in the presence of nitrogen and phosphorus co-doped reduced graphene oxide as a bacterial growth enhancer. Journal of Materials Chemistry A, 2017, 5, 24462-24471.	5.2	10
2034	CuO nanorods supported Pd nanoparticles as high performance electrocatalysts for glucose detection. Journal of Electroanalytical Chemistry, 2017, 807, 220-227.	1.9	40
2035	Modulating the electronic and magnetic properties of graphene. RSC Advances, 2017, 7, 51546-51580.	1.7	53
2036	Magnetron Sputtering Deposition Cu@Onion-like Nâ€“C as High-Performance Electrocatalysts for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2017, 9, 41945-41954.	4.0	19
2037	Introduction of sulfur to graphene oxide by Friedel-Crafts reaction. FlatChem, 2017, 6, 28-36.	2.8	7
2038	Generalized Synthesis of a Family of Highly Heteroatom-Doped Ordered Mesoporous Carbons. Chemistry of Materials, 2017, 29, 10178-10186.	3.2	74
2039	Applications of carbon nanotubes and graphene produced by chemical vapor deposition. MRS Bulletin, 2017, 42, 825-833.	1.7	14
2040	Cobalt sulfide supported on nitrogen and sulfur dual-doped reduced graphene oxide for highly active oxygen reduction reaction. RSC Advances, 2017, 7, 50246-50253.	1.7	32
2041	Self-template synthesis of biomass-derived 3D hierarchical N-doped porous carbon for simultaneous determination of dihydroxybenzene isomers. Scientific Reports, 2017, 7, 14985.	1.6	21
2042	Dissociation of O2 molecule on Fe/Nx clusters embedded in C60 fullerene, carbon nanotube and graphene. Synthetic Metals, 2017, 234, 38-46.	2.1	28

#	Article	IF	Citations
2043	NiCo₂S₄ nanosheet-decorated 3D, porous Ni film@Ni wire electrode materials for all solid-state asymmetric supercapacitor applications. Nanoscale, 2017, 9, 18819-18834.	2.8	107
2044	Carbonâ€“Heteroatom Bond Formation by an Ultrasonic Chemical Reaction for Energy Storage Systems. Advanced Materials, 2017, 29, 1702747.	11.1	27
2045	A nanocrystalline structured NiO/MnO₂@nitrogen-doped graphene oxide hybrid nanocomposite for high performance supercapacitors. New Journal of Chemistry, 2017, 41, 15517-15527.	1.4	47
2046	Facile synthesis of nitrogen-doped graphene containing azobenzene moieties for the oxygen reduction reaction. Molecular Crystals and Liquid Crystals, 2017, 653, 33-38.	0.4	1
2047	Study of iron oxide nanoparticle phases in graphene aerogels for oxygen reduction reaction. New Journal of Chemistry, 2017, 41, 15180-15186.	1.4	15
2048	Computational study of precision nitrogen doping on graphene nanoribbon edges. Nanotechnology, 2017, 28, 505602.	1.3	13
2049	The effects of capacitively coupled CH4 plasma on the reduction of the graphene oxide film. Molecular Crystals and Liquid Crystals, 2017, 651, 203-207.	0.4	2
2050	Effective anchoring of silver nanoparticles onto N-doped carbon with enhanced catalytic performance for the hydrogenation of dimethyl oxalate to methyl glycolate. Catalysis Communications, 2017, 100, 148-152.	1.6	24
2051	Fabrication of nitrogen-doped nano-onions and their electrocatalytic activity toward the oxygen reduction reaction. Scientific Reports, 2017, 7, 4178.	1.6	44
2052	Lifting the mist of flatland: The recent progress in the characterizations of two-dimensional materials. Progress in Crystal Growth and Characterization of Materials, 2017, 63, 72-93.	1.8	12
2053	From Linear Molecular Chains to Extended Polycyclic Networks: Polymerization of Dicyanoacetylene. Chemistry of Materials, 2017, 29, 6706-6718.	3.2	9
2054	The physics and chemistry of graphene-on-surfaces. Chemical Society Reviews, 2017, 46, 4417-4449.	18.7	309
2055	Growth and properties of large-area sulfur-doped graphene films. Journal of Materials Chemistry C, 2017, 5, 7944-7949.	2.7	21
2056	One-step and low-temperature synthesis of iodine-doped graphene and its multifunctional applications for hydrogen evolution reaction and electrochemical sensing. Electrochimica Acta, 2017, 246, 1155-1162.	2.6	26
2057	La_{0.8}Sr_{0.2}MnO₃-Based Perovskite Nanoparticles with the A-Site Deficiency as High Performance Bifunctional Oxygen Catalyst in Alkaline Solution. ACS Applied Materials & Interfaces, 2017, 9, 23820-23827.	4.0	87
2058	Bimetallic Fe-Co promoting one-step growth of hierarchical nitrogen-doped carbon nanotubes/nanofibers for highly efficient oxygen reduction reaction. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2017, 223, 159-166.	1.7	22
2059	A facile approach to tailoring electrocatalytic activities of imine-rich nitrogen-doped graphene for oxygen reduction reaction. Carbon, 2017, 122, 515-523.	5.4	25
2060	3DGH-Fc based electrochemical sensor for the simultaneous determination of ascorbic acid, dopamine and uric acid. Journal of Electroanalytical Chemistry, 2017, 799, 459-467.	1.9	41

#	Article	IF	Citations
2061	Preparation of nitrogen-doped graphene by high-gravity technology and its application in oxygen reduction. Particuology, 2017, 34, 110-117.	2.0	13
2062	Co 3 O 4 nanoparticles assembled on polypyrrole/graphene oxide for electrochemical reduction of oxygen in alkaline media. Chinese Journal of Catalysis, 2017, 38, 1281-1290.	6.9	16
2063	Synergistically enhanced activity of nitrogen-doped carbon dots/graphene composites for oxygen reduction reaction. Applied Surface Science, 2017, 423, 909-916.	3.1	44
2064	Highly microporous nitrogen doped graphene-like carbon material as an efficient fuel cell catalyst. International Journal of Hydrogen Energy, 2017, 42, 19903-19912.	3.8	14
2065	Graphene-Based Functional Architectures: Sheets Regulation and Macrostructure Construction toward Actuators and Power Generators. Accounts of Chemical Research, 2017, 50, 1663-1671.	7.6	92
2066	Single-Atomic Ruthenium Catalytic Sites on Nitrogen-Doped Graphene for Oxygen Reduction Reaction in Acidic Medium. ACS Nano, 2017, 11, 6930-6941.	7.3	435
2067	Watermelon-like Rh x S y @C nanospheres: phase evolution and its influence on the electrocatalytic performance for oxygen reduction reaction. Journal of Materials Science, 2017, 52, 11402-11412.	1.7	5
2068	Reversible hydrogen adsorption on Co/N 4 cluster embedded in graphene: The role of charge manipulation. Chemical Physics, 2017, 493, 85-90.	0.9	25
2069	Preparation and electrochemical properties of nanocable-like Nb2O5/surface-modified carbon nanotubes composites for anode materials in lithium ion batteries. Electrochimica Acta, 2017, 246, 1088-1096.	2.6	99
2070	A highly active and stable La0.5Sr0.5Ni0.4Fe0.6O3-Î´ perovskite electrocatalyst for oxygen evolution reaction in alkaline media. Electrochimica Acta, 2017, 246, 997-1003.	2.6	41
2071	Nitrogen-doped graphene anchored with mixed growth patterns of CuPt alloy nanoparticles as a highly efficient and durable electrocatalyst for the oxygen reduction reaction in an alkaline medium. Nanoscale, 2017, 9, 9009-9017.	2.8	25
2072	Photocatalytic Properties of Graphdiyne and Graphene Modified TiO2: From Theory to Experiment. Springer Theses, 2017, , 93-110.	0.0	2
2073	Enhancing the cyclability of Liâ€“O 2 batteries using PdM alloy nanoparticles anchored on nitrogen-doped reduced graphene as the cathode catalyst. Journal of Power Sources, 2017, 337, 173-179.	4.0	43
2074	Identifying the Active Sites on Nâ€doped Graphene toward Oxygen Evolution Reaction. ChemCatChem, 2017, 9, 846-852.	1.8	45
2075	Interfacial charge carrier dynamics of cuprous oxide-reduced graphene oxide (Cu2O-rGO) nanoheterostructures and their related visible-light-driven photocatalysis. Applied Catalysis B: Environmental, 2017, 204, 21-32.	10.8	181
2076	Exploring the catalytic activity of pristine T6[100] surface for oxygen reduction reaction: A first-principles study. Applied Surface Science, 2017, 418, 56-63.	3.1	5
2077	Advancements in rationally designed PGM-free fuel cell catalysts derived from metalâ€“organic frameworks. Materials Horizons, 2017, 4, 20-37.	6.4	139
2078	Improved performance of a single chamber microbial fuel cell using nitrogen-doped polymer-metal-carbon nanocomposite-based air-cathode. International Journal of Hydrogen Energy, 2017, 42, 3271-3280.	3.8	53

#	Article	IF	Citations
2079	Active sites for oxygen reduction reaction on nitrogen-doped carbon nanotubes derived from polyaniline. Carbon, 2017, 112, 219-229.	5.4	195
2080	Highly efficient nitrogen-doped carbide-derived carbon materials for oxygen reduction reaction in alkaline media. Carbon, 2017, 113, 159-169.	5.4	88
2081	Plasma-etched, S-doped graphene for effective hydrogen evolution reaction. International Journal of Hydrogen Energy, 2017, 42, 4184-4192.	3.8	67
2082	Nanoscale Engineering of Efficient Oxygen Reduction Electrocatalysts by Tailoring the Local Chemical Environment of Pt Surface Sites. ACS Catalysis, 2017, 7, 17-24.	5.5	44
2083	Enhancing Electrocatalytic Performance of Bifunctional Cobaltâ€“Manganeseâ€Oxynitride Nanocatalysts on Graphene. ChemSusChem, 2017, 10, 68-73.	3.6	28
2084	3D cobalt-embedded nitrogen-doped graphene xerogel as an efficient electrocatalyst for oxygen reduction reaction in an alkaline medium. Journal of Applied Electrochemistry, 2017, 47, 13-23.	1.5	6
2085	Electrocatalytic Oxygen Evolution Reaction in Acidic Environments â€“ Reaction Mechanisms and Catalysts. Advanced Energy Materials, 2017, 7, 1601275.	10.2	847
2086	Heteroatom-doped graphene as electrocatalysts for air cathodes. Materials Horizons, 2017, 4, 7-19.	6.4	142
2087	Three-dimensional N-doped, plasma-etched graphene: Highly active metal-free catalyst for hydrogen evolution reaction. Applied Catalysis A: General, 2017, 529, 127-133.	2.2	73
2088	Amide-functionalized graphene with 1,4-diaminobutane as efficient metal-free and porous electrocatalyst for oxygen reduction. Carbon, 2017, 111, 577-586.	5.4	36
2089	Three-dimensional phosphorus-doped graphene as an efficient metal-free electrocatalyst for electrochemical sensing. Sensors and Actuators B: Chemical, 2017, 241, 584-591.	4.0	48
2090	Applications of graphene in microbial fuel cells: The gap between promise and reality. Renewable and Sustainable Energy Reviews, 2017, 72, 1389-1403.	8.2	148
2091	Reusable DNA-functionalized-graphene for ultrasensitive mercury (II) detection and removal. Biosensors and Bioelectronics, 2017, 87, 129-135.	5.3	57
2092	Simple solution-based synthesis of pyridinic-rich nitrogen-doped graphene nanoplatelets for supercapacitors. Applied Energy, 2017, 195, 1071-1078.	5.1	60
2093	In situ one-pot preparation of reduced graphene oxide/polyaniline composite for high-performance electrochemical capacitors. Applied Surface Science, 2017, 392, 71-79.	3.1	85
2094	Noble-metal-free hetero-structural CdS/Nb2O5/N-doped-graphene ternary photocatalytic system as visible-light-driven photocatalyst for hydrogen evolution. Applied Catalysis B: Environmental, 2017, 201, 202-210.	10.8	153
2095	Oxygenâ€Molecule Adsorption and Dissociation on BCN Graphene: A Firstâ€Principles Study. ChemPhysChem, 2017, 18, 101-110.	1.0	11
2096	Surface chemistry and catalysis confined under two-dimensional materials. Chemical Society Reviews, 2017, 46, 1842-1874.	18.7	412

#	Article	IF	Citations
2097	A highâ€“selectivity electrochemical sensor for ultra-trace lead (II) detection based on a nanocomposite consisting of nitrogen-doped graphene/gold nanoparticles functionalized with ETBD and Fe3O4@TiO2 coreâ€“shell nanoparticles. Sensors and Actuators B: Chemical, 2017, 242, 889-896.	4.0	36
2098	Engineering nanostructures of PGM-free oxygen-reduction catalysts using metal-organic frameworks. Nano Energy, 2017, 31, 331-350.	8.2	317
2099	Electrically Rechargeable Zincâ€“Air Batteries: Progress, Challenges, and Perspectives. Advanced Materials, 2017, 29, 1604685.	11.1	1,143
2100	The recent progress and future of oxygen reduction reaction catalysis: A review. Renewable and Sustainable Energy Reviews, 2017, 69, 401-414.	8.2	300
2101	Synthesis and Characterization Carbon Nanotubes Doped Carbon Aerogels. IOP Conference Series: Materials Science and Engineering, 2017, 275, 012006.	0.3	1
2102	Fabrication of a nitrogen-doping carbon-based catalyst towards oxygen reduction reaction using ammonia as a single nitrogen source. Journal of the Ceramic Society of Japan, 2017, 125, 32-35.	0.5	1
2103	Direct synthesis of Pt-free catalyst on gas diffusion layer of fuel cell and usage of high boiling point fuels for efficient utilization of waste heat. Applied Energy, 2017, 205, 1050-1058.	5.1	20
2104	In situ fabrication of nickel based oxide on nitrogen-doped graphene for high electrochemical performance supercapacitors. Chemical Physics Letters, 2017, 685, 457-464.	1.2	15
2105	Nitrogen-doped Graphene Modified Glassy Carbon Electrode for Electrochemical Determination of Breast Cancer Marker Carbohydrate Antigen 15-3. International Journal of Electrochemical Science, 2017, 12, 8280-8287.	0.5	5
2106	4. Controlled Chemical Synthesis in CVD Graphene. , 2017, , .		1
2108	Metal-Free Carbon-Based Materials: Promising Electrocatalysts for Oxygen Reduction Reaction in Microbial Fuel Cells. International Journal of Molecular Sciences, 2017, 18, 25.	1.8	67
2109	N-Doped Carbon Xerogels as Pt Support for the Electro-Reduction of Oxygen. Materials, 2017, 10, 1092.	1.3	31
2110	N-Doped Graphene with Low Intrinsic Defect Densities via a Solid Source Doping Technique. Nanomaterials, 2017, 7, 302.	1.9	37
2111	A Review of Theoretical Studies on Functionalized Graphene for Electrochemical Energy Conversion and Storage Applications. Current Physical Chemistry, 2017, 6, 244-265.	0.1	1
2112	Green Synthesis of N-doped Graphene Nanosheets by Cow Urine. Current Graphene Science, 2017, 1, .	0.5	8
2113	Two-dimensional carbon-based nanocomposites for photocatalytic energy generation and environmental remediation applications. Beilstein Journal of Nanotechnology, 2017, 8, 1571-1600.	1.5	119
2114	Controlled Chemical Synthesis in CVD Graphene. ChemistrySelect, 2017, 2, .	0.7	7
2115	Effect of Platinum loading on Graphene Nano Sheets at Cathode. Oriental Journal of Chemistry, 2017, 33, 134-140.	0.1	3

#	Article	IF	Citations
2116	Effect of Polymerization of Aniline on Thermal Stability, Electrical Conductivity and Band Gap of Graphene Oxide/PolyanilineNanocomposites. International Journal of Electrochemical Science, 2017, 12, 1785-1796.	0.5	10
2117	Graphitization and Pore Structure Adjustment of Graphene for Energy Storage and Conversion. Current Graphene Science, 2017, 1, .	0.5	2
2118	Synthesis of N-doped Graphene for Simultaneous Electrochemical Detection of Lead and Copper in Water. International Journal of Electrochemical Science, 2017, , 4856-4866.	0.5	12
2119	Doped Graphene as Non-Metallic Catalyst for Fuel Cells. Medziagotyra, 2017, 23, .	0.1	5
2120	Nitrogen-doped graphene wrapped around silver nanowires for enhanced catalysis in oxygen reduction reaction. Journal of Solid State Electrochemistry, 2018, 22, 2287-2296.	1.2	16
2121	Nano-Architecture of nitrogen-doped graphene films synthesized from a solid CN source. Scientific Reports, 2018, 8, 3247.	1.6	72
2122	Biomass chitosan derived cobalt/nitrogen doped carbon nanotubes for the electrocatalytic oxygen reduction reaction. Journal of Materials Chemistry A, 2018, 6, 5740-5745.	5.2	113
2123	Iron Phthalocyanine Decorated Nitrogen-Doped Graphene Biosensing Platform for Real-Time Detection of Nitric Oxide Released from Living Cells. Analytical Chemistry, 2018, 90, 4438-4444.	3.2	81
2124	Doped, Defectâ€Enriched Carbon Nanotubes as an Efficient Oxygen Reduction Catalyst for Anion Exchange Membrane Fuel Cells. Advanced Materials Interfaces, 2018, 5, 1800184.	1.9	37
2125	Supramolecular assembly promoted synthesis of three-dimensional nitrogen doped graphene frameworks as efficient electrocatalyst for oxygen reduction reaction and methanol electrooxidation. Applied Catalysis B: Environmental, 2018, 231, 224-233.	10.8	131
2126	One-step production of O-N-S co-doped three-dimensional hierarchical porous carbons for high-performance supercapacitors. Nano Energy, 2018, 47, 547-555.	8.2	547
2127	Metal-Free Oxygen Evolution and Oxygen Reduction Reaction Bifunctional Electrocatalyst in Alkaline Media: From Mechanisms to Structureâ€“Catalytic Activity Relationship. ACS Sustainable Chemistry and Engineering, 2018, 6, 4973-4980.	3.2	62
2128	AuPd Nanoparticles Anchored on Nitrogen-Decorated Carbon Nanosheets with Highly Efficient and Selective Catalysis for the Dehydrogenation of Formic Acid. Journal of Physical Chemistry C, 2018, 122, 4792-4801.	1.5	33
2129	Manganese deception on graphene and implications in catalysis. Carbon, 2018, 132, 623-631.	5.4	54
2130	High-performance Platinum-free oxygen reduction reaction and hydrogen oxidation reaction catalyst in polymer electrolyte membrane fuel cell. Scientific Reports, 2018, 8, 3591.	1.6	89
2131	Facile synthesis of nitrogen-doped graphene frameworks for enhanced performance of hole transport material-free perovskite solar cells. Journal of Materials Chemistry C, 2018, 6, 3097-3103.	2.7	38
2132	Engineering phosphorus-doped LaFeO3-Î´ perovskite oxide as robust bifunctional oxygen electrocatalysts in alkaline solutions. Nano Energy, 2018, 47, 199-209.	8.2	202
2133	Earthworm-likeÂN, S-Doped carbon tube-encapsulated Co₉S₈nanocomposites derived from nanoscaled metalâ€“organic frameworks for highly efficient bifunctional oxygen catalysis. Journal of Materials Chemistry A, 2018, 6, 5935-5943.	5.2	101

#	Article	IF	Citations
2134	Holey Co, N-codoped graphene aerogel with in-plane pores and multiple active sites for efficient oxygen reduction. Electrochimica Acta, 2018, 269, 544-552.	2.6	29
2135	CVD grown graphene as catalyst for acid electrolytes. International Journal of Hydrogen Energy, 2018, 43, 10710-10716.	3.8	21
2136	Non-platinum metal-organic framework based electro-catalyst for promoting oxygen reduction reaction. AIP Conference Proceedings, 2018, , .	0.3	1
2137	MnCo₂O₄ Anchored on Nitrogenâ€Doped Carbon Nanomaterials as an Efficient Electrocatalyst for Oxygen Reduction. ChemistrySelect, 2018, 3, 4228-4236.	0.7	14
2138	Fundamental Challenges for Modeling Electrochemical Energy Storage Systems at the Atomic Scale. Topics in Current Chemistry, 2018, 376, 17.	3.0	16
2139	Biocompatible mediated bioanode prepared by using poly(3,4-ethylene dioxythiophene) poly(styrene) Tj ETQq1 1 0.784314 rgBT /Ove applications. Materials Science for Energy Technologies, 2018, 1, 63-69.	1.0	16
2140	N-doped porous carbon nanosheets as pH-universal ORR electrocatalyst in various fuel cell devices. Nano Energy, 2018, 49, 393-402.	8.2	300
2141	The chemistry of CVD graphene. Journal of Materials Chemistry C, 2018, 6, 6082-6101.	2.7	95
2142	Effect of Supports on Catalytic Centers. Nanostructure Science and Technology, 2018, , 169-201.	0.1	0
2143	The â€œMidas Touchâ€•Transformation of TiO₂ Nanowire Arrays during Visible Light Photoelectrochemical Performance by Carbon/Nitrogen Coimplantation. Advanced Energy Materials, 2018, 8, 1800165.	10.2	77
2144	Electronic coupling induced high performance of N, S-codoped graphene supported CoS2 nanoparticles for catalytic reduction and evolution of oxygen. Journal of Power Sources, 2018, 389, 178-187.	4.0	46
2145	Carbon Nanostructured Catalysts as High Efficient Materials for Low Temperature Fuel Cells. , 2018, , 1-29.		0
2146	Synergistic interaction and controllable active sites of nitrogen and sulfur co-doping into mesoporous carbon sphere for high performance oxygen reduction electrocatalysts. Applied Surface Science, 2018, 440, 627-636.	3.1	36
2147	Homogeneously Dispersed Co₉S₈ Anchored on Nitrogen and Sulfur Co-Doped Carbon Derived from Soybean as Bifunctional Oxygen Electrocatalysts and Supercapacitors. ACS Applied Materials & Interfaces, 2018, 10, 16436-16448.	4.0	57
2148	Defect electrocatalytic mechanism: concept, topological structure and perspective. Materials Chemistry Frontiers, 2018, 2, 1250-1268.	3.2	119
2149	Oxidized Laserâ€Induced Graphene for Efficient Oxygen Electrocatalysis. Advanced Materials, 2018, 30, e1707319.	11.1	94
2150	Oneâ€Step Synthesis of NiCo₂S₄/Graphene Composite for Asymmetric Supercapacitors with Superior Performances. ChemElectroChem, 2018, 5, 1576-1585.	1.7	44
2151	Approaching the self-consistency challenge of electrocatalysis with theory and computation. Current Opinion in Electrochemistry, 2018, 9, 189-197.	2.5	28

#	Article	IF	Citations
2152	Pyridinic-N-Dominated Doped Defective Graphene as a Superior Oxygen Electrocatalyst for Ultrahigh-Energy-Density Znâ€“Air Batteries. ACS Energy Letters, 2018, 3, 1183-1191.	8.8	456
2153	Combustion reaction-derived nitrogen-doped porous carbon as an effective metal-Free catalyst for the oxygen reduction reaction. Energy, 2018, 152, 333-340.	4.5	13
2154	Control of Ion Species and Energy in High-Flux Helicon-Wave-Excited Plasma Using Ar/N₂ Gas Mixtures. IEEE Transactions on Plasma Science, 2018, 46, 895-899.	0.6	2
2155	Morphologyâ€Dependent Magnetism in Nanographene: Beyond Nanoribbons. Advanced Functional Materials, 2018, 28, 1800592.	7.8	5
2156	Boosting ORR Catalytic Activity by Integrating Pyridineâ€N Dopants, a High Degree of Graphitization, and Hierarchical Pores into a MOFâ€Derived Nâ€Doped Carbon in a Tandem Synthesis. Chemistry - an Asian Journal, 2018, 13, 1318-1326.	1.7	24
2157	Nitrogen-doped hollow carbon nanospheres for highly sensitive electrochemical sensing of nitrobenzene. Materials Research Bulletin, 2018, 104, 15-19.	2.7	25
2158	Au monolayer film coating with graphene oxide for surface enhanced Raman effect. Gold Bulletin, 2018, 51, 27-33.	1.1	2
2159	Self-templated synthesis of heavily nitrogen-doped hollow carbon spheres. Chemical Communications, 2018, 54, 4565-4568.	2.2	13
2160	Mixed Transition Metal Dichalcogenide as Saturable Absorber in Ytterbium, Praseodymium, and Erbium Fiber Laser. IEEE Journal of Quantum Electronics, 2018, 54, 1-9.	1.0	15
2161	One Step Synthesis of Nitrogen-Doped Graphene from Naphthalene and Urea by Atmospheric Chemical Vapor Deposition. Journal of Inorganic and Organometallic Polymers and Materials, 2018, 28, 1609-1615.	1.9	6
2162	Refining cocoon to prepare (N, S, and Fe) ternary-doped porous carbon aerogel as efficient catalyst for the oxygen reduction reaction in alkaline medium. Journal of Power Sources, 2018, 384, 48-57.	4.0	69
2163	Oxygen reduction on graphene sheets functionalised by anthraquinone diazonium compound during electrochemical exfoliation of graphite. Electrochimica Acta, 2018, 267, 246-254.	2.6	25
2165	Enhanced electrochemical performance of nitrogen-doped graphene and poly[Ni(salen)] composite electrodes for supercapacitors. Ionics, 2018, 24, 3143-3153.	1.2	7
2166	Ammonia modification of high-surface-area activated carbons as metal-free electrocatalysts for oxygen reduction reaction. Electrochimica Acta, 2018, 263, 465-473.	2.6	27
2167	Rational synthesis of N/S-doped porous carbons as high efficient electrocatalysts for oxygen reduction reaction and Zn-Air batteries. Electrochimica Acta, 2018, 266, 17-26.	2.6	47
2168	Nitrogen-doped carbon materials. Carbon, 2018, 132, 104-140.	5.4	566
2169	Nitrogen-doped carbon nanoflower with superior ORR performance in both alkaline and acidic electrolyte and enhanced durability. International Journal of Hydrogen Energy, 2018, 43, 4311-4320.	3.8	33
2170	Nitrogen-incorporated carbon nanotube derived from polystyrene and polypyrrole as hydrogen storage material. International Journal of Hydrogen Energy, 2018, 43, 5077-5088.	3.8	89

#	Article	IF	Citations
2171	Recent progress and perspectives of bifunctional oxygen reduction/evolution catalyst development for regenerative anion exchange membrane fuel cells. Nano Energy, 2018, 47, 172-198.	8.2	134
2172	Simultaneous determination of isoproterenol, acetaminophen, folic acid, propranolol and caffeine using a sensor platform based on carbon black, graphene oxide, copper nanoparticles and PEDOT:PSS. Talanta, 2018, 183, 329-338.	2.9	80
2173	Pyridinic-nitrogen highly doped nanotubular carbon arrays grown on a carbon cloth for high-performance and flexible supercapacitors. Nanoscale, 2018, 10, 3981-3989.	2.8	27
2174	Structure stability of polyaniline/graphene nanocomposites in gamma-ray environment. Journal of Radioanalytical and Nuclear Chemistry, 2018, 315, 627-638.	0.7	6
2175	Nitrogen-doped graphene approach to enhance the performance of a membraneless enzymatic biofuel cell. Frontiers in Energy, 2018, 12, 233-238.	1.2	12
2176	Scalable Conversion of CO2 to N-Doped Carbon Foam for Efficient Oxygen Reduction Reaction and Lithium Storage. ACS Sustainable Chemistry and Engineering, 2018, 6, 3358-3366.	3.2	10
2177	A Novel Graphene-Grafted Gold Nanoparticles Composite for Highly Sensitive Electrochemical Biosensing. IEEE Sensors Journal, 2018, 18, 2513-2519.	2.4	30
2179	Non-Transition-Metal Catalytic System for N₂ Reduction to NH₃: AÂDensity Functional Theory Study of Al-Doped Graphene. Journal of Physical Chemistry Letters, 2018, 9, 570-576.	2.1	43
2180	Nitrogen-doped graphene-supported molybdenum dioxide electrocatalysts for oxygen reduction reaction. Journal of Materials Science, 2018, 53, 6124-6134.	1.7	11
2181	3D Carbon Electrocatalysts In Situ Constructed by Defectâ€Rich Nanosheets and Polyhedrons from NaClâ€Sealed Zeolitic Imidazolate Frameworks. Advanced Functional Materials, 2018, 28, 1705356.	7.8	233
2182	Nitrogen-rich carbon nano-onions for oxygen reduction reaction. Carbon, 2018, 130, 645-651.	5.4	90
2183	Cobalt nitride nanoparticle-modified nitrogen-doped graphene aerogel used as an efficient catalyst for oxygen reduction reaction in acidic medium. Journal of Materials Science, 2018, 53, 7691-7702.	1.7	9
2184	Tunable Bifunctional Activity of Mn_xCo_{3â^'x}O₄ Nanocrystals Decorated on Carbon Nanotubes for Oxygen Electrocatalysis. ChemSusChem, 2018, 11, 1295-1304.	3.6	50
2185	Modification of graphene electronic properties via controllable gas-phase doping with copper chloride. Applied Physics Letters, 2018, 112, .	1.5	23
2186	Novel synthesis of a Cu₂Oâ€“graphene nanoplatelet composite through a two-step electrodeposition method for selective detection of hydrogen peroxide. New Journal of Chemistry, 2018, 42, 3574-3581.	1.4	21
2187	Divacancy-nitrogen/boron-codoped graphene as a metal-free catalyst for high-efficient CO oxidation. Materials Chemistry and Physics, 2018, 207, 11-22.	2.0	29
2188	B,Nâ€Codoped graphene as catalyst for the oxygen reduction reaction: Insights from periodic and cluster DFT calculations. Journal of Computational Chemistry, 2018, 39, 637-647.	1.5	39
2189	â€œMetal-freeâ€•electrocatalysis: Quaternary-doped graphene and the alkaline oxygen reduction reaction. Applied Catalysis A: General, 2018, 553, 107-116.	2.2	46

#	Article	IF	Citations
2190	Exploring the catalytic efficiency of Xâ€doped (X=B, N, P) graphene in oxygen reduction reaction: Influence of solvent and border effects. International Journal of Quantum Chemistry, 2018, 118, e25579.	1.0	4
2191	Graphene oxide as a sustainable metal and solvent free catalyst for dehydration of fructose to 5-HMF: A new and green protocol. Catalysis Communications, 2018, 106, 64-67.	1.6	36
2192	Graphene-Directed Formation of a Nitrogen-Doped Porous Carbon Sheet with High Catalytic Performance for the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2018, 122, 13508-13514.	1.5	16
2193	Island shape, size and interface dependency on electronic and magnetic properties of graphene hexagonal-boron nitride (h-BN) in-plane hybrids. Journal of Physics and Chemistry of Solids, 2018, 115, 187-198.	1.9	10
2194	Tuning the band gap and the nitrogen content in carbon nitride materials by high temperature treatment at high pressure. Carbon, 2018, 130, 170-177.	5.4	29
2195	Innovations upon antioxidant capacity evaluation for cosmetics: A photoelectrochemical sensor exploitation based on N-doped graphene/TiO2 nanocomposite. Sensors and Actuators B: Chemical, 2018, 259, 963-971.	4.0	37
2196	Theoretical insights on the oxygen-reduction reaction mechanism of LaN4-embedded graphene. Journal of Molecular Modeling, 2018, 24, 14.	0.8	5
2197	Graphene Platforms for Smart Energy Generation and Storage. Joule, 2018, 2, 245-268.	11.7	168
2198	Mechanisms of the oxygen reduction reaction on B- and/or N-doped carbon nanomaterials with curvature and edge effects. Nanoscale, 2018, 10, 1129-1134.	2.8	81
2199	High Performance of Nâ€Doped Graphene with Bubbleâ€like Textures for Supercapacitors. Small, 2018, 14, 1702570.	5.2	56
2200	Tri-amine functionalized graphene oxide for co-operative catalyst in the Henry reaction. Research on Chemical Intermediates, 2018, 44, 2157-2167.	1.3	10
2201	Remarkable activity of nitrogen-doped hollow carbon spheres encapsulated Cu on synthesis of dimethyl carbonate: Role of effective nitrogen. Applied Surface Science, 2018, 436, 803-813.	3.1	25
2202	The effect of aluminum phosphinate on char formation of phosphorus-containing deoxybenzoin polymer. High Performance Polymers, 2018, 30, 1019-1026.	0.8	1
2203	Role of phosphorus in nitrogen, phosphorus dual-doped ordered mesoporous carbon electrocatalyst for oxygen reduction reaction in alkaline media. International Journal of Hydrogen Energy, 2018, 43, 1470-1478.	3.8	51
2204	Nitrogenatedâ€Graphiteâ€Encapsulated Carbon Black as a Metalâ€Free Electrocatalyst for the Oxygen Evolution Reaction in Acid. ChemElectroChem, 2018, 5, 583-588.	1.7	18
2205	Tuning the Doping Types in Graphene Sheets by N Monoelement. Nano Letters, 2018, 18, 386-394.	4.5	44
2206	Facile fabrication and characterization of two-dimensional bismuth(<scp>iii</scp>) sulfide nanosheets for high-performance photodetector applications under ambient conditions. Nanoscale, 2018, 10, 2404-2412.	2.8	166
2207	Microwave-assisted synthesis of palladium nanoparticles intercalated nitrogen doped reduced graphene oxide and their electrocatalytic activity for direct-ethanol fuel cells. Journal of Colloid and Interface Science, 2018, 515, 160-171.	5.0	91

#	Article	IF	Citations
2208	Ultrafast-Versatile-Domestic-Microwave-Oven Based Graphene Oxide Reactor for the Synthesis of Highly Efficient Graphene Based Hybrid Electrocatalysts. ACS Sustainable Chemistry and Engineering, 2018, 6, 4037-4045.	3.2	11
2209	The in situ grown of activated Fe-N-C nanofibers derived from polypyrrole on carbon paper and its electro-catalytic activity for oxygen reduction reaction. Journal of Solid State Electrochemistry, 2018, 22, 1217-1226.	1.2	10
2210	Graphene aerogels for efficient energy storage and conversion. Energy and Environmental Science, 2018, 11, 772-799.	15.6	435
2211	Iron carbide encapsulated by porous carbon nitride as bifunctional electrocatalysts for oxygen reduction and evolution reactions. Applied Surface Science, 2018, 439, 439-446.	3.1	34
2212	Low-dimensional catalysts for hydrogen evolution and CO2 reduction. Nature Reviews Chemistry, 2018, 2, .	13.8	631
2213	Two-dimensional Nitrogen-doped Mesoporous Carbon/Graphene Nanocomposites from the Self-assembly of Block Copolymer Micelles in Solution. Chinese Journal of Polymer Science (English) Tj ETQq1 1 0.784314 rgBT /Overlock	2.4	37
2214	Anisotropy of graphene scaffolds assembled by three-dimensional printing. Carbon, 2018, 130, 1-10.	5.4	59
2215	Size effect of oxygen reduction reaction on nitrogen-doped graphene quantum dots. RSC Advances, 2018, 8, 531-536.	1.7	37
2216	Facile Synthesis of Nitrogen and Halogen Dualâ€Doped Porous Graphene as an Advanced Performance Anode for Lithiumâ€Ion Batteries. Advanced Materials Interfaces, 2018, 5, 1701261.	1.9	21
2217	Facile Synthesis of N-Doped Graphene-Like Carbon Nanoflakes as Efficient and Stable Electrocatalysts for the Oxygen Reduction Reaction. Nano-Micro Letters, 2018, 10, 29.	14.4	85
2218	Combining nitrogen substitutional defects and oxygen intercalation to control the graphene corrugation and doping level. Carbon, 2018, 130, 362-368.	5.4	8
2219	N-Doped Graphitized Carbon Nanohorns as a Forefront Electrocatalyst in Highly Selective O2 Reduction to H2O2. CheM, 2018, 4, 106-123.	5.8	348
2220	Effect of an anionic surfactant (SDS) on the photoluminescence of graphene oxide (GO) in acidic and alkaline medium. RSC Advances, 2018, 8, 584-595.	1.7	14
2221	From a ZIF-8 polyhedron to three-dimensional nitrogen doped hierarchical porous carbon: an efficient electrocatalyst for the oxygen reduction reaction. Journal of Materials Chemistry A, 2018, 6, 10731-10739.	5.2	111
2222	Fe Isolated Single Atoms on S, N Codoped Carbon by Copolymer Pyrolysis Strategy for Highly Efficient Oxygen Reduction Reaction. Advanced Materials, 2018, 30, e1800588.	11.1	511
2223	Electrocatalytic Oxygen Reduction by Dopantâ€free, Porous Graphene Aerogel. Electroanalysis, 2018, 30, 1472-1478.	1.5	13
2224	Bifunctional 3D n-doped porous carbon materials derived from paper towel for oxygen reduction reaction and supercapacitor. Science Bulletin, 2018, 63, 621-628.	4.3	34
2225	Making graphene luminescent by adsorption of an amphiphilic europium complex. Applied Physics Letters, 2018, 112, .	1.5	7

#	Article	IF	Citations
2226	AlN and AlP doped graphene quantum dots as novel drug delivery systems for 5-fluorouracil drug: Theoretical studies. Journal of Fluorine Chemistry, 2018, 211, 81-93.	0.9	95
2227	Synthesis of Co-Fe-Pd nanoparticles via ultrasonic irradiation and their electro-catalytic activity for oxygen reduction reaction. Applied Catalysis A: General, 2018, 560, 103-110.	2.2	15
2228	Polydopamine-coated graphene nanosheets as efficient electrocatalysts for oxygen reduction reaction. RSC Advances, 2018, 8, 16044-16051.	1.7	13
2229	A promising graphitic N-dominated porous carbon catalyst derived from lotus leaves for oxygen reduction reaction. Ionics, 2018, 24, 3601-3609.	1.2	8
2230	Simultaneous Determination of Hydroquinone, Catechol and Resorcinol with High Selectivity Based on Hollow Nitrogen-Doped Mesoporous Carbon Spheres Decorated Graphene. Journal of the Electrochemical Society, 2018, 165, B212-B219.	1.3	37
2231	Taming transition metals on N-doped CNTs by a one-pot method for efficient oxygen reduction reaction. International Journal of Hydrogen Energy, 2018, 43, 7893-7902.	3.8	49
2232	Electrochemical and electrocatalytic reaction characteristics of boron-incorporated graphene viaÂa simple spin-on dopant process. Journal of Materials Chemistry A, 2018, 6, 7351-7356.	5.2	23
2233	Heterostructures of MXenes and N-doped graphene as highly active bifunctional electrocatalysts. Nanoscale, 2018, 10, 10876-10883.	2.8	215
2234	One step synthesis of chlorine-free Pt/Nitrogen-doped graphene composite for oxygen reduction reaction. Carbon, 2018, 133, 90-100.	5.4	25
2235	Nitrogen-doped graphene prepared by a millisecond photo-thermal process and its applications. Organic Electronics, 2018, 56, 221-231.	1.4	13
2236	Rapidly Enhanced Electro-Fenton Efficiency by in Situ Electrochemistry-Activated Graphite Cathode. Industrial & Engineering Chemistry Research, 2018, 57, 4907-4915.	1.8	24
2237	Emerging chemical strategies for imprinting magnetism in graphene and related 2D materials for spintronic and biomedical applications. Chemical Society Reviews, 2018, 47, 3899-3990.	18.7	161
2238	A density functional study on the oxygen reduction reaction mechanism on FeN₂-doped graphene. New Journal of Chemistry, 2018, 42, 6873-6879.	1.4	41
2239	Heteroatom-doped carbonaceous electrode materials for high performance energy storage devices. Sustainable Energy and Fuels, 2018, 2, 1398-1429.	2.5	59
2240	Carbon and non-carbon support materials for platinum-based catalysts in fuel cells. International Journal of Hydrogen Energy, 2018, 43, 7823-7854.	3.8	210
2241	Nitrogen-doped graphene: Effect of graphitic-N on the electrochemical sensing properties towards acetaminophen. FlatChem, 2018, 9, 1-7.	2.8	28
2242	Functionalization of graphene materials by heteroatom-doping for energy conversion and storage. Progress in Natural Science: Materials International, 2018, 28, 121-132.	1.8	148
2243	Theoretical study on the origin of activity for the oxygen reduction reaction of metal-doped two-dimensional boron nitride materials. Physical Chemistry Chemical Physics, 2018, 20, 10240-10246.	1.3	45

#	Article	IF	Citations
2244	Cuscuta reflexa leaf extract mediated green synthesis of the Cu nanoparticles on graphene oxide/manganese dioxide nanocomposite and its catalytic activity toward reduction of nitroarenes and organic dyes. Journal of the Taiwan Institute of Chemical Engineers, 2018, 86, 158-173.	2.7	138
2245	Plasmons in N-doped graphene nanostructures tuned by Au/Ag films: a time-dependent density functional theory study. Physical Chemistry Chemical Physics, 2018, 20, 10439-10444.	1.3	4
2246	A Synthetic Route for the Preparation of Core-Shell Nanoparticles Using a Protective Carbon Layer and Ozone Treatment. Journal of the Electrochemical Society, 2018, 165, F285-F290.	1.3	4
2247	Carbon-Based Metal-Free Electrocatalysis for Energy Conversion, Energy Storage, and Environmental Protection. Electrochemical Energy Reviews, 2018, 1, 84-112.	13.1	153
2248	A review on the heterostructure nanomaterials for supercapacitor application. Journal of Energy Storage, 2018, 17, 181-202.	3.9	129
2249	Nitrogen and Sulfur Coâ€“Doped Hollow Carbon Nanospheres Derived from Surfaceâ€Attached Polyelectrolyte Monolayers. ChemistrySelect, 2018, 3, 3006-3013.	0.7	2
2250	Highly dispersed Co nanoparticles inlayed in S, N-doped hierarchical carbon nanoprisms derived from Co-MOFs as efficient electrocatalysts for oxygen reduction reaction. Catalysis Today, 2018, 318, 126-131.	2.2	36
2251	Nitrogen and sulfur co-doped graphene supported PdW alloys as highly active electrocatalysts for oxygen reduction reaction. International Journal of Hydrogen Energy, 2018, 43, 5530-5540.	3.8	15
2252	The promotion effects of graphitic and pyridinic N combinational doping on graphene for ORR. Applied Surface Science, 2018, 445, 398-403.	3.1	71
2253	Synthesis of pyridinic-N doped carbon nanofibers and its electro-catalytic activity for oxygen reduction reaction. Materials Letters, 2018, 220, 313-316.	1.3	21
2254	Recent advances in the synthesis and modification of carbon-based 2D materials for application in energy conversion and storage. Progress in Energy and Combustion Science, 2018, 67, 115-157.	15.8	271
2255	Emerging Two-Dimensional Nanomaterials for Electrocatalysis. Chemical Reviews, 2018, 118, 6337-6408.	23.0	1,552
2256	Identifying the Active Site of N-Doped Graphene for Oxygen Reduction by Selective Chemical Modification. ACS Energy Letters, 2018, 3, 986-991.	8.8	102
2257	Improved electrochemical performance of ordered mesoporous carbon by incorporating macropores for Liâ'O2 battery cathode. Carbon, 2018, 133, 118-126.	5.4	17
2258	Facile hydrothermal method for synthesizing nitrogen-doped graphene nanoplatelets using aqueous ammonia: dispersion, stability in solvents and thermophysical performances. Materials Research Express, 2018, 5, 035042.	0.8	4
2259	Evaluation of ORR active sites in nitrogen-doped carbon nanofibers by KOH post treatment. Catalysis Today, 2018, 301, 11-16.	2.2	36
2260	Oxygen Reduction Reaction Catalyzed by Small Gold Cluster on h-BN/Au(111) Support. Electrocatalysis, 2018, 9, 182-188.	1.5	14
2261	Noble metal-free Fe N-CNFs as an efficient electrocatalyst for oxygen reduction reaction. International Journal of Hydrogen Energy, 2018, 43, 4746-4753.	3.8	15

#	Article	IF	Citations
2262	Durability of template-free Fe-N-C foams for electrochemical oxygen reduction in alkaline solution. Journal of Power Sources, 2018, 375, 244-254.	4.0	24
2263	Milk powder-derived bifunctional oxygen electrocatalysts for rechargeable Zn-air battery. Energy Storage Materials, 2018, 11, 134-143.	9.5	45
2264	Efficient N-doping of hollow core-mesoporous shelled carbon spheres via hydrothermal treatment in ammonia solution for the electrocatalytic oxygen reduction reaction. Microporous and Mesoporous Materials, 2018, 261, 88-97.	2.2	62
2265	Recent Applications of 2D Inorganic Nanosheets for Emerging Energy Storage System. Chemistry - A European Journal, 2018, 24, 4757-4773.	1.7	52
2266	Feâ€“N co-decorated hierarchically porous graphene as a highly efficient electrocatalyst for the oxygen reduction reaction. Sustainable Energy and Fuels, 2018, 2, 169-174.	2.5	14
2267	Anion exchange membrane fuel cells: Current status and remaining challenges. Journal of Power Sources, 2018, 375, 170-184.	4.0	706
2268	Nitrogen-doped and nanostructured carbons with high surface area for enhanced oxygen reduction reaction. Carbon, 2018, 126, 111-118.	5.4	63
2269	A review of nitrogen-doped graphene catalysts for proton exchange membrane fuel cells-synthesis, characterization, and improvement. Nano Structures Nano Objects, 2018, 15, 140-152.	1.9	39
2270	Straightforward and controllable synthesis of heteroatom-doped carbon dots and nanoporous carbons for surface-confined energy and chemical storage. Energy Storage Materials, 2018, 12, 331-340.	9.5	58
2271	Chemisorption of CO on N-doped graphene on Ni(111). Applied Surface Science, 2018, 428, 775-780.	3.1	18
2272	High performance of N, P co-doped metal-free carbon catalyst derived from ionic liquid for oxygen reduction reaction. Journal of Solid State Electrochemistry, 2018, 22, 519-525.	1.2	19
2273	Creation of Triple Hierarchical Micro-Meso-Macroporous N-doped Carbon Shells with Hollow Cores Toward the Electrocatalytic Oxygen Reduction Reaction. Nano-Micro Letters, 2018, 10, 3.	14.4	99
2274	General Synthesis of Transitionâ€Metal Oxide Hollow Nanospheres/Nitrogenâ€Doped Graphene Hybrids by Metalâ€“Ammine Complex Chemistry for Highâ€Performance Lithiumâ€Ion Batteries. Chemistry - A European Journal, 2018, 24, 2126-2136.	1.7	16
2275	Phosphine-functionalized graphene oxide, a high-performance electrocatalyst for oxygen reduction reaction. Applied Surface Science, 2018, 427, 722-729.	3.1	9
2276	Nitrogen-doped bamboo-like carbon nanotubes with Ni encapsulation for persulfate activation to remove emerging contaminants with excellent catalytic stability. Chemical Engineering Journal, 2018, 332, 398-408.	6.6	199
2277	N-doped carbon nanocages: Bifunctional electrocatalysts for the oxygen reduction and evolution reactions. Nano Research, 2018, 11, 1905-1916.	5.8	73
2278	An efficient carbon catalyst supports with mesoporous graphene-like morphology. Journal of Porous Materials, 2018, 25, 913-921.	1.3	2
2279	Photocatalytic degradation of phenanthrene by graphite oxide-TiO2-Sr(OH)2/SrCO3 nanocomposite under solar irradiation: Effects of water quality parameters and predictive modeling. Chemical Engineering Journal, 2018, 335, 290-300.	6.6	87

#	Article	IF	Citations
2280	Two-dimensional polymer-based nanosheets for electrochemical energy storage and conversion. Journal of Energy Chemistry, 2018, 27, 99-116.	7.1	35
2281	Covalent Organic Framework Electrocatalysts for Clean Energy Conversion. Advanced Materials, 2018, 30, 1703646.	11.1	309
2282	Two- and three-dimensional graphene-based hybrid composites for advanced energy storage and conversion devices. Journal of Materials Chemistry A, 2018, 6, 702-734.	5.2	126
2283	Toward High-Performance Pt-Based Nanocatalysts for Oxygen Reduction Reaction through Organicâ€“Inorganic Hybrid Concepts. Chemistry of Materials, 2018, 30, 2-24.	3.2	65
2284	Mg/Cu bimetallic nanoalloys: Morphologies, electronic structures, and catalysis of O2 dissociation. Journal of Alloys and Compounds, 2018, 735, 1962-1970.	2.8	7
2285	A nitrogen-doped electrocatalyst from metalâ€“organic framework-carbon nanotube composite. Journal of Materials Research, 2018, 33, 538-545.	1.2	16
2286	3D Mesoporous van der Waals Heterostructures for Trifunctional Energy Electrocatalysis. Advanced Materials, 2018, 30, 1705110.	11.1	171
2287	Nitrogen-doped graphene: Synthesis, characterizations and energy applications. Journal of Energy Chemistry, 2018, 27, 146-160.	7.1	254
2288	Covalent Triazine Framework Anchored with Co₃O₄ Nanoparticles for Efficient Oxygen Reduction. ChemElectroChem, 2018, 5, 717-721.	1.7	13
2289	NiCo Alloy Nanoparticles Decorated on Nâ€Doped Carbon Nanofibers as Highly Active and Durable Oxygen Electrocatalyst. Advanced Functional Materials, 2018, 28, 1705094.	7.8	405
2290	Bioinspired Synthesis of Melaninlike Nanoparticles for Highly N-Doped Carbons Utilized as Enhanced CO₂ Adsorbents and Efficient Oxygen Reduction Catalysts. ACS Sustainable Chemistry and Engineering, 2018, 6, 2324-2333.	3.2	14
2291	Hollow Mesoporous Carbon Nanocubes: Rigidâ€Interfaceâ€Induced Outward Contraction of Metalâ€Organic Frameworks. Advanced Functional Materials, 2018, 28, 1705253.	7.8	100
2292	Fe@C2N: A highly-efficient indirect-contact oxygen reduction catalyst. Nano Energy, 2018, 44, 304-310.	8.2	118
2293	N-doped graphdiyne for high-performance electrochemical electrodes. Nano Energy, 2018, 44, 144-154.	8.2	182
2294	Charge-controlled switchable CO adsorption on FeN 4 cluster embedded in graphene. Surface Science, 2018, 668, 117-124.	0.8	21
2295	Bulk Production of Nonâ€Precious Metal Catalysts with High Surface Area and Excellent Activity in the Oxygen Reduction Reaction. ChemElectroChem, 2018, 5, 1854-1861.	1.7	6
2296	Carbon Nanostructured Catalysts as High Efficient Materials for Low Temperature Fuel Cells. , 2018, , 1-28.		1
2297	Facile synthesis of N-doped carbon layer encapsulated Fe2N as an efficient catalyst for oxygen reduction reaction. Carbon, 2018, 127, 636-642.	5.4	77

#	Article	IF	Citations
2298	Biomass-derived N-doped porous carbon as electrode materials for Zn-air battery powered capacitive deionization. Chemical Engineering Journal, 2018, 334, 1270-1280.	6.6	182
2299	Oneâ€Step Synthesis of B/N Coâ€doped Graphene as Highly Efficient Electrocatalyst for the Oxygen Reduction Reaction: Synergistic Effect of Impurities. Chemistry - A European Journal, 2018, 24, 928-936.	1.7	26
2300	Synthesis of N-hydroxy-imidamide-functionalized graphene: an efficient metal-free electrocatalyst for oxygen reduction. Journal of the Iranian Chemical Society, 2018, 15, 111-119.	1.2	6
2301	Reduced-graphene-oxide supported tantalum-based electrocatalysts: Controlled nitrogen doping and oxygen reduction reaction. Applied Surface Science, 2018, 434, 243-250.	3.1	13
2302	Non-covalently functionalized graphene strengthened poly(vinyl alcohol). Materials and Design, 2018, 139, 372-379.	3.3	236
2303	Insights into oxygen reduction reaction (ORR) and oxygen evolution reaction (OER) active sites for nitrogen-doped carbon nanostructures (CNx) in acidic media. Applied Catalysis B: Environmental, 2018, 220, 88-97.	10.8	232
2304	Reduced graphene oxide modified activated carbon for improving power generation of air-cathode microbial fuel cells. Journal of Materials Research, 2018, 33, 1279-1287.	1.2	8
2305	Cobalt Hydroxide/Heteroatom Doped Graphene Composite as Electrocalyst for Oxygen Reduction Reaction. , 2018, , .		0
2306	Oxygen Reduction Catalysts on Nanoparticle Electrodes. , 2018, , 796-811.		5
2307	Electrocatalysis of Oxygen Reduction on Pristine and Heteroatom-Doped Graphene Materials. , 2018, , 497-506.		6
2308	Graphene-Based Nanostructures in Electrocatalytic Oxygen Reduction. , 2018, , 651-659.		4
2309	Electronic properties of boron doped single-layer graphene. AIP Conference Proceedings, 2018, , .	0.3	1
2310	Regioselectivity in hexagonal boron nitride co-doped graphene. New Journal of Chemistry, 2018, 42, 18913-18918.	1.4	15
2311	Enhancement of nitrogen self-doped nanocarbons electrocatalyst via tune-up solution plasma synthesis. RSC Advances, 2018, 8, 35503-35511.	1.7	7
2312	Bioresource derived porous carbon from cottonseed hull for removal of triclosan and electrochemical application. RSC Advances, 2018, 8, 42405-42414.	1.7	15
2313	Multiple heteroatom-doped few-layer carbons for the electrochemical oxygen reduction reaction. Journal of Materials Chemistry A, 2018, 6, 22277-22286.	5.2	81
2314	Reduced graphene oxide intercalated ZnS nanoparticles as an efficient and durable electrocatalyst for the oxygen reduction reaction. New Journal of Chemistry, 2018, 42, 19285-19293.	1.4	12
2315	Enriched graphitic N in nitrogen-doped graphene as a superior metal-free electrocatalyst for the oxygen reduction reaction. New Journal of Chemistry, 2018, 42, 19665-19670.	1.4	82

#	Article	IF	Citations
2316	Growth temperature dependence of nitrogen doped graphene structure on Pt (111) and analysis of its reactivity with oxygen. RSC Advances, 2018, 8, 34309-34313.	1.7	3
2317	Enhanced oxygen reduction on graphene via Y5Si3 electride substrate: A first-principles study. Chinese Journal of Chemical Physics, 2018, 31, 649-654.	0.6	6
2318	Preparation of the natural carbon fiber from narrow-leaved cattails (Typha angustifolia Linn.) flower for using as the cathode catalyst in the zinc-air fuel cell. Materials Today: Proceedings, 2018, 5, 14002-14008.	0.9	2
2319	A Class of High Performance Electrocatalysts for Oxygen Reduction Reaction of Fuel Cells, using Iodine Doped Graphene. Materials Today: Proceedings, 2018, 5, 15915-15922.	0.9	2
2320	Fe-Doped Metal-Organic Frameworks-Derived Electrocatalysts for Oxygen Reduction Reaction in Alkaline Media. Journal of the Electrochemical Society, 2018, 165, F1278-F1285.	1.3	12
2321	An Efficient Electrocatalyst based on Platinum Incorporated into N,S co-doped Porous Graphene for Oxygen Reduction Reaction in Microbial Fuel Cell. International Journal of Electrochemical Science, 2018, 13, 11001-11015.	0.5	3
2322	Recent advances in energy chemistry of precious-metal-free catalysts for oxygen electrocatalysis. Chinese Chemical Letters, 2018, 29, 1757-1767.	4.8	63
2323	Exploring Reaction Mechanisms for the Reduction of NO Molecules over Alâ€•or Siâ€Anchored Graphene Oxide: A Metalâ€Free Approach. ChemistrySelect, 2018, 3, 12072-12079.	0.7	4
2324	Dependence on treatment ion energy of nitrogen plasma for oxygen reduction reaction of high ordered pyrolytic graphite. Japanese Journal of Applied Physics, 2018, 57, 125504.	0.8	2
2325	Boron and Nitrogen Co-doped Graphene Used As Counter Electrode for Iodine Reduction in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2018, 122, 26385-26392.	1.5	31
2326	Fluorographenes for Energy and Sensing Application: The Amount of Fluorine Matters. ACS Omega, 2018, 3, 17700-17706.	1.6	6
2327	Zigzag sp² Carbon Chains Passing through an sp³ Framework: A Driving Force toward Room-Temperature Ferromagnetic Graphene. ACS Nano, 2018, 12, 12847-12859.	7.3	19
2328	Manganese Vanadium Oxideâ€“N-Doped Reduced Graphene Oxide Composites as Oxygen Reduction and Oxygen Evolution Electrocatalysts. ACS Applied Materials & Interfaces, 2018, 10, 44511-44517.	4.0	62
2329	Characteristics and performance of two-dimensional materials for electrocatalysis. Nature Catalysis, 2018, 1, 909-921.	16.1	591
2330	Activation of Reduced-Graphene-Oxide Supported Pt Nanoparticles by Aligning with WO₃-Nanowires toward Oxygen Reduction in Acid Medium: Diagnosis with Rotating-Ring-Disk Voltammetry and Double-Potential-Step Chronocoulometry. Journal of the Electrochemical Society, 2018, 165, J3384-J3391.	1.3	13
2331	A Strategy to Achieve Well-Dispersed Hollow Nitrogen-Doped Carbon Microspheres with Trace Iron for Highly Efficient Oxygen Reduction Reaction in Al-Air Batteries. Journal of the Electrochemical Society, 2018, 165, A3766-A3772.	1.3	8
2332	Constructing Successive Active Sites for Metalâ€free Electrocatalyst with Boosted Electrocatalytic Activities Toward Hydrogen Evolution and Oxygen Reduction Reactions. ChemCatChem, 2018, 10, 5194-5200.	1.8	30
2333	Direct transformation of bulk copper into copper single sites via emitting and trapping of atoms. Nature Catalysis, 2018, 1, 781-786.	16.1	746

#	Article	IF	Citations
2334	Fluorine-doped graphene with an outstanding electrocatalytic performance for efficient oxygen reduction reaction in alkaline solution. Royal Society Open Science, 2018, 5, 180925.	1.1	25
2335	Characterization of Electronic, Electrical, Optical, and Mechanical Properties of Graphene. , 2018, , 805-822.		1
2336	Visible-light driven photocatalyst of CdTe/CdS homologous heterojunction on N-rGO photocatalyst for efficient degradation of 2,4-dichlorophenol. Journal of the Taiwan Institute of Chemical Engineers, 2018, 93, 603-615.	2.7	46
2337	Synthesis and properties of graphene and its 2D inorganic analogues with potential applications. Bulletin of Materials Science, 2018, 41, 1.	0.8	4
2338	N-doped reduced graphene oxide /MnO2 nanocomposite for electrochemical detection of Hg2+ by square wave stripping voltammetry. Electrochimica Acta, 2018, 291, 95-102.	2.6	47
2339	Effect of Acid-Washing on the Nature of Bulk Characteristics of Nitrogen-Doped Carbon Nanostructures as Oxygen Reduction Reaction Electrocatalysts in Acidic Media. Energy & Fuels, 2018, 32, 11038-11045.	2.5	12
2340	Synthesis of Biomassâ€Đerived Carbon Induced by Cellular Respiration in Yeast for Supercapacitor Applications. Chemistry - A European Journal, 2018, 24, 18068-18074.	1.7	35
2341	Ammonia capture by MN₄ (Mâ€‰=â€‰Fe and Ni) clusters embedded in graphene. Journal of Coordination Chemistry, 2018, 71, 3476-3486.	0.8	9
2342	Tungsten-Embedded Graphene: Theoretical Study on a Potential High-Activity Catalyst toward CO Oxidation. Materials, 2018, 11, 1848.	1.3	13
2343	In-situ electrochemical activation of carbon fiber paper for the highly efficient electroreduction of concentrated nitric acid. Electrochimica Acta, 2018, 291, 328-334.	2.6	23
2344	Metal-Free Single Atom Catalyst for N₂ Fixation Driven by Visible Light. Journal of the American Chemical Society, 2018, 140, 14161-14168.	6.6	742
2345	Boron/Nitrogen-Codoped Carbon Nano-Onion Electrocatalysts for the Oxygen Reduction Reaction. ACS Applied Nano Materials, 2018, 1, 5763-5773.	2.4	57
2346	Be3N2 monolayer: A graphene-like two-dimensional material and its derivative nanoribbons. AIP Advances, 2018, 8, .	0.6	17
2347	Defects on carbons for electrocatalytic oxygen reduction. Chemical Society Reviews, 2018, 47, 7628-7658.	18.7	432
2348	Nitrogen-Doped Carbon Nanotubes Encapsulated Cobalt Nanoparticles Hybrids for Highly Efficient Catalysis of Oxygen Reduction Reaction. Journal of the Electrochemical Society, 2018, 165, J3052-J3058.	1.3	12
2349	Synergistic Effect of CuGeO₃/Graphene Composites for Efficient Oxygenâ€“Electrode Electrocatalysts in Liâ€“O₂ Batteries. Advanced Energy Materials, 2018, 8, 1801930.	10.2	37
2350	Molybdenumâ€Based Carbon Hybrid Materials to Enhance the Hydrogen Evolution Reaction. Chemistry - A European Journal, 2018, 24, 18158-18179.	1.7	46
2351	What Matters in Fuel Cell Electrocatalysis?â€”A Theory Perspective. , 2018, , 908-919.		0

#	Article	IF	Citations
2352	Application of Novel Carbonaceous Materials as Support for Fuel Cell Electrocatalysts. , 2018, , 175-213.		2
2353	Flexible Solidâ€State Asymmetric Supercapacitors Based on Nitrogenâ€Doped Graphene Encapsulated Ternary Metalâ€Nitrides with Ultralong Cycle Life. Advanced Functional Materials, 2018, 28, 1804663.	7.8	212
2354	Non-precious nanostructured materials by electrospinning and their applications for oxygen reduction in polymer electrolyte membrane fuel cells. Journal of Power Sources, 2018, 408, 17-27.	4.0	45
2355	Platinum Nanoparticles Dispersed on High-Surface-Area Roelike Nitrogen-Doped Mesoporous Carbon for Oxygen Reduction Reaction. ACS Applied Energy Materials, 2018, 1, 6198-6207.	2.5	12
2356	MOF Derived Catalysts for Oxygen Reduction Reaction in Proton Exchange Membrane Fuel Cell. Key Engineering Materials, 0, 778, 275-282.	0.4	3
2357	Effective Co_xS_y HER Electrocatalysts Fabricated by Inâ€Situ Sulfuration of a Metalâ€Organic Framework. ChemElectroChem, 2018, 5, 3639-3644.	1.7	41
2358	In Situ Molecular-Level Observation of Methanol Catalysis at the Waterâ€“Graphite Interface. ACS Applied Materials & Interfaces, 2018, 10, 34265-34271.	4.0	11
2359	Bread-derived 3D macroporous carbon foams as high performance free-standing anode in microbial fuel cells. Biosensors and Bioelectronics, 2018, 122, 217-223.	5.3	91
2360	Structure-, dimension-, and particle size-engineering toward highly efficient supported nanoparticulate metal catalysts. Journal of Materials Chemistry A, 2018, 6, 18561-18570.	5.2	11
2370	Emerging Materials in Heterogeneous Electrocatalysis Involving Oxygen for Energy Harvesting. ACS Applied Materials & Interfaces, 2018, 10, 33737-33767.	4.0	52
2372	Conducting Copper(I/II)-Metallopolymer for the Electrocatalytic Oxygen Reduction Reaction (ORR) with High Kinetic Current Density. Polymers, 2018, 10, 1002.	2.0	6
2373	Highly dispersed cobalt decorated uniform nitrogen doped graphene derived from polydopamine positioning metal-organic frameworks for highly efficient electrochemical water oxidation. Electrochimica Acta, 2018, 289, 139-148.	2.6	11
2374	One-Step Chemical Vapor Deposition Synthesis of 3D N-doped Carbon Nanotube/N-doped Graphene Hybrid Material on Nickel Foam. Nanomaterials, 2018, 8, 700.	1.9	28
2375	An Efficient Antiâ€poisoning Catalyst against SO_x, NO_x, and PO_x: P, Nâ€Doped Carbon for Oxygen Reduction in Acidic Media. Angewandte Chemie, 2018, 130, 15321-15326.	1.6	27
2376	An Efficient Antiâ€poisoning Catalyst against SO_x, NO_x, and PO_x: P, Nâ€Doped Carbon for Oxygen Reduction in Acidic Media. Angewandte Chemie - International Edition, 2018, 57, 15101-15106.	7.2	122
2377	Large-scale synthesis of free-standing N-doped graphene using microwave plasma. Scientific Reports, 2018, 8, 12595.	1.6	85
2378	Modeling of the in-situ nitrogen (N) doping of graphene-carbon nanotube (CNT) hybrids in a plasma medium and their field emission properties. Physics of Plasmas, 2018, 25, .	0.7	5
2379	Boron-doped graphene as a promising electrocatalyst for NO electrochemical reduction: a computational study. New Journal of Chemistry, 2018, 42, 16346-16353.	1.4	27

#	Article	IF	Citations
2380	Tuning the Electrochemical Properties of Nitrogen-Doped Carbon Aerogels in a Blend of Ammonia and Nitrogen Gases. ACS Applied Energy Materials, 2018, 1, 5043-5053.	2.5	21
2381	Emerging core-shell nanostructured catalysts of transition metal encapsulated by two-dimensional carbon materials for electrochemical applications. Nano Today, 2018, 22, 100-131.	6.2	86
2382	Surface activation of graphene nanoribbons for oxygen reduction reaction by nitrogen doping and defect engineering: An ab initio study. Carbon, 2018, 137, 349-357.	5.4	16
2383	BN co-doped graphene monolayers as promising metal-free catalysts for N 2 O reduction: A DFT study. Chemical Physics Letters, 2018, 705, 44-49.	1.2	26
2384	Synthesis of Carbonâ€“Nitrogenâ€“Phosphorous Materials with an Unprecedented High Amount of Phosphorous toward an Efficient Fireâ€Retardant Material. Angewandte Chemie - International Edition, 2018, 57, 9764-9769.	7.2	28
2385	Synthesis of Carbonâ€“Nitrogenâ€“Phosphorous Materials with an Unprecedented High Amount of Phosphorous toward an Efficient Fireâ€Retardant Material. Angewandte Chemie, 2018, 130, 9912-9917.	1.6	1
2386	Graphene-wrapped nitrogen-doped hollow carbon spheres for high-activity oxygen electroreduction. Materials Chemistry Frontiers, 2018, 2, 1489-1497.	3.2	19
2387	Polyoxotungstate@Carbon Nanocomposites As Oxygen Reduction Reaction (ORR) Electrocatalysts. Langmuir, 2018, 34, 6376-6387.	1.6	41
2388	An Introduction to Nanomaterials. Environmental Chemistry for A Sustainable World, 2018, , 1-58.	0.3	7
2389	Continuous Synthesis of Highly Uniform Noble Metal Nanoparticles over Reduced Graphene Oxide Using Microreactor Technology. ACS Sustainable Chemistry and Engineering, 2018, 6, 8719-8726.	3.2	17
2390	One pot synthesis of nitrogen-doped hollow carbon spheres with improved electrocatalytic properties for sensitive H2O2 sensing in human serum. Sensors and Actuators B: Chemical, 2018, 270, 530-537.	4.0	34
2391	Pyridinic-N-Doped Graphene Paper from Perforated Graphene Oxide for Efficient Oxygen Reduction. ACS Omega, 2018, 3, 5522-5530.	1.6	42
2392	The catalytic activity and mechanism of oxygen reduction reaction on P-doped MoS₂. Physical Chemistry Chemical Physics, 2018, 20, 18184-18191.	1.3	22
2393	Recent advances in electrochemical non-enzymatic glucose sensors â€“ A review. Analytica Chimica Acta, 2018, 1033, 1-34.	2.6	574
2394	Concentric dopant segregation in CVD-grown N-doped graphene single crystals. Applied Surface Science, 2018, 454, 121-129.	3.1	5
2395	Elucidation of role of graphene in catalytic designs for electroreduction of oxygen. Current Opinion in Electrochemistry, 2018, 9, 257-264.	2.5	35
2396	Flash nanoprecipitation of poly(styrene-co-acrylonitrile) colloids in the presence of hydrophobic organoplatinum and their derived Pt-carbon nanocomposites for oxygen reduction reaction. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 552, 118-123.	2.3	5
2397	Atomic dispersion of Fe/Co/N on graphene by ball-milling for efficient oxygen evolution reaction. International Journal of Hydrogen Energy, 2018, 43, 10351-10358.	3.8	44

#	Article	IF	Citations
2398	Improved interfacial floatability of superhydrophobic and compressive S, N co-doped graphene aerogel by electrostatic spraying for highly efficient organic pollutants recovery from water. Applied Surface Science, 2018, 457, 780-788.	3.1	22
2399	CO2-activated porous self-templated N-doped carbon aerogel derived from banana for high-performance supercapacitors. Applied Surface Science, 2018, 457, 477-486.	3.1	118
2400	Recent Advances in Graphene Quantum Dots: Synthesis, Properties, and Applications. Small Methods, 2018, 2, 1800050.	4.6	166
2401	Recent advancements in the development of bifunctional electrocatalysts for oxygen electrodes in unitized regenerative fuel cells (URFCs). Progress in Materials Science, 2018, 98, 108-167.	16.0	37
2402	NiFe LDH nanodots anchored on 3D macro/mesoporous carbon as a high-performance ORR/OER bifunctional electrocatalyst. Journal of Materials Chemistry A, 2018, 6, 14299-14306.	5.2	147
2403	Label-free electrochemiluminescent immunosensor for detection of prostate specific antigen based on mesoporous graphite-like carbon nitride. Talanta, 2018, 188, 729-735.	2.9	25
2404	Graphynes: indispensable nanoporous architectures in carbon flatland. RSC Advances, 2018, 8, 22998-23018.	1.7	31
2405	Effect of pH on the Reduction of Graphene Oxide on its Structure and Oxygen Reduction Capabilities in the Alkaline Media. Electroanalysis, 2018, 30, 1938-1945.	1.5	3
2406	Negatively charged boron nitride nanosheets as a potential metal-free electrocatalyst for the oxygen reduction reaction: a computational study. New Journal of Chemistry, 2018, 42, 12838-12844.	1.4	12
2407	Efficient Capture of Radioactive Strontium from Water Using Magnetic WO₃ Assembled on Grapheme Oxide Nanocomposite. ChemistrySelect, 2018, 3, 6992-6997.	0.7	1
2408	Lignosulfonate biomass derived N and S co-doped porous carbon for efficient oxygen reduction reaction. Sustainable Energy and Fuels, 2018, 2, 1820-1827.	2.5	37
2409	Properties of a granulated nitrogen-doped graphene oxide aerogel. Journal of Non-Crystalline Solids, 2018, 498, 236-243.	1.5	13
2410	Facile Conversion of Radish to Nitrogenâ€Doped Mesoporous Carbon as Effective Metalâ€Free Oxygen Reduction Electrocatalysts. ChemNanoMat, 2018, 4, 954-963.	1.5	15
2411	Ab-initio calculations of electronic and vibrational properties of Sr and Yb intercalated graphene. Optical and Quantum Electronics, 2018, 50, 1.	1.5	3
2412	Co4N/nitrogen-doped graphene: A non-noble metal oxygen reduction electrocatalyst for alkaline fuel cells. Applied Catalysis B: Environmental, 2018, 237, 826-834.	10.8	80
2413	Novel approach towards the synthesis of carbon-based transparent highly effective flame retardant. Carbon, 2018, 139, 205-209.	5.4	75
2414	Single-Doped and Multidoped Transition-Metal (Mn, Fe, Co, and Ni) ZnO and Their Electrocatalytic Activities for Oxygen Reduction Reaction. Inorganic Chemistry, 2018, 57, 9977-9987.	1.9	57
2415	Facile synthesis of silver nanowire-zeolitic imidazolate framework 67 composites as high-performance bifunctional oxygen catalysts. Nanoscale, 2018, 10, 15755-15762.	2.8	44

#	Article	IF	Citations
2416	Three-Dimensional Heteroatom-Doped Nanocarbon for Metal-Free Oxygen Reduction Electrocatalysis: A Review. Catalysts, 2018, 8, 301.	1.6	31
2417	Moltenâ€Saltâ€Assisted Synthesis of 3D Holey Nâ€Doped Graphene as Bifunctional Electrocatalysts for Rechargeable Znâ€“Air Batteries. Small Methods, 2018, 2, 1800144.	4.6	77
2418	Interfaces Between Grapheneâ€Related Materials and MAPbI 3 : Insights from Firstâ€Principles. Advanced Materials Interfaces, 2018, 5, 1800496.	1.9	15
2419	Microporous N,Pâ€Codoped Graphitic Nanosheets as an Efficient Electrocatalyst for Oxygen Reduction in Whole pH Range for Energy Conversion and Biosensing Dissolved Oxygen. Chemistry - A European Journal, 2018, 24, 18487-18493.	1.7	36
2420	3D Edgeâ€Enriched Fe₃C@C Nanocrystals with a Coreâ€“Shell Structure Grown on Reduced Graphene Oxide Networks for Efficient Oxygen Reduction Reaction. ChemSusChem, 2018, 11, 3292-3298.	3.6	25
2421	Carbonâ€Rich Nanomaterials: Fascinating Hydrogen and Oxygen Electrocatalysts. Advanced Materials, 2018, 30, e1800528.	11.1	135
2422	MOF derived carbon based nanocomposite materials as efficient electrocatalysts for oxygen reduction and oxygen and hydrogen evolution reactions. RSC Advances, 2018, 8, 26728-26754.	1.7	75
2423	Metal nanoparticles-grafted functionalized graphene coated with nanostructured polyaniline â€˜hybridâ€™ nanocomposites as high-performance biosensors. Sensors and Actuators B: Chemical, 2018, 274, 85-101.	4.0	25
2424	Laser-induced graphene synthesis of Co3O4 in graphene for oxygen electrocatalysis and metal-air batteries. Carbon, 2018, 139, 880-887.	5.4	91
2425	Tailoring the nanophase-separated morphology of anion exchange membrane by embedding aliphatic chains of different lengths into aromatic main chains. Journal of Membrane Science, 2018, 564, 436-443.	4.1	28
2426	Interactions between Grapheneâ€Based Materials and Water Molecules toward Actuator and Electricityâ€Generator Applications. Small Methods, 2018, 2, 1800108.	4.6	36
2427	Lowâ€Temperature Carbideâ€Mediated Growth of Bicontinuous Nitrogenâ€Doped Mesoporous Graphene as an Efficient Oxygen Reduction Electrocatalyst. Advanced Materials, 2018, 30, e1803588.	11.1	73
2428	Nano casting fabrication of porous N-doped carbon using melamine-formaldehyde resins. AIP Conference Proceedings, 2018, , .	0.3	1
2429	Electronic structure, optical and structural properties of Si, Ni, B and N-doped a carbon nanotube: DFT study. Optik, 2018, 172, 295-301.	1.4	35
2430	A Library of Doped-Graphene Images via Transmission Electron Microscopy. Journal of Carbon Research, 2018, 4, 34.	1.4	21
2431	An Iron-Based Catalyst with Multiple Active Components Synergetically Improved Electrochemical Performance for Oxygen Reduction Reaction. Catalysts, 2018, 8, 243.	1.6	5
2432	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. Energies, 2018, 11, 167.	1.6	20
2433	Electronic Band Structure and Electrocatalytic Performance of Cu₃N Nanocrystals. ACS Applied Nano Materials, 2018, 1, 3673-3681.	2.4	27

#	Article	IF	Citations
2434	Effect of Thermal Treatment on the Atomic Structure and Electrochemical Characteristics of Bimetallic PtCu Coreâ€“Shell Nanoparticles in PtCu/C Electrocatalysts. Journal of Physical Chemistry C, 2018, 122, 17199-17210.	1.5	18
2435	Nitrogen-Containing Functional Groups-Facilitated Acetone Adsorption by ZIF-8-Derived Porous Carbon. Materials, 2018, 11, 159.	1.3	36
2436	Green Synthesis of Three-Dimensional Hybrid N-Doped ORR Electro-Catalysts Derived from Apricot Sap. Materials, 2018, 11, 205.	1.3	8
2437	Aerosol Synthesis of N and N-S Doped and Crumpled Graphene Nanostructures. Nanomaterials, 2018, 8, 406.	1.9	9
2438	Comprehensive Analysis of Trends and Emerging Technologies in All Types of Fuel Cells Based on a Computational Method. Sustainability, 2018, 10, 458.	1.6	32
2439	Graphene oxide liquid crystals: a frontier 2D soft material for graphene-based functional materials. Chemical Society Reviews, 2018, 47, 6013-6045.	18.7	121
2440	Microscopic Electrode Processes in the Four-Electron Oxygen Reduction on Highly Active Carbon-Based Electrocatalysts. ACS Catalysis, 2018, 8, 8162-8176.	5.5	54
2441	A novel route to prepare N-graphene/SnO₂ composite as a high-performance anode for lithium batteries. Dalton Transactions, 2018, 47, 10206-10212.	1.6	12
2442	Computational study of the NO, SO2, and NH3 adsorptions on fragments of 3N-graphene and Al/3N graphene. Journal of Molecular Modeling, 2018, 24, 210.	0.8	6
2443	Embellished hollow spherical catalyst boosting activity and durability for oxygen reduction reaction. Nano Energy, 2018, 51, 745-753.	8.2	33
2444	Hydrothermal and plasma nitrided electrospun carbon nanofibers for amperometric sensing of hydrogen peroxide. Mikrochimica Acta, 2018, 185, 371.	2.5	20
2445	Nanorice-like Structure of Carbon-Doped Hexagonal Boron Nitride as an Efficient Metal-Free Catalyst for Oxygen Electroreduction. ACS Sustainable Chemistry and Engineering, 2018, 6, 11115-11122.	3.2	52
2446	Co₃Fe₇/nitrogen-doped graphene nanoribbons as bi-functional electrocatalyst for oxygen reduction and oxygen evolution. Nanotechnology, 2018, 29, 415402.	1.3	24
2447	Nitrogen-doped graphene and graphene quantum dots: A review onsynthesis and applications in energy, sensors and environment. Advances in Colloid and Interface Science, 2018, 259, 44-64.	7.0	313
2448	Porous nitrogen-doped graphene prepared through pyrolysis of ammonium acetate as an efficient ORR nanocatalyst. International Journal of Hydrogen Energy, 2018, 43, 15941-15951.	3.8	34
2449	Silver sulfide anchored on reduced graphene oxide as a high -performance catalyst for CO 2 electroreduction. Journal of Power Sources, 2018, 398, 83-90.	4.0	74
2450	Investigation of reaction sequence occurring in graphene-assisted chemical etching of Ge surfaces in water. Materials Science in Semiconductor Processing, 2018, 87, 32-36.	1.9	6
2451	Gold nanocatalysts supported on carbon for electrocatalytic oxidation of organic molecules including guanines in DNA. Dalton Transactions, 2018, 47, 14139-14152.	1.6	11

#	Article	IF	Citations
2452	Single-layer graphdiyne-covered Pt(111) surface: improved catalysis confined under two-dimensional overlayer. Journal of Nanoparticle Research, 2018, 20, 1.	0.8	9
2453	Green approach for in-situ growth of highly-ordered 3D flower-like CuS hollow nanospheres decorated on nitrogen and sulfur co-doped graphene bionanocomposite with enhanced peroxidase-like catalytic activity performance for colorimetric biosensing of glucose. Materials Science and Engineering C, 2018, 90, 576-588.	3.8	19
2454	Subâ€50 nm Ironâ€"Nitrogenâ€Doped Hollow Carbon Sphereâ€Encapsulated Iron Carbide Nanoparticles as Efficient Oxygen Reduction Catalysts. Advanced Science, 2018, 5, 1800120.	5.6	187
2455	Enhancement in Oxygen Reduction Reaction Activity of Nitrogenâ€Doped Carbon Nanostructures in Acidic Media through Chlorideâ€Ion Exposure. ChemElectroChem, 2018, 5, 1966-1975.	1.7	16
2456	Co@C Nanoparticle Embedded Hierarchically Porous Nâ€Doped Hollow Carbon for Efficient Oxygen Reduction. Chemistry - A European Journal, 2018, 24, 10178-10185.	1.7	40
2457	Flower-like NiCo2O4 from Ni-Co 1,3,5-benzenetricarboxylate metal organic framework tuned by graphene oxide for high-performance lithium storage. Electrochimica Acta, 2018, 279, 152-160.	2.6	34
2458	Boron-Doped C₃N Monolayer as a Promising Metal-Free Oxygen Reduction Reaction Catalyst: A Theoretical Insight. Journal of Physical Chemistry C, 2018, 122, 20312-20322.	1.5	78
2459	Graphene- and CNTs-based carbocatalysts in persulfates activation: Material design and catalytic mechanisms. Chemical Engineering Journal, 2018, 354, 941-976.	6.6	448
2460	Structure, Activity, and Faradaic Efficiency of Nitrogenâ€Doped Porous Carbon Catalysts for Direct Electrochemical Hydrogen Peroxide Production. ChemSusChem, 2018, 11, 3388-3395.	3.6	148
2461	Structure of graphene and its disorders: a review. Science and Technology of Advanced Materials, 2018, 19, 613-648.	2.8	407
2462	Exclusive sub-lattices for extended and localized states in graphene ribbons: their role in Klein tunneling, disorder and magnetic field effects. Journal of Physics Communications, 2018, 2, 035020.	0.5	2
2463	Single pot fabrication of N doped reduced GO (N-rGO) /ZnO-CuO nanocomposite as an efficient electrode material for supercapacitor application. Vacuum, 2018, 157, 145-154.	1.6	39
2464	TiO₂ nanoparticlesâ€"reduced graphene oxide hybrid: an efficient and durable electrocatalyst toward artificial N₂ fixation to NH₃ under ambient conditions. Journal of Materials Chemistry A, 2018, 6, 17303-17306.	5.2	165
2465	Multifunctionality of Carbon-based Frameworks in Lithium Sulfur Batteries. Electrochemical Energy Reviews, 2018, 1, 403-432.	13.1	42
2466	Heavily Doped and Highly Conductive Hierarchical Nanoporous Graphene for Electrochemical Hydrogen Production. Angewandte Chemie, 2018, 130, 13486-13491.	1.6	10
2467	Heavily Doped and Highly Conductive Hierarchical Nanoporous Graphene for Electrochemical Hydrogen Production. Angewandte Chemie - International Edition, 2018, 57, 13302-13307.	7.2	64
2468	In situ synthesis of sulfur-doped graphene quantum dots decorated carbon nanoparticles hybrid as metal-free electrocatalyst for oxygen reduction reaction. Journal of Materials Science: Materials in Electronics, 2018, 29, 17695-17705.	1.1	19
2469	N-doping of graphene: toward long-term corrosion protection of Cu. Journal of Materials Chemistry A, 2018, 6, 24136-24148.	5.2	68

#	Article	IF	Citations
2470	N, Pâ€doped CoS₂ Embedded in TiO₂ Nanoporous Films for Znâ€“Air Batteries. Advanced Functional Materials, 2018, 28, 1804540.	7.8	93
2471	Experimental and Computational Study of Dopamine as an Electrochemical Probe of the Surface Nanostructure of Graphitized N-Doped Carbon. Journal of Physical Chemistry C, 2018, 122, 20763-20773.	1.5	33
2472	Vertically Aligned N-Doped Diamond/Graphite Hybrid Nanosheets Epitaxially Grown on B-Doped Diamond Films as Electrocatalysts for Oxygen Reduction Reaction in an Alkaline Medium. ACS Applied Materials & Interfaces, 2018, 10, 29866-29875.	4.0	10
2473	Using Multifunctional Polymeric Soft Template for Synthesizing Nitrogen and Phosphorus Coâ€“Doped Mesoporous Carbon Frameworks Electrocatalysts for Oxygen Reduction Reaction. ChemistrySelect, 2018, 3, 9013-9020.	0.7	4
2474	Hybridization Effects of Nitrogen-Doped Grapheneâ€“Carbon Nanotubes and Nano-Onion Carbons on the Electrocatalytic Activity of the Oxygen Reduction Reaction. ECS Journal of Solid State Science and Technology, 2018, 7, M128-M137.	0.9	5
2475	N-doping goes sp-hybridized. Nature Chemistry, 2018, 10, 900-902.	6.6	17
2476	The different influences of graphene quantum dots and N over oxygen reduction reaction. Integrated Ferroelectrics, 2018, 190, 1-7.	0.3	2
2477	Boron Doping and Defect Engineering of Graphene Aerogels for Ultrasensitive NO₂ Detection. Journal of Physical Chemistry C, 2018, 122, 20358-20365.	1.5	41
2478	Metal-free catalysis based on nitrogen-doped carbon nanomaterials: a photoelectron spectroscopy point of view. Beilstein Journal of Nanotechnology, 2018, 9, 2015-2031.	1.5	10
2479	Resolving Challenges of Mass Transport in Non Pt-Group Metal Catalysts for Oxygen Reduction in Proton Exchange Membrane Fuel Cells. Journal of the Electrochemical Society, 2018, 165, F589-F596.	1.3	12
2480	Nanosizedâ€Zincâ€Mediated Selfâ€Gelation of Graphene Oxide under Ambient Conditions. ChemPlusChem, 2018, 83, 947-955.	1.3	1
2481	C_xN_y particles@N-doped porous graphene: a novel cathode catalyst with a remarkable cyclability for Liâ€“O₂ batteries. Nanoscale, 2018, 10, 12763-12770.	2.8	17
2482	Boosting oxygen reduction catalysis with abundant copper single atom active sites. Energy and Environmental Science, 2018, 11, 2263-2269.	15.6	405
2483	Electrical Conductivity of Films Formed by Few-Layer Graphene Structures. Russian Journal of Applied Chemistry, 2018, 91, 388-391.	0.1	2
2484	Synthesis of hydroxyapatite nanoparticles using surface carboxyl-functionalized carbon dots as template. Ceramics International, 2018, 44, 16844-16850.	2.3	8
2485	Adsorption of CO2 on graphene surface modified with defects. Computational Condensed Matter, 2018, 16, e00315.	0.9	19
2486	Facile preparation of biomass-derived bifunctional electrocatalysts for oxygen reduction and evolution reactions. International Journal of Hydrogen Energy, 2018, 43, 8611-8622.	3.8	64
2487	Porous Co₉S₈/Nitrogen, Sulfur-Doped Carbon@Mo₂C Dual Catalyst for Efficient Water Splitting. ACS Applied Materials & Interfaces, 2018, 10, 22291-22302.	4.0	96

#	Article	IF	Citations
2488	Toxicity of Nanomaterials: Exposure, Pathways, Assessment, and Recent Advances. ACS Biomaterials Science and Engineering, 2018, 4, 2237-2275.	2.6	217
2489	Direct reduction of oxygen gas over dendritic carbons with hierarchical porosity: beyond the diffusion limitation. Inorganic Chemistry Frontiers, 2018, 5, 2023-2030.	3.0	6
2490	Multi-element doping design of high-efficient carbocatalyst for electrochemical sensing of cancer cells. Sensors and Actuators B: Chemical, 2018, 273, 108-117.	4.0	28
2491	Strategies toward Highâ€Performance Cathode Materials for Lithiumâ€“Oxygen Batteries. Small, 2018, 14, e1800078.	5.2	86
2492	Graphitic Nitrogen Is Responsible for Oxygen Electroreduction on Nitrogen-Doped Carbons in Alkaline Electrolytes: Insights from Activity Attenuation Studies and Theoretical Calculations. ACS Catalysis, 2018, 8, 6827-6836.	5.5	188
2493	Layered double hydroxide-based core-shell nanoarrays for efficient electrochemical water splitting. Frontiers of Chemical Science and Engineering, 2018, 12, 537-554.	2.3	33
2494	Breaking the scaling relations for oxygen reduction reaction on nitrogen-doped graphene by tensile strain. Carbon, 2018, 139, 129-136.	5.4	23
2495	Silicon-coordinated nitrogen-doped graphene as a promising metal-free catalyst for N₂O reduction by CO: a theoretical study. RSC Advances, 2018, 8, 22322-22330.	1.7	24
2496	Facile synthesis of Co-N-rGO composites as an excellent electrocatalyst for oxygen reduction reaction. Chemical Engineering Science, 2019, 194, 45-53.	1.9	25
2497	Doped and Decorated Carbon Foams for Energy Applications. Nanostructure Science and Technology, 2019, , 175-203.	0.1	2
2498	Metal-free catalytic ozonation on surface-engineered graphene: Microwave reduction and heteroatom doping. Chemical Engineering Journal, 2019, 355, 118-129.	6.6	86
2499	Formation, geometric properties, and surface activities of nSi clusters (nâ€‰=â€‰1â€‰â^'â€‰4) doped graphene as metal-free catalyst. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	1.1	0
2500	Confinement Catalysis with 2D Materials for Energy Conversion. Advanced Materials, 2019, 31, e1901996.	11.1	257
2501	Graphene-based materials. , 2019, , 41-56.		0
2502	Metal-doped graphene nanocomposites and their application in energy storage. , 2019, , 109-120.		1
2503	Catalytic Ozonation of Ketoprofen with In Situ N-Doped Carbon: A Novel Synergetic Mechanism of Hydroxyl Radical Oxidation and an Intra-Electron-Transfer Nonradical Reaction. Environmental Science & Technology, 2019, 53, 10342-10351.	4.6	101
2504	Nickel-tungsten sulfides nanostructures assembled nitrogen-doped graphene as a novel catalyst for effective oxygen reduction reaction. Journal of Electroanalytical Chemistry, 2019, 848, 113343.	1.9	3
2505	Nitrogen cluster doping for high-mobility/conductivity graphene films with millimeter-sized domains. Science Advances, 2019, 5, eaaw8337.	4.7	77

#	Article	IF	Citations
2506	Functionalization of 2D materials for enhancing OER/ORR catalytic activity in Liâ€“oxygen batteries. Communications Chemistry, 2019, 2, .	2.0	61
2507	Functions of hydroxyapatite in fabricating N-doped carbon for excellent catalysts and supercapacitors. Catalysis Science and Technology, 2019, 9, 4952-4960.	2.1	11
2508	Carbon nanotubes, graphene, porous carbon, and hybrid carbon-based materials: synthesis, properties, and functionalization for efficient energy storage. , 2019, , 1-24.		7
2509	Recent progress in carbon-based materials as catalysts for electrochemical and photocatalytic water splitting. , 2019, , 173-200.		2
2510	A promising and new single-atom catalyst for CO oxidation: Si-embedded MoS2 monolayer. Journal of Physics and Chemistry of Solids, 2019, 135, 109123.	1.9	14
2511	Structural and tribological behaviors of graphene nanocrystallited carbon nitride films. Applied Surface Science, 2019, 495, 143591.	3.1	8
2512	Hierarchical carbon material of N-doped carbon quantum dots in-situ formed on N-doped carbon nanotube for efficient oxygen reduction. Applied Surface Science, 2019, 495, 143597.	3.1	37
2513	Photocatalytic disinfection and purification of water employing reduced graphene oxide/TiO₂ composites. Journal of Chemical Technology and Biotechnology, 2019, 94, 3905-3914.	1.6	16
2514	MOF-derived uniform Ni nanoparticles encapsulated in carbon nanotubes grafted on rGO nanosheets as bifunctional materials for lithium-ion batteries and hydrogen evolution reaction. Nanoscale, 2019, 11, 15112-15119.	2.8	42
2515	A review of oxygen reduction mechanisms for metal-free carbon-based electrocatalysts. Npj Computational Materials, 2019, 5, .	3.5	480
2516	Beyond Graphene: Chemistry of Group 14 Graphene Analogues: Silicene, Germanene, and Stanene. ACS Nano, 2019, 13, 8566-8576.	7.3	93
2517	A review on synthesis of graphene, h-BN and MoS2 for energy storage applications: Recent progress and perspectives. Nano Research, 2019, 12, 2655-2694.	5.8	283
2518	Catalytic Activity for Oxygen Reduction Reaction of Ni-Mn-Fe Layered Double Hydroxide-Carbon Gel Composite. Chemistry Letters, 2019, 48, 696-699.	0.7	4
2519	Promotion of the performance of nitrogen-doped graphene by secondary heteroatoms doping in energy transformation and storage. Ionics, 2019, 25, 3499-3522.	1.2	7
2520	Nitrogen-sulphur Co-doped graphenes modified electrospun lignin/polyacrylonitrile-based carbon nanofiber as high performance supercapacitor. Journal of Power Sources, 2019, 437, 226937.	4.0	108
2521	Facile Preparation of Highâ€Content Nâ€Doped CNT Microspheres for Highâ€Performance Lithium Storage. Advanced Functional Materials, 2019, 29, 1904819.	7.8	81
2522	Si-coordinated nitrogen doped graphene: A robust and highly active catalyst for NOâ€¯+â€¯CO reaction. Applied Surface Science, 2019, 494, 659-665.	3.1	9
2523	A comprehensive study on the characteristic spectroscopic features of nitrogen doped graphene. Applied Surface Science, 2019, 495, 143518.	3.1	11

#	Article	IF	Citations
2524	Efficient electrochemical reduction of CO2 to ethanol on Cu nanoparticles decorated on N-doped graphene oxide catalysts. Journal of CO2 Utilization, 2019, 33, 452-460.	3.3	66
2525	Degradation of Cosmetic Microplastics via Functionalized Carbon Nanosprings. Matter, 2019, 1, 745-758.	5.0	306
2526	Oxygen reduction reaction mechanism on a phosporus-doped pyrolyzed graphitic Fe/N/C catalyst. New Journal of Chemistry, 2019, 43, 11408-11418.	1.4	19
2527	Nitrogenâ€Doped Reduced Graphene Oxide Hydrogel Achieved via a Oneâ€Step Hydrothermal Process. ChemNanoMat, 2019, 5, 1144-1151.	1.5	9
2528	Synthesis, Properties, and Applications of Graphene. , 2019, , 25-90.		10
2529	Facile synthesis of iron phthalocyanine functionalized N,Bâ€“doped reduced graphene oxide nanocomposites and sensitive electrochemical detection for glutathione. Sensors and Actuators B: Chemical, 2019, 297, 126756.	4.0	36
2530	One-pot hydrothermal synthesis of heteroatom co-doped with fluorine on reduced graphene oxide for enhanced ORR activity and stability in alkaline media. Materials Chemistry and Physics, 2019, 236, 121804.	2.0	16
2531	Why nitrogen favors oxygen reduction on graphitic materials. Sustainable Energy and Fuels, 2019, 3, 2391-2398.	2.5	13
2532	Genuine four-electron oxygen reduction over precious-metal-free catalyst in alkaline media. Electrochimica Acta, 2019, 319, 382-389.	2.6	18
2533	Fishnet-like Niâ€“Feâ€“N co-modified graphene aerogel catalyst for highly efficient oxygen reduction reaction in an alkaline medium. Journal of Applied Electrochemistry, 2019, 49, 1211-1226.	1.5	3
2534	Nanoengineering Carbon Spheres as Nanoreactors for Sustainable Energy Applications. Advanced Materials, 2019, 31, e1903886.	11.1	251
2535	Seedâ€Initiated Synthesis and Tunable Doping Graphene for Highâ€Performance Photodetectors. Advanced Optical Materials, 2019, 7, 1901388.	3.6	7
2536	Heterogeneous Nitrogenâ€doped Graphene Catalysed HOO^{â˙} Generation via a Nonâ€radical Mechanism for Baseâ€free Dakin Reaction. Advanced Synthesis and Catalysis, 2019, 361, 5210-5216.	2.1	6
2537	Silicon-based carbonaceous electrocatalysts for oxygen reduction and evolution properties in alkaline conditions. SN Applied Sciences, 2019, 1, 1.	1.5	4
2538	Oxygen reduction reaction at few-layer graphene structures obtained via plasma-assisted electrochemical exfoliation of graphite. Journal of Electroanalytical Chemistry, 2019, 851, 113440.	1.9	19
2539	Thermal treated three-dimensional N-doped graphene as efficient metal free-catalyst for oxygen reduction reaction. Journal of Electroanalytical Chemistry, 2019, 853, 113536.	1.9	21
2540	Top-down bottom-up graphene synthesis. Nano Futures, 2019, 3, 042003.	1.0	39
2542	Electrochemical Reduction of N₂ to NH₃ Using a Coâ€Atom Stabilized on Defective Nâ€Doped Graphene: A Computational Study. ChemistrySelect, 2019, 4, 12216-12226.	0.7	14

#	Article	IF	Citations
2543	N doped carbon dots modified needle-like NiCo2O4 supported on graphene as efficient dual-functional electrocatalyst for oxygen reduction and evolution reactions. Journal of Electroanalytical Chemistry, 2019, 855, 113617.	1.9	29
2544	O-Doping Boosts the Electrochemical Oxygen Reduction Activity of a Single Fe Site in Hydrophilic Carbon with Deep Mesopores. ACS Applied Materials & Interfaces, 2019, 11, 45825-45831.	4.0	37
2545	Surface Engineering of Graphene. Carbon Nanostructures, 2019, , .	0.1	5
2546	Two-Dimensional Carbon: A Review of Synthesis Methods, and Electronic, Optical, and Vibrational Properties of Single-Layer Graphene. Journal of Carbon Research, 2019, 5, 67.	1.4	38
2549	Tunable-Deformed Graphene Layers for Actuation. Frontiers in Chemistry, 2019, 7, 725.	1.8	6
2550	Porous Fe, Co, and N-co-doped carbon nanofibers as high-efficiency oxygen reduction catalysts. Journal of Nanoparticle Research, 2019, 21, 1.	0.8	15
2551	Cobaltâ€“Phosphate Catalysts with Reduced Bivalent Co-Ion States and Doped Nitrogen Atoms Playing as Active Sites for Facile Adsorption, Fast Charge Transfer, and Robust Stability in Photoelectrochemical Water Oxidation. ACS Applied Materials & Interfaces, 2019, 11, 44366-44374.	4.0	13
2552	From All-Triazine C₃N₃ Framework to Nitrogen-Doped Carbon Nanotubes: Efficient and Durable Trifunctional Electrocatalysts. ACS Applied Nano Materials, 2019, 2, 7969-7977.	2.4	49
2553	Hydrogen Peroxide Production from Solar Water Oxidation. ACS Energy Letters, 2019, 4, 3018-3027.	8.8	170
2554	Alkali Metal Arenides as a Universal Synthetic Tool for Layered 2D Germanene Modification. Angewandte Chemie, 2019, 131, 16669-16674.	1.6	0
2555	Porous Nitrogenâ€Doped Carbons as Effective Catalysts for Oxygen Reduction Reaction Synthesized from Cellulose and Polyamide. ChemElectroChem, 2019, 6, 5735-5743.	1.7	15
2556	High Areal Capacitance of Nâ€Doped Graphene Synthesized by Arc Discharge. Advanced Functional Materials, 2019, 29, 1905511.	7.8	75
2557	Alkali Metal Arenides as a Universal Synthetic Tool for Layered 2D Germanene Modification. Angewandte Chemie - International Edition, 2019, 58, 16517-16522.	7.2	14
2558	Ten years of carbonâ€based metalâ€free electrocatalysts. , 2019, 1, 19-31.		114
2559	The Preparation of Porous Carbon Materials with High Pyridinicâ€N Doping toward Efficient Oxygen Reduction Reactions. Energy Technology, 2019, 7, 1900610.	1.8	3
2560	Shaddock peel derived nitrogen and phosphorus dual-doped hierarchical porous carbons as high-performance catalysts for oxygen reduction reaction. International Journal of Hydrogen Energy, 2019, 44, 26982-26991.	3.8	19
2561	Role of Graphitic Nitrogen and Ï€â€Conjugated Functional Groups in Selective Oxidation of Alcohols: A DFT based Mechanistic Elucidation. Chemistry - an Asian Journal, 2019, 14, 4798-4806.	1.7	2
2562	One Step Synthesis of Tertiary Coâ€doped Graphene Electrocatalyst Using Microalgae Synechococcus elangatus for Applying in Microbial Fuel Cell. Fuel Cells, 2019, 19, 623-634.	1.5	5

#	Article	IF	Citations
2563	Theory-Driven Design and Targeting Synthesis of a Highly-Conjugated Basal-Plane 2D Covalent Organic Framework for Metal-Free Electrocatalytic OER. ACS Energy Letters, 2019, 4, 2251-2258.	8.8	124
2564	Recent progress in two-dimensional nanomaterials: Synthesis, engineering, and applications. FlatChem, 2019, 18, 100133.	2.8	52
2565	An effective approach for tuning catalytic activity of C3N nanosheets: Chemical-doping with the Si atom. Journal of Molecular Graphics and Modelling, 2019, 92, 320-328.	1.3	7
2566	Porous Fe₂O₃ Modified by Nitrogen-Doped Carbon Quantum Dots/Reduced Graphene Oxide Composite Aerogel as a High-Capacity and High-Rate Anode Material for Alkaline Aqueous Batteries. ACS Applied Materials & Interfaces, 2019, 11, 36970-36984.	4.0	96
2567	Silver Nanoparticles Encapsulated in an N-Doped Porous Carbon Matrix as High-Active Catalysts toward Oxygen Reduction Reaction via Electron Transfer to Outer Graphene Shells. ACS Sustainable Chemistry and Engineering, 2019, 7, 16511-16519.	3.2	17
2568	Three-dimensional interlinked Co3O4-CNTs hybrids as novel oxygen electrocatalyst. Applied Surface Science, 2019, 497, 143818.	3.1	40
2569	Doped graphene and Ag(1â€¯1â€¯1) hybrid material as fuel cell electrode: New insights on interfacial features and oxygen adsorption from dispersion-corrected density functional theory. Computational Materials Science, 2019, 169, 109141.	1.4	2
2570	Decamethylcucurbit[5]uril based supramolecular assemblies as efficient electrocatalysts for the oxygen reduction reaction. Chemical Communications, 2019, 55, 11687-11690.	2.2	4
2571	Sn nanoparticles anchored on N doped porous carbon as an anode for potassium ion batteries. Materials Letters, 2019, 256, 126613.	1.3	30
2572	CO Oxidation Catalyzed by Two-Dimensional Co₃O₄/CeO₂ Nanosheets. ACS Applied Nano Materials, 2019, 2, 5769-5778.	2.4	45
2573	N,O-codoped 3D graphene fibers with densely arranged sharp edges as highly efficient electrocatalyst for oxygen reduction reaction. Journal of Materials Science, 2019, 54, 14495-14503.	1.7	15
2574	B80 Fullerene: A Promising Metal-Free Photocatalyst for Efficient Conversion of CO2 to HCOOH. Journal of Physical Chemistry C, 2019, 123, 24193-24199.	1.5	19
2575	One-pot synthesis of activated porous graphitic carbon spheres with cobalt nanoparticles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 582, 123884.	2.3	11
2576	The adsorption and activation of oxygen molecule on nickel clusters doped graphene-based support by DFT. Molecular Catalysis, 2019, 477, 110547.	1.0	12
2577	Synthesis and characterization of reduced graphene oxide/PEDOT composite as cathode materials for oxygen reduction reaction. Materials Today: Proceedings, 2019, 16, 2023-2029.	0.9	2
2578	Three-dimensional nitrogen and phosphorus co-doped carbon quantum dots/reduced graphene oxide composite aerogels with a hierarchical porous structure as superior electrode materials for supercapacitors. Journal of Materials Chemistry A, 2019, 7, 26311-26325.	5.2	175
2579	Combustion synthesis of N-doped three-dimensional graphene networks using graphene oxideâ€“nitrocellulose composites. Advanced Composites and Hybrid Materials, 2019, 2, 492-500.	9.9	29
2580	In Situ Decoration of Ultrafine Ru Nanocrystals on N-Doped Graphene Tube and Their Applications as Oxygen Reduction and Hydrogen Evolution Catalyst. ACS Applied Energy Materials, 2019, 2, 7330-7339.	2.5	32

#	Article	IF	Citations
2581	Power to methanol technologies via CO₂ recovery: CO₂ hydrogenation and electrocatalytic routes. Reviews in Chemical Engineering, 2019, .	2.3	12
2582	Metal-Free N-Formylation of Amines with CO₂ and Hydrosilane by Nitrogen-Doped Graphene Nanosheets. ACS Applied Materials & Interfaces, 2019, 11, 38838-38848.	4.0	38
2583	Noble metal supported hexagonal boron nitride for the oxygen reduction reaction: a DFT study. Nanoscale Advances, 2019, 1, 132-139.	2.2	29
2584	Observing Single Hollow Porous Carbon Catalyst Collisions for Oxygen Reduction at Gold Nanoband Electrode. ChemPhysChem, 2019, 20, 529-532.	1.0	2
2585	Oxygen reactions on Pt{hkl} in a non-aqueous Na⁺ electrolyte: site selective stabilisation of a sodium peroxy species. Chemical Science, 2019, 10, 2956-2964.	3.7	25
2586	Chemical modification of vertically aligned graphene standing on SiC microspheres for selective oxidation. New Journal of Chemistry, 2019, 43, 514-519.	1.4	3
2587	2D/2D Heterojunctions for Catalysis. Advanced Science, 2019, 6, 1801702.	5.6	224
2588	Decorating g-C₃N₄ Nanosheets with Ti₃C₂ MXene Nanoparticles for Efficient Oxygen Reduction Reaction. Langmuir, 2019, 35, 2909-2916.	1.6	109
2589	Carbothermal-Reduction-Assisted Phosphidation of Cobalt Affords Mesoporous Nitrogen-Doped Carbon-Embedded CoP Nanoelectrocatalysts for the Oxygen Reduction Reaction. ACS Applied Nano Materials, 2019, 2, 643-648.	2.4	13
2590	Activity and Durability of Platinum-Based Electrocatalysts with Tin Oxideâ€“Coated Carbon Aerogel Materials as Catalyst Supports. Electrocatalysis, 2019, 10, 156-172.	1.5	12
2591	Metal-free graphdiyne doped with sp-hybridized boron and nitrogen atoms at acetylenic sites for high-efficiency electroreduction of CO₂ to CH₄ and C₂H₄. Journal of Materials Chemistry A, 2019, 7, 4026-4035.	5.2	87
2592	Boron doped graphene cathode for capacitor via a new one-step method. Ceramics International, 2019, 45, 7095-7101.	2.3	8
2593	Boosted electrocatalytic activity of nitrogen-doped porous carbon triggered by oxygen functional groups. Journal of Colloid and Interface Science, 2019, 541, 133-142.	5.0	23
2594	Single-source precursor synthesis of nitrogen-doped porous carbon for high-performance electrocatalytic ORR application. Ceramics International, 2019, 45, 8354-8361.	2.3	10
2595	Nitrogen-Doped Graphene Oxide Electrocatalysts for the Oxygen Reduction Reaction. ACS Applied Nano Materials, 2019, 2, 1675-1682.	2.4	69
2596	Hollow Nanospheres of Co/Nâ€€ Composite as an Efficient Nonprecious Electrocatalyst for Oxygen Reduction Reaction. ChemistrySelect, 2019, 4, 1700-1705.	0.7	2
2597	Production of Reduced Graphene Oxide Platelets from Graphite Flakes Using the Fenton Reaction as an Alternative to Harmful Oxidizing Agents. Journal of Nanomaterials, 2019, 2019, 1-8.	1.5	7
2598	Grapheneâ€“hBN non-van der Waals vertical heterostructures for four- electron oxygen reduction reaction. Physical Chemistry Chemical Physics, 2019, 21, 3942-3953.	1.3	55

#	Article	IF	Citations
2599	Facile synthesis of N-doped graphene supported porous cobalt molybdenum oxynitride nanodendrites for the oxygen reduction reaction. Nanoscale, 2019, 11, 1205-1216.	2.8	27
2600	A reliable procedure for the preparation of graphene-boron nitride superlattices as large area (cm Ã—) Tj ETQq1 1 0.784314 rgBT /Ove Nanoscale, 2019, 11, 2981-2990.	2.8	9
2602	Engineering Two-Dimensional Materials and Their Heterostructures as High-Performance Electrocatalysts. Electrochemical Energy Reviews, 2019, 2, 373-394.	13.1	74
2603	Photocatalytic H2 generation from aqueous ammonia solution using TiO2 nanowires-intercalated reduced graphene oxide composite membrane under low power UV light. Emergent Materials, 2019, 2, 303-311.	3.2	30
2604	Highly active N,S co-doped hierarchical porous carbon nanospheres from green and template-free method for super capacitors and oxygen reduction reaction. Electrochimica Acta, 2019, 318, 272-280.	2.6	60
2605	Recent advances in metal sulfides: from controlled fabrication to electrocatalytic, photocatalytic and photoelectrochemical water splitting and beyond. Chemical Society Reviews, 2019, 48, 4178-4280.	18.7	810
2606	Untangling Cooperative Effects of Pyridinic and Graphitic Nitrogen Sites at Metalâ€Free Nâ€Doped Carbon Electrocatalysts for the Oxygen Reduction Reaction. Small, 2019, 15, e1902081.	5.2	57
2607	A comprehensive study on electronic structure and optical properties of carbon nanotubes with doped B, Al, Ga, Si, Ge, N, P and As and different diameters. Journal of Alloys and Compounds, 2019, 802, 25-35.	2.8	30
2608	Carbon nanotube@ZIFâ€“derived Fe-N-doped carbon electrocatalysts for oxygen reduction and evolution reactions. Journal of Solid State Electrochemistry, 2019, 23, 2225-2232.	1.2	9
2609	Hydrothermal synthesis of nitrogen, sulfur co-doped graphene and its high performance in supercapacitor and oxygen reduction reaction. Microporous and Mesoporous Materials, 2019, 290, 109556.	2.2	44
2610	Watermelon-like Metallic Co/Graphene-like Nanohybrids from Electrochemical Exfoliation of Anthracite Coal as Superior Oxygen Reduction Reaction Electrocatalyst. ACS Sustainable Chemistry and Engineering, 0, , .	3.2	4
2611	Electrodeposition of nanostructured Ptâ€“Pd bimetallic catalyst on polyaniline-camphorsulfonic acid/graphene nanocomposites for methanol electrooxidation. Journal of Applied Electrochemistry, 2019, 49, 755-765.	1.5	10
2612	Direct synthesis of covalent triazine-based frameworks (CTFs) through aromatic nucleophilic substitution reactions. RSC Advances, 2019, 9, 18008-18012.	1.7	21
2613	Ultrasensitive electrochemical detection of Mycobacterium tuberculosis IS6110 fragment using gold nanoparticles decorated fullerene nanoparticles/nitrogen-doped graphene nanosheet as signal tags. Analytica Chimica Acta, 2019, 1080, 75-83.	2.6	41
2614	Controllable preparation of nitrogen-doped graphitized carbon from molecular precursor as non-metal oxygen evolution reaction electrocatalyst. Applied Surface Science, 2019, 491, 723-734.	3.1	24
2615	An excellent alternative composite modifier for cathode catalysts prepared from bacterial cellulose doped with Cu and P and its utilization in microbial fuel cell. Bioresource Technology, 2019, 289, 121661.	4.8	23
2616	Heterogeneous electron transfer kinetics of defective graphene investigated by scanning electrochemical microscopy. Applied Surface Science, 2019, 491, 553-559.	3.1	8
2617	Tunable stable operating potential window for high-voltage aqueous supercapacitors. Nano Energy, 2019, 63, 103848.	8.2	55

#	Article	IF	Citations
2618	A simple strategy based on a highly fluorinated polymer blended with a fluorinated polymer containing phosphonic acid to improve the properties of PEMFCs. New Journal of Chemistry, 2019, 43, 11141-11147.	1.4	9
2619	Room-temperature photocatalytic methanol fuel cell based on one-dimension semiconductor photoanode: Intrinsic mechanism of photogenerated charge separation. Electrochimica Acta, 2019, 318, 413-421.	2.6	17
2620	Applications of carbon nanotubes and graphene for third-generation solar cells and fuel cells. Nano Materials Science, 2019, 1, 77-90.	3.9	38
2621	Intrinsic Effects of Ruddlesdenâ€Popperâ€Based Bifunctional Catalysts for Highâ€Temperature Oxygen Reduction and Evolution. Advanced Energy Materials, 2019, 9, 1901573.	10.2	58
2622	Compressible Highly Stable 3D Porous MXene/GO Foam with a Tunable High-Performance Stealth Property in the Terahertz Band. ACS Applied Materials & Interfaces, 2019, 11, 25369-25377.	4.0	78
2623	C₆₀-Adsorbed Single-Walled Carbon Nanotubes as Metal-Free, pH-Universal, and Multifunctional Catalysts for Oxygen Reduction, Oxygen Evolution, and Hydrogen Evolution. Journal of the American Chemical Society, 2019, 141, 11658-11666.	6.6	220
2624	Phosphomolybdic Acid coupling with Vulcan XC72 Carbon as Superior Catalyst to Enhance ORR Activity and Performance of MFC. International Journal of Electrochemical Science, 2019, 14, 5613-5628.	0.5	2
2625	AgNi@ZnO nanorods grown on graphene as an anodic catalyst for direct glucose fuel cells. Korean Journal of Chemical Engineering, 2019, 36, 1193-1200.	1.2	8
2626	Metal-free multiporous carbon for electrochemical energy storage and electrocatalysis applications. New Journal of Chemistry, 2019, 43, 11653-11659.	1.4	31
2627	Toward heterostructured transition metal hybrids with highly promoted electrochemical hydrogen evolution. RSC Advances, 2019, 9, 19924-19929.	1.7	4
2628	Oxygen Reduction Reaction Activity of Microwave Mediated Solvothermal Synthesized CeO2/g-C3N4 Nanocomposite. Frontiers in Chemistry, 2019, 7, 403.	1.8	34
2629	Interface Functionalized Mo_xTi_{1â€“x}O_{2â^Î´} Composite via a Postgrowth Modification Approach as High Performance PtRu Catalyst Support for Methanol Electrooxidation. ACS Applied Energy Materials, 2019, 2, 4882-4889.	2.5	3
2630	Flash foam stamp-inspired fabrication of flexible in-plane graphene integrated micro-supercapacitors on paper. Journal of Power Sources, 2019, 433, 226703.	4.0	28
2631	Thermodynamic stability of nitrogen functionalities and defects in graphene and graphene nanoribbons from first principles. Carbon, 2019, 152, 715-726.	5.4	22
2632	Boosting exciton dissociation and molecular oxygen activation by in-plane grafting nitrogen-doped carbon nanosheets to graphitic carbon nitride for enhanced photocatalytic performance. Journal of Colloid and Interface Science, 2019, 553, 59-70.	5.0	26
2633	Self-assembled globular clusters-like cobalt hexacyanoferrate/carbon nanotubes hybrid as efficient nonprecious electrocatalyst for oxygen evolution reaction. Journal of Power Sources, 2019, 434, 126670.	4.0	36
2634	Fabrication of ZnO/N-rGO composite as highly efficient visible-light photocatalyst for 2,4-DCP degradation and H2 evolution. Applied Surface Science, 2019, 488, 611-619.	3.1	48
2635	Carbon-based catalysts for oxygen reduction reaction: A review on degradation mechanisms. Carbon, 2019, 151, 160-174.	5.4	117

#	Article	IF	Citations
2636	Carbon Defect Characterization of Nitrogen-Doped Reduced Graphene Oxide Electrocatalysts for the Two-Electron Oxygen Reduction Reaction. Chemistry of Materials, 2019, 31, 3967-3973.	3.2	85
2637	Thermal Synthesis of FeNi@Nitrogen-Doped Graphene Dispersed on Nitrogen-Doped Carbon Matrix as an Excellent Electrocatalyst for Oxygen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 4075-4083.	2.5	34
2638	Electrochemically Exfoliating Graphite Cathode to N-Doped Graphene Analogue and Its Excellent Al Storage Performance. Journal of the Electrochemical Society, 2019, 166, A1738-A1744.	1.3	5
2639	Metallic cobalt nanoparticles embedded in sulfur and nitrogen co-doped rambutan-like nanocarbons for the oxygen reduction reaction under both acidic and alkaline conditions. Journal of Materials Chemistry A, 2019, 7, 14291-14301.	5.2	37
2640	Electrical Conductivity of Films Formed by Few-Layer Graphene Structures Obtained by Plasma-Assisted Electrochemical Exfoliation of Graphite. International Journal of Electrochemistry, 2019, 2019, 1-6.	2.4	3
2641	A Facile Electrochemical Method for Graphene Nanoplatelets Preparation Using Multiâ€walled Carbon Nanotubes. Fuel Cells, 2019, 19, 202-210.	1.5	7
2642	Robust Design of Dualâ€Phasic Carbon Cathode for Lithiumâ€“Oxygen Batteries. Advanced Functional Materials, 2019, 29, 1902915.	7.8	34
2643	In Situ X-ray Absorption Spectroscopy Studies of Nanoscale Electrocatalysts. Nano-Micro Letters, 2019, 11, 47.	14.4	181
2644	Novel Porous Nitrogen Doped Graphene/Carbon Black Composites as Efficient Oxygen Reduction Reaction Electrocatalyst for Power Generation in Microbial Fuel Cell. Nanomaterials, 2019, 9, 836.	1.9	14
2645	Selenium covalently modified graphene: towards gas sensing. 2D Materials, 2019, 6, 034006.	2.0	4
2646	Graphene-Based Metal-Free Catalysis. NATO Science for Peace and Security Series A: Chemistry and Biology, 2019, , 173-200.	0.5	0
2647	Theoretical insight into the role of pyridinic nitrogen on the catalytic activity of boron-doped graphene towards oxygen reduction reaction. Applied Surface Science, 2019, 492, 826-842.	3.1	20
2648	Efficient reduction of waste water pollution using GO/Î³MnO2/Pd nanocomposite as a highly stable and recoverable catalyst. Separation and Purification Technology, 2019, 225, 33-40.	3.9	49
2649	Chemical etching of silicon assisted by graphene oxide. Japanese Journal of Applied Physics, 2019, 58, 050924.	0.8	11
2650	Oneâ€Step Interfacial Functionalization and Synthesis of Moâ€“Modified TiO 2 Nanocrystalline as Composite PtRu Anode Catalyst Support for DMFCs. ChemistrySelect, 2019, 4, 5055-5063.	0.7	1
2651	Selenium-Coupled Reduced Graphene Oxide as Single-Atom Site Catalyst for Direct Four-Electron Oxygen Reduction Reaction. ACS Applied Energy Materials, 2019, 2, 3624-3632.	2.5	19
2652	MnIII-enriched Î±-MnO2 nanowires as efficient bifunctional oxygen catalysts for rechargeable Zn-air batteries. Energy Storage Materials, 2019, 23, 252-260.	9.5	80
2653	Fine Co nanoparticles encapsulated in N-doped porous carbon for efficient oxygen reduction. New Journal of Chemistry, 2019, 43, 9666-9672.	1.4	5

#	Article	IF	Citations
2654	Glucose-derived carbon supported well-dispersed CrN as competitive oxygen reduction catalysts in acidic medium. Electrochimica Acta, 2019, 314, 202-211.	2.6	12
2655	The electronic structure underlying electrocatalysis of twoâ€dimensional materials. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2019, 9, e1418.	6.2	17
2656	Top-down synthesis of S-doped graphene nanosheets by electrochemical exfoliation of graphite: Metal-free bifunctional catalysts for oxygen reduction and evolution reactions. Electrochimica Acta, 2019, 313, 1-9.	2.6	54
2657	A simple method to fabricate N-doped hierarchical porous carbon for supercapacitors. Clean Energy, 2019, 3, 163-172.	1.5	0
2658	N-Doped 3D Mesoporous Carbon/Carbon Nanotubes Monolithic Catalyst for H₂S Selective Oxidation. ACS Applied Nano Materials, 2019, 2, 3780-3792.	2.4	43
2659	Boosting ORR/OER Activity of Graphdiyne by Simple Heteroatom Doping. Small Methods, 2019, 3, 1800550.	4.6	149
2660	Polyaniline Functionalized Graphene Nanoelectrodes for the Regeneration of PC12 Cells via Electrical Stimulation. International Journal of Molecular Sciences, 2019, 20, 2013.	1.8	16
2661	First-principles calculations of B/N co-doped graphene for sensing NO and NO2 molecules. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 113, 121-129.	1.3	4
2662	Interaction of synthesized nitrogen enriched graphene quantum dots with novel anti-Alzheimerâ€™s drugs: spectroscopic insights. Journal of Biomolecular Structure and Dynamics, 2020, 38, 1-16.	2.0	12
2663	Transition Metal (Fe, Co, Ni) Nanoparticles on Selective Amino-N-Doped Carbon as High-Performance Oxygen Reduction Reaction Electrocatalyst. Nanomaterials, 2019, 9, 742.	1.9	29
2664	Band edge alignment for tuning interfacial charge transfer: a case study of NaTaO3 as photoelectron platform by anchoring CdTe quantum dots. Journal of Nanoparticle Research, 2019, 21, 1.	0.8	3
2665	Insights into nitrogen and boron-co-doped graphene toward high-performance peroxymonosulfate activation: Maneuverable N-B bonding configurations and oxidation pathways. Applied Catalysis B: Environmental, 2019, 253, 419-432.	10.8	163
2666	Poisoning of proton exchange membrane fuel cells by contaminants and impurities: Review of mechanisms, effects, and mitigation strategies. Journal of Power Sources, 2019, 427, 21-48.	4.0	125
2667	Understanding the Role of Interfaces for Water Management in Platinum Group Metal-Free Electrodes in Polymer Electrolyte Fuel Cells. ACS Applied Energy Materials, 2019, 2, 3542-3553.	2.5	31
2668	Stereodefined Codoping of sp-N and S Atoms in Few-Layer Graphdiyne for Oxygen Evolution Reaction. Journal of the American Chemical Society, 2019, 141, 7240-7244.	6.6	198
2669	Universal Method for Producing Reduced Graphene Oxide/Gold Nanoparticles Composites with Controlled Density of Grafting and Long-Term Stability. Nanomaterials, 2019, 9, 602.	1.9	13
2670	Single Mo atom realized enhanced CO2 electro-reduction into formate on N-doped graphene. Nano Energy, 2019, 61, 428-434.	8.2	106
2671	Pd nanoparticle supported reduced graphene oxide and its excellent catalytic activity for the Ullmann Câ€“C coupling reaction in a green solvent. RSC Advances, 2019, 9, 13332-13335.	1.7	9

#	Article	IF	Citations
2672	C₅₉N Heterofullerene: A Promising Catalyst for NO Conversion into N₂O. ChemistrySelect, 2019, 4, 4308-4315.	0.7	6
2673	Triple-Layered Carbon-SiO₂ Composite Membrane for High Energy Density and Long Cycling Liâ€“S Batteries. ACS Nano, 2019, 13, 5900-5909.	7.3	93
2674	B-doped C3N monolayer: a robust catalyst for oxidation of carbon monoxide. Theoretical Chemistry Accounts, 2019, 138, 1.	0.5	20
2675	Hierarchically Coupled Ni:FeOOH Nanosheets on 3D N-Doped Graphite Foam as Self-Supported Electrocatalysts for Efficient and Durable Water Oxidation. ACS Catalysis, 2019, 9, 5025-5034.	5.5	89
2676	Electrochemical performance at sputter-deposited nanocarbon film with different surface nitrogen-containing groups. Nanoscale, 2019, 11, 10239-10246.	2.8	10
2677	Functionalized Carbon Dots on Graphene as Outstanding Nonâ€Metal Bifunctional Oxygen Electrocatalyst. Small, 2019, 15, e1900296.	5.2	58
2678	Hydrogen peroxide generation from O2 electroreduction for environmental remediation: A state-of-the-art review. Chemosphere, 2019, 225, 588-607.	4.2	211
2679	Importance of Electrocatalyst Morphology for the Oxygen Reduction Reaction. ChemElectroChem, 2019, 6, 2600-2614.	1.7	45
2680	Solid-state thermal exfoliation of graphite nano-fibers to edge-nitrogenized graphene nanosheets for oxygen reduction reaction. Journal of Colloid and Interface Science, 2019, 545, 71-81.	5.0	14
2681	Prospects and challenges of graphene based fuel cells. Journal of Energy Chemistry, 2019, 39, 217-234.	7.1	63
2682	Adsorption of Ethene-1,2-Dione on Materials Based on Graphene. Journal of Physical Chemistry C, 2019, 123, 6316-6325.	1.5	1
2683	The mechanism and activity of oxygen reduction reaction on single atom doped graphene: a DFT method. RSC Advances, 2019, 9, 7086-7093.	1.7	31
2684	Electronic Structure Engineering of LiCoO₂ toward Enhanced Oxygen Electrocatalysis. Advanced Energy Materials, 2019, 9, 1803482.	10.2	85
2685	Electrocatalysis of N-doped carbons in the oxygen reduction reaction as a function of pH: N-sites and scaffold effects. Carbon, 2019, 148, 224-230.	5.4	32
2686	Interface-induced controllable synthesis of Cu2O nanocubes for electroreduction CO2 to C2H4. Electrochimica Acta, 2019, 306, 360-365.	2.6	35
2687	Work function-tailored graphene via transition metal encapsulation as a highly active and durable catalyst for the oxygen reduction reaction. Energy and Environmental Science, 2019, 12, 2200-2211.	15.6	141
2688	Metal and Nonmetal Codoped 3D Nanoporous Graphene for Efficient Bifunctional Electrocatalysis and Rechargeable Znâ€“Air Batteries. Advanced Materials, 2019, 31, e1900843.	11.1	236
2689	Recent Progress in Defective Carbonâ€Based Oxygen Electrode Materials for Rechargeable Zinkâ€Air Batteries. Batteries and Supercaps, 2019, 2, 509-523.	2.4	41

#	Article	IF	Citations
2690	Direct Oneâ€pot Synthesis of Carbon Supported Agâ€Pt Alloy Nanoparticles as High Performance Electrocatalyst for Fuel Cell Application. Fuel Cells, 2019, 19, 169-176.	1.5	7
2691	Carbonâ€Based Substrates for Highly Dispersed Nanoparticle and Even Singleâ€Atom Electrocatalysts. Small Methods, 2019, 3, 1900050.	4.6	87
2692	Edge-doping modulation of N, P-codoped porous carbon spheres for high-performance rechargeable Zn-air batteries. Nano Energy, 2019, 60, 536-544.	8.2	247
2693	Modulating the electronic structures and sensing properties of metal and non-metal atoms modified graphene sheets. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 111, 206-217.	1.3	8
2694	Sodium Storage and Electrode Dynamics of Tinâ€“Carbon Composite Electrodes from Bulk Precursors for Sodiumâ€Ion Batteries. Advanced Functional Materials, 2019, 29, 1900790.	7.8	107
2695	Nitrogen-doped graphene fiber webs for multi-battery energy storage. Nanoscale, 2019, 11, 6334-6342.	2.8	38
2696	Mn3O4 nanoparticles@reduced graphene oxide composite: An efficient electrocatalyst for artificial N2 fixation to NH3 at ambient conditions. Nano Research, 2019, 12, 1093-1098.	5.8	93
2697	Light-Induced Tunable n-Doping of Ag-Embedded GO/RGO Sheets in Polymer Matrix. Journal of Physical Chemistry C, 2019, 123, 10557-10563.	1.5	5
2698	Nitrogen (N), Phosphorus (P)-Codoped Porous Carbon as a Metal-Free Electrocatalyst for N₂ Reduction under Ambient Conditions. ACS Applied Materials & Interfaces, 2019, 11, 12408-12414.	4.0	103
2699	Functional graphene film macroscopic assemblies for flexible supercapacitor application. Journal of Physics: Conference Series, 2019, 1168, 022071.	0.3	1
2700	Effect of two-step doping pathway on the morphology, structure, composition, and electrochemical performance of three-dimensional N,S-codoped graphene framework. Journal of Materials Research, 2019, 34, 1993-2002.	1.2	8
2701	Assembly and electrochemistry of carbon nanomaterials at the liquid-liquid interface. Electrochimica Acta, 2019, 308, 307-316.	2.6	7
2702	Chemical vapor deposition-grown carbon nanotubes/graphene hybrids for electrochemical energy storage and conversion. FlatChem, 2019, 15, 100091.	2.8	35
2703	Direct growth of nitrogen-doped graphene films on glass by plasma-assisted hot filament CVD for enhanced electricity generation. Journal of Materials Chemistry A, 2019, 7, 12038-12049.	5.2	36
2704	Surface Compositions of Ptâ€“Pd/Pd(111) Alloys in the Presence of O and OH during Oxygen Reduction Reaction: A First-Principles Study. Journal of the Physical Society of Japan, 2019, 88, 044802.	0.7	2
2705	Fe,N-doped graphene prepared by NH3 plasma with a high performance for oxygen reduction reaction. Catalysis Today, 2019, 337, 97-101.	2.2	21
2706	Direct Electrochemistry and Electrocatalysis of Myoglobin with Copper Benzenetricarboxylate Metal-Organic Frameworks@ Nitrogen-Doped Graphene Composite Modified Electrode. International Journal of Electrochemical Science, 2019, , 2732-2742.	0.5	6
2707	Low-temperature plasma technology for electrocatalysis. Chinese Chemical Letters, 2019, 30, 826-838.	4.8	57

#	Article	IF	Citations
2708	Chemical Dopants on Edge of Holey Graphene Accelerate Electrochemical Hydrogen Evolution Reaction. Advanced Science, 2019, 6, 1900119.	5.6	90
2709	Sensitive nonenzymatic detection of glucose at PtPd/porous holey nitrogen-doped graphene. Journal of Alloys and Compounds, 2019, 792, 50-58.	2.8	32
2710	Magnetic nitrogen-doped reduced graphene oxide as a novel magnetic solid-phase extraction adsorbent for the separation of bisphenol endocrine disruptors in carbonated beverages. Talanta, 2019, 201, 194-203.	2.9	59
2711	Review of Metal Catalysts for Oxygen Reduction Reaction: From Nanoscale Engineering to Atomic Design. CheM, 2019, 5, 1486-1511.	5.8	544
2712	Highly Durable Non-Platinum Catalyst for Protic Ionic Liquid Based Intermediate Temperature PEFCs. Electrochemistry, 2019, 87, 35-46.	0.6	6
2713	Tailoring the electrocatalytic oxygen reduction reaction pathway by tuning the electronic states of single-walled carbon nanotubes. Carbon, 2019, 147, 35-42.	5.4	11
2714	3D Heteroatomâ€Doped Carbon Nanomaterials as Multifunctional Metalâ€Free Catalysts for Integrated Energy Devices. Advanced Materials, 2019, 31, e1805598.	11.1	194
2715	One-Step Construction of Ni/Co-Doped Câ€“N Nanotube Composites as Excellent Cathode Catalysts for Neutral Zincâ€“Air Battery. Nano, 2019, 14, 1950028.	0.5	12
2716	CO₂ Adsorption on the B12N12 Nanocage Encapsulated with Alkali Metals: A Density Functional Study. Nano, 2019, 14, 1950034.	0.5	5
2717	Nonmainstream Outâ€Plane Fluoroâ€and Aminoâ€Cofunctionalized Graphene for a Striking Electrocatalyst: Programming Substitutive/Reductive Defluorination toward Graphite Fluoride. Advanced Materials Interfaces, 2019, 6, 1801699.	1.9	6
2718	Chemical Approaches to Carbonâ€Based Metalâ€Free Catalysts. Advanced Materials, 2019, 31, e1804863.	11.1	90
2719	Progress in Nonmetalâ€Doped Graphene Electrocatalysts for the Oxygen Reduction Reaction. ChemSusChem, 2019, 12, 2133-2146.	3.6	81
2720	Economic Assessment of Nanomaterials in Bio-Electrical Water Treatment. Nanotechnology in the Life Sciences, 2019, , 1-23.	0.4	12
2721	Carbon Nanomaterials for Energy and Biorelated Catalysis: Recent Advances and Looking Forward. ACS Central Science, 2019, 5, 389-408.	5.3	67
2722	Barrier mechanism of nitrogen-doped graphene against atomic oxygen irradiation. Applied Surface Science, 2019, 479, 669-678.	3.1	17
2723	Surface chemical-functionalization of ultrathin two-dimensional nanomaterials for electrocatalysis. Materials Today Energy, 2019, 12, 250-268.	2.5	48
2724	In situ nanoarchitecturing and active-site engineering toward highly efficient carbonaceous electrocatalysts. Nano Energy, 2019, 59, 207-215.	8.2	54
2725	Green, single-pot synthesis of functionalized Na/N/P co-doped graphene nanosheets for high-performance supercapacitors. Journal of Electroanalytical Chemistry, 2019, 837, 30-38.	1.9	26

#	Article	IF	Citations
2726	Functionalized Graphene Nanocomposites in Air Filtration Applications. , 2019, , 65-89.		2
2727	A Lowâ€Cost and Facile Method for the Preparation of Feâ€N/Câ€Based Hybrids with Superior Catalytic Performance toward Oxygen Reduction Reaction. Advanced Materials Interfaces, 2019, 6, 1900273.	1.9	25
2728	Oxygen Reduction Reaction Activity of Nano-Flake Carbon-Deposited Pt75Ni25(111) Surfaces. Electrocatalysis, 2019, 10, 232-242.	1.5	3
2729	Two-Dimensional Materials on the Rocks: Positive and Negative Role of Dopants and Impurities in Electrochemistry. ACS Nano, 2019, 13, 2681-2728.	7.3	62
2730	3D-porous electrocatalytic foam based on Pt@N-doped graphene for high performance and durable polymer electrolyte membrane fuel cells. Sustainable Energy and Fuels, 2019, 3, 996-1011.	2.5	33
2731	Ni nanoparticle supported reduced graphene oxide as a highly active and durable heterogeneous material for coupling reactions. Nanoscale Advances, 2019, 1, 1527-1530.	2.2	15
2732	Boosting the oxygen reduction activity of a nano-graphene catalyst by charge redistribution at the grapheneâ€“metal interface. Nanoscale, 2019, 11, 5038-5047.	2.8	22
2733	Effect of nitrogen-doping configuration in graphene on the oxygen reduction reaction. RSC Advances, 2019, 9, 6035-6041.	1.7	21
2734	Phosphorene: A promising metal free cathode material for proton exchange membrane fuel cell. Applied Surface Science, 2019, 479, 590-594.	3.1	26
2735	Defect chemistry in 2D materials for electrocatalysis. Materials Today Energy, 2019, 12, 215-238.	2.5	110
2736	Graphene based non-noble metal catalyst for oxygen reduction reaction. IOP Conference Series: Earth and Environmental Science, 2019, 384, 012057.	0.2	0
2737	Nitrogen-doped carbon fiber sponges by using different nitrogen precursors: synthesis, characterization, and electrochemical activity. Materials Today Chemistry, 2019, 14, 100200.	1.7	3
2738	Toward a new generation of low cost, efficient, and durable metalâ€“air flow batteries. Journal of Materials Chemistry A, 2019, 7, 26744-26768.	5.2	51
2739	Fast synthesis of highly-oxidized graphene oxide by two-step oxidation process. AIP Conference Proceedings, 2019, , .	0.3	2
2740	Graphene-covered transition metal halide molecules as efficient and durable electrocatalysts for oxygen reduction and evolution reactions. Physical Chemistry Chemical Physics, 2019, 21, 23094-23101.	1.3	8
2741	N-doped hierarchical porous metal-free catalysts derived from covalent triazine frameworks for the efficient oxygen reduction reaction. Catalysis Science and Technology, 2019, 9, 6606-6612.	2.1	23
2742	Catalytic trends of nitrogen doped carbon nanotubes for oxygen reduction reaction. Nanoscale, 2019, 11, 18683-18690.	2.8	27
2743	Recent advances in two-dimensional materials and their nanocomposites in sustainable energy conversion applications. Nanoscale, 2019, 11, 21622-21678.	2.8	201

#	Article	IF	Citations
2744	Biomass-Derived Nickel Phosphide Nanoparticles as a Robust Catalyst for Hydrogen Production by Catalytic Decomposition of C₂H₂ or Dry Reforming of CH₄. ACS Applied Energy Materials, 2019, 2, 8649-8658.	2.5	11
2745	Carbon-Based Nanomaterials as Sustainable Noble-Metal-Free Electrocatalysts. Frontiers in Chemistry, 2019, 7, 759.	1.8	29
2746	Solvation of Pristine Graphene Using Amino Acids: A Molecular Simulation and Experimental Analysis. Journal of Physical Chemistry C, 2019, 123, 30234-30244.	1.5	7
2747	Upgrading the Properties of Reduced Graphene Oxide and Nitrogen-Doped Reduced Graphene Oxide Produced by Thermal Reduction toward Efficient ORR Electrocatalysts. Nanomaterials, 2019, 9, 1761.	1.9	20
2748	Preparation of graphene via modified redox method and its electronic performance. Ferroelectrics, 2019, 551, 251-258.	0.3	2
2749	Anchoring MnCo₂O₄ Nanorods from Bimetal-Organic Framework on rGO for High-Performance Oxygen Evolution and Reduction Reaction. ACS Omega, 2019, 4, 22325-22331.	1.6	22
2750	Broadband Nonlinear Optical Response of InSe Nanosheets for the Pulse Generation From 1 to 2 Î¼m. ACS Applied Materials & Interfaces, 2019, 11, 48281-48289.	4.0	51
2751	Mechanistic insight into electroreduction of carbon dioxide on FeN_x (x = 0â€“4) embedded graphene. Physical Chemistry Chemical Physics, 2019, 21, 23638-23644.	1.3	16
2752	NO reduction over an Al-embedded MoS₂ monolayer: a first-principles study. RSC Advances, 2019, 9, 38973-38981.	1.7	11
2753	Development of Polymer Electrolyte Membranes for Solid Alkaline Fuel Cells. Nanostructure Science and Technology, 2019, , 309-350.	0.1	1
2754	N-, P-, and S-doped graphene-like carbon catalysts derived from onium salts with enhanced oxygen chemisorption for Zn-air battery cathodes. Applied Catalysis B: Environmental, 2019, 241, 442-451.	10.8	284
2755	Heteroatom-doped graphene and its application as a counter electrode in dye-sensitized solar cells. International Journal of Energy Research, 2019, 43, 1702-1734.	2.2	22
2756	Effect of Substitutionally Doped Graphene on the Activity of Metal Nanoparticle Catalysts for the Hydrogen Oxidation Reaction. ACS Catalysis, 2019, 9, 1129-1139.	5.5	34
2757	Magneto-electronic and optical properties of Si-doped graphene. Carbon, 2019, 144, 608-614.	5.4	20
2758	Continuous and Reversible Tuning of Electrochemical Reaction Kinetics on Back-Gated 2D Semiconductor Electrodes: Steady-State Analysis Using a Hydrodynamic Method. Analytical Chemistry, 2019, 91, 1627-1635.	3.2	15
2759	Superoxide Decay Pathways in Oxygen Reduction Reaction on Carbonâ€Based Catalysts Evidenced by Theoretical Calculations. ChemSusChem, 2019, 12, 1133-1138.	3.6	13
2760	Sustainable Carbonaceous Materials Derived from Biomass as Metalâ€Free Electrocatalysts. Advanced Materials, 2019, 31, e1805718.	11.1	102
2761	Nanowireâ€Templated Synthesis of FeN x â€Decorated Carbon Nanotubes as Highly Efficient, Universalâ€pH, Oxygen Reduction Reaction Catalysts. Chemistry - A European Journal, 2019, 25, 2637-2644.	1.7	16

#	Article	IF	Citations
2762	Localized micro-deflagration induced defect-rich N-doped nanocarbon shells for highly efficient oxygen reduction reaction. Carbon, 2019, 145, 411-418.	5.4	20
2763	Biomass derived hierarchical porous carbon materials as oxygen reduction reaction electrocatalysts in fuel cells. Progress in Materials Science, 2019, 102, 1-71.	16.0	129
2764	Designing Carbon-Based Materials for Efficient Electrochemical Reduction of CO₂. Industrial & Engineering Chemistry Research, 2019, 58, 879-885.	1.8	10
2765	Direct patterned growth of intrinsic/doped vertical graphene nanosheets on stainless steel via heating solid precursor films for field emission application. Materials and Design, 2019, 162, 293-299.	3.3	18
2766	Laser-derived graphene: A three-dimensional printed graphene electrode and its emerging applications. Nano Today, 2019, 24, 81-102.	6.2	138
2767	Ultrasound-Assisted Nitrogen and Boron Codoping of Graphene Oxide for Efficient Oxygen Reduction Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 3434-3442.	3.2	49
2768	Doping of Carbon Materials for Metalâ€Free Electrocatalysis. Advanced Materials, 2019, 31, e1804672.	11.1	361
2769	Catalysis with Two-Dimensional Materials Confining Single Atoms: Concept, Design, and Applications. Chemical Reviews, 2019, 119, 1806-1854.	23.0	745
2770	Thermal Sugar Bubbling Preparation of Nâ€Doped Porous Carbon for Highâ€Performance Solidâ€State Znâ€Air Batteries. Batteries and Supercaps, 2019, 2, 373-379.	2.4	21
2771	Self-doped Sargassum spp. derived biocarbon as electrocatalysts for ORR in alkaline media. International Journal of Hydrogen Energy, 2019, 44, 12399-12408.	3.8	25
2772	Introduction to Catalysis. Interface Science and Technology, 2019, , 1-21.	1.6	25
2773	Sp2-carbon dominant carbonaceous materials for energy conversion and storage. Materials Science and Engineering Reports, 2019, 137, 1-37.	14.8	25
2774	Simultaneous determination of dihydroxybenzene isomers at nitrogen-doped graphene surface using fast Fourier transform square wave voltammetry and multivariate calibration. Microchemical Journal, 2019, 145, 596-605.	2.3	20
2775	Synthesis of three dimensional N&S co-doped rGO foam with high capacity and long cycling stability for supercapacitors. Journal of Colloid and Interface Science, 2019, 537, 57-65.	5.0	29
2776	Structural investigation and enhancement of optical, electrical and thermal properties of poly (vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 Materials Research and Technology, 2019, 8, 1111-1120.	2.6	35
2777	Fe-porphyrin carbon matrix as a bifunctional catalyst for oxygen reduction and CO₂ reduction from theoretical perspective. Molecular Physics, 2019, 117, 1805-1812.	0.8	12
2778	Metal and heteroatoms-free carbon soot obtained from atmospheric combustion of naphthalene for sensitive dissolved oxygen reduction reaction and sensing in neutral media. Electrochimica Acta, 2019, 296, 407-417.	2.6	9
2779	Microbial fuel cells: An overview of current technology. Renewable and Sustainable Energy Reviews, 2019, 101, 60-81.	8.2	473

#	Article	IF	Citations
2780	Sulfur, Nitrogen and Fluorine Tripleâ€Doped Metalâ€Free Carbon Electrocatalysts for the Oxygen Reduction Reaction. ChemElectroChem, 2019, 6, 741-747.	1.7	33
2781	Wet-chemistry grafted active pyridinic nitrogen sites on holey graphene edges as high performance ORR electrocatalyst for Zn-AirÂbatteries. Materials Today Energy, 2019, 11, 24-29.	2.5	23
2782	The Absence and Importance of Operando Techniques for Metalâ€Free Catalysts. Advanced Materials, 2019, 31, e1805609.	11.1	25
2783	Carbonâ€Based Metalâ€Free Catalysts for Key Reactions Involved in Energy Conversion and Storage. Advanced Materials, 2019, 31, e1801526.	11.1	273
2784	Metal-free N-doped carbon blacks as excellent electrocatalysts for oxygen reduction reactions. Carbon, 2019, 145, 481-487.	5.4	33
2785	Highly Switchable Adhesion of N-Doped Graphene Interfaces for Robust Micromanipulation. ACS Applied Materials & Interfaces, 2019, 11, 5544-5553.	4.0	7
2786	Well-dispersed Pt nanoparticles on borane-modified graphene oxide and their electrocatalytic performance for oxygen reduction reaction. Journal of Solid State Chemistry, 2019, 271, 168-174.	1.4	5
2787	In-Plane Carbon Lattice-Defect Regulating Electrochemical Oxygen Reduction to Hydrogen Peroxide Production over Nitrogen-Doped Graphene. ACS Catalysis, 2019, 9, 1283-1288.	5.5	216
2788	Electrochemical catalytic mechanism of N-doped graphene for enhanced H2O2 yield and in-situ degradation of organic pollutant. Applied Catalysis B: Environmental, 2019, 245, 583-595.	10.8	204
2789	Deriving Efficient Porous Heteroatomâ€Doped Carbon Electrocatalysts for Hydrazine Oxidation from Transition Metal Ionsâ€Coordinated Casein. Advanced Functional Materials, 2019, 29, 1808486.	7.8	31
2790	A flexible non-precious metal Fe-N/C catalyst for highly efficient oxygen reduction reaction. Nanotechnology, 2019, 30, 144001.	1.3	9
2791	Magnetic Ni-Co alloy encapsulated N-doped carbon nanotubes for catalytic membrane degradation of emerging contaminants. Chemical Engineering Journal, 2019, 362, 251-261.	6.6	164
2792	Ultrapure Graphene Is a Poor Electrocatalyst: Definitive Proof of the Key Role of Metallic Impurities in Graphene-Based Electrocatalysis. ACS Nano, 2019, 13, 1574-1582.	7.3	92
2793	Noble-Metal-Free Iron Nitride/Nitrogen-Doped Graphene Composite for the Oxygen Reduction Reaction. ACS Omega, 2019, 4, 130-139.	1.6	29
2794	Recent Advances of 2D Nanomaterials in the Electrode Materials of Lithium-Ion Batteries. Nano, 2019, 14, 1930001.	0.5	22
2795	Efficient Metalâ€Free Electrocatalysts from Nâ€Doped Carbon Nanomaterials: Monoâ€Doping and Coâ€Doping. Advanced Materials, 2019, 31, e1805121.	11.1	329
2796	Active Sites and Mechanism of Oxygen Reduction Reaction Electrocatalysis on Nitrogenâ€Doped Carbon Materials. Advanced Materials, 2019, 31, e1804297.	11.1	459
2797	Work function, carrier type, and conductivity of nitrogen-doped single-walled carbon nanotube catalysts prepared by annealing via defluorination and efficient oxygen reduction reaction. Carbon, 2019, 142, 518-527.	5.4	28

#	Article	IF	Citations
2798	Rational Design of Carbonâ€Rich Materials for Energy Storage and Conversion. Advanced Materials, 2019, 31, e1804973.	11.1	74
2799	Nitrogen-doped nanocarbons (NNCs): Current status and future opportunities. Current Opinion in Green and Sustainable Chemistry, 2019, 15, 67-76.	3.2	21
2800	N-doped hierarchically porous carbon for highly efficient metal-free catalytic activation of peroxymonosulfate in water: A non-radical mechanism. Chemosphere, 2019, 216, 545-555.	4.2	133
2801	Ultrathin sub-3â€¯nm nitrogen-doped graphene quantum dot layers coated TiO2 nanocomposites as high-performance photocatalysts. Chemical Physics Letters, 2019, 714, 1-5.	1.2	13
2802	Controlled synthesis of graphene via electrochemical route and its use as efficient metal-free catalyst for oxygen reduction. Applied Catalysis B: Environmental, 2019, 243, 373-380.	10.8	39
2803	In situ construction of nitrogen-doped graphene with surface-grown carbon nanotubes as a multifactorial synergistic catalyst for oxygen reduction. Carbon, 2019, 142, 40-50.	5.4	32
2804	High performance non-enzymatic graphene-based glucose fuel cell operated under moderate temperatures and a neutral solution. Journal of the Taiwan Institute of Chemical Engineers, 2019, 95, 48-54.	2.7	15
2805	Edgeâ€Functionalized Graphene Nanoplatelets as Metalâ€Free Electrocatalysts for Dyeâ€Sensitized Solar Cells. Advanced Materials, 2019, 31, e1804440.	11.1	44
2806	Guiding Principles for Designing Highly Efficient Metalâ€Free Carbon Catalysts. Advanced Materials, 2019, 31, e1805252.	11.1	110
2807	Aluminum and Nitrogen Codoped Graphene: Highly Active and Durable Electrocatalyst for Oxygen Reduction Reaction. ACS Catalysis, 2019, 9, 610-619.	5.5	56
2808	Atomic Properties and Electronic Structure. Interface Science and Technology, 2019, , 23-66.	1.6	3
2809	Characterization. Interface Science and Technology, 2019, , 109-151.	1.6	11
2810	Oxygen Reduction Reaction. Interface Science and Technology, 2019, 27, 203-252.	1.6	15
2811	Alcohol Oxidation and Hydrogen Evolution. Interface Science and Technology, 2019, 27, 253-301.	1.6	16
2812	One-step solution combustion synthesis of CuO/Cu2O/C anode for long cycle life Li-ion batteries. Carbon, 2019, 142, 51-59.	5.4	79
2813	Phaseâ€Controlled Cobalt Phosphide Nanoparticles Coupled with N, P, S Coâ€Doped Hollow Carbon Polyhedrons as Efficient Catalysts for Both Alkaline and Acidic Hydrogen Evolution. Energy Technology, 2019, 7, 1800757.	1.8	5
2814	In-situ formation of hierarchical 1D-3D hybridized carbon nanostructure supported nonnoble transition metals for efficient electrocatalysis of oxygen reaction. Applied Catalysis B: Environmental, 2019, 243, 151-160.	10.8	66
2815	Recent progress on graphene-analogous 2D nanomaterials: Properties, modeling and applications. Progress in Materials Science, 2019, 100, 99-169.	16.0	235

#	Article	IF	Citations
2816	Iron promoted nitrogen doped porous graphite for efficient oxygen reduction reaction in alkaline and acidic media. Journal of Alloys and Compounds, 2019, 773, 819-827.	2.8	19
2817	Electronic and Structural Engineering of Carbonâ€Based Metalâ€Free Electrocatalysts for Water Splitting. Advanced Materials, 2019, 31, e1803625.	11.1	229
2818	Reaction milling for scalable synthesis of N, P-codoped covalent organic polymers for metal-free bifunctional electrocatalysts. Chemical Engineering Journal, 2019, 358, 427-434.	6.6	44
2819	In situ palladium/nitrogen-doped ordered mesoporous carbon hybrids as highly active and durable electrocatalysts for oxygen reduction reaction. Journal of Porous Materials, 2019, 26, 371-379.	1.3	8
2820	Iodinated carbon materials for oxygen reduction reaction in proton exchange membrane fuel cell. Scalable synthesis and electrochemical performances. Arabian Journal of Chemistry, 2019, 12, 868-880.	2.3	20
2821	Biomass-derived nanoporous carbons as electrocatalysts for oxygen reduction reaction. Catalysis Today, 2020, 357, 269-278.	2.2	18
2822	Reversible chemical switches of functionalized nitrogen-doped graphene field-effect transistors. Chinese Chemical Letters, 2020, 31, 565-569.	4.8	7
2823	Graphene for Energy Storage and Conversion: Synthesis and Interdisciplinary Applications. Electrochemical Energy Reviews, 2020, 3, 395-430.	13.1	59
2824	Nitrogen-doped carbon enhanced mesoporous TiO2 in photocatalytic remediation of organic pollutants. Research on Chemical Intermediates, 2020, 46, 1065-1076.	1.3	7
2825	Recent development of covalent organic frameworks (COFs): synthesis and catalytic (organic-electro-photo) applications. Materials Horizons, 2020, 7, 411-454.	6.4	291
2826	Boron-, sulfur-, and phosphorus-doped graphene for environmental applications. Science of the Total Environment, 2020, 698, 134239.	3.9	79
2827	Intrinsic properties of nitrogen-rich carbon nitride for oxygen reduction reaction. Applied Surface Science, 2020, 500, 144020.	3.1	21
2828	Co3O4 nanoparticles anchored in MnO2 nanorods as efficient oxygen reduction reaction catalyst for metal-air batteries. Journal of Alloys and Compounds, 2020, 814, 152239.	2.8	28
2829	2D Electrocatalysts for Converting Earthâ€Abundant Simple Molecules into Valueâ€Added Commodity Chemicals: Recent Progress and Perspectives. Advanced Materials, 2020, 32, e1904870.	11.1	76
2830	Dispersed graphene materials of biomedical interest and their toxicological consequences. Advances in Colloid and Interface Science, 2020, 275, 102051.	7.0	27
2831	Metamorphic transformations of nitrogen functionalities: Stabilization of organic nitrogen in anthracite and its effect on Î´15N parameter. Marine and Petroleum Geology, 2020, 112, 104090.	1.5	11
2832	Recent developments in graphene based novel structures for efficient and durable fuel cells. Materials Research Bulletin, 2020, 122, 110674.	2.7	36
2833	Nitrogen-doped carbon nanotubes as a highly active metal-free catalyst for nitrobenzene hydrogenation. Applied Catalysis B: Environmental, 2020, 260, 118105.	10.8	122

#	Article	IF	Citations
2834	N-doped hard carbon nanotubes derived from conjugated microporous polymer for electrocatalytic oxygen reduction reaction. Renewable Energy, 2020, 146, 2270-2280.	4.3	42
2835	Nitrogenâ€Doped Carbon Nanomaterials: Synthesis, Characteristics and Applications. Chemistry - an Asian Journal, 2020, 15, 2282-2293.	1.7	100
2836	Fabrication of eco-friendly carbon microtubes @ nitrogen-doped reduced graphene oxide hybrid as an excellent carbonaceous scaffold to load MnO2 nanowall (PANI nanorod) as bifunctional material for high-performance supercapacitor and oxygen reduction reaction catalyst. Journal of Power Sources, 2020, 447, 227387.	4.0	86
2837	Tuning the type of nitrogen on N-RGO supported on N-TiO2 under ultrasonication/hydrothermal treatment for efficient hydrogen evolution â€“ A mechanistic overview. Ultrasonics Sonochemistry, 2020, 64, 104866.	3.8	11
2838	Improvement of Li-ion batteries energy storage by graphene additive. Energy Reports, 2020, 6, 64-71.	2.5	26
2839	Tailoring the Electrochemical Production of H₂O₂: Strategies for the Rational Design of Highâ€Performance Electrocatalysts. Small, 2020, 16, e1902845.	5.2	114
2840	Robust three-dimensional porous rGO aerogel anchored with ultra-fine Î±-Fe2O3 nanoparticles exhibit dominated pseudocapacitance behavior for superior lithium storage. Journal of Alloys and Compounds, 2020, 816, 152627.	2.8	25
2841	Short-range ordered graphitized-carbon nanotubes with large cavity as high-performance lithium-ion battery anodes. Carbon, 2020, 158, 642-650.	5.4	24
2842	Molecular insight into adsorption affinities of Carmustine drug on boron and nitrogen doped functionalized single-walled carbon nanotubes using density functional theory including dispersion correction calculations and molecular dynamics simulation. Journal of Biomolecular Structure and Dynamics, 2020, 38, 4817-4826.	2.0	2
2843	Effect of atomic oxygen on corrosion and friction and wear behavior of polyimide composites. Journal of Applied Polymer Science, 2020, 137, 48441.	1.3	6
2844	Simple Method for Estimating the Surface Area of Layered Grapheneâ€Based Thin Films. ChemSusChem, 2020, 13, 1613-1620.	3.6	3
2845	Low Mach limit to oneâ€dimensional nonisentropic planar compressible magnetohydrodynamic equations. Mathematical Methods in the Applied Sciences, 2020, 43, 580-599.	1.2	0
2846	Recycling of nitrogen-containing waste diapers for catalytic contaminant oxidation: Occurrence of radical and non-radical pathways. Chemical Engineering Journal, 2020, 384, 123246.	6.6	28
2847	CVD grown nitrogen doped graphene is an exceptional visible-light driven photocatalyst for surface catalytic reactions. 2D Materials, 2020, 7, 015002.	2.0	12
2848	In situ fabrication of hierarchical iron oxide spheres@N-doped 3D porous graphene aerogel for superior lithium storage. Ionics, 2020, 26, 2303-2314.	1.2	13
2849	Boron-doped few-layer graphene nanosheet gas sensor for enhanced ammonia sensing at room temperature. RSC Advances, 2020, 10, 1007-1014.	1.7	46
2850	Magneto-transport properties of B-, Si- and N-doped graphene. Carbon, 2020, 160, 211-218.	5.4	12
2851	Oxygen reduction using a metal-free naphthalene diimide-based covalent organic framework electrocatalyst. Chemical Communications, 2020, 56, 1267-1270.	2.2	56

#	Article	IF	Citations
2852	N-Doped porous tremella-like Fe₃C/C electrocatalysts derived from metalâ€“organic frameworks for oxygen reduction reaction. Dalton Transactions, 2020, 49, 797-807.	1.6	29
2853	Adsorption characteristics and oxygen reduction reactions on pristine and Pt-, Co-decorated antimonenes: a DFT-D study. New Journal of Chemistry, 2020, 44, 1138-1146.	1.4	7
2854	A few-layer InSe-based sensitivity-enhanced photothermal fiber sensor. Journal of Materials Chemistry C, 2020, 8, 132-138.	2.7	15
2855	Dopamine-assisted synthesis of rGO@NiPd@NC sandwich structure for highly efficient hydrogen evolution reaction. Journal of Solid State Electrochemistry, 2020, 24, 137-144.	1.2	5
2856	Activation of graphitic nitrogen sites for boosting oxygen reduction. Carbon, 2020, 159, 611-616.	5.4	30
2857	Direct covalent immobilization of new nitrogen-doped carbon nanodots by electrografting for sensing applications. Carbon, 2020, 159, 303-310.	5.4	28
2858	Synergistic Effect of Nitrogen Dopants on Carbon Nanotubes on the Catalytic Selective Epoxidation of Styrene. ACS Catalysis, 2020, 10, 129-137.	5.5	55
2859	Green, fast, and scalable production of reduced graphene oxide via Taylor vortex flow. Chemical Engineering Journal, 2020, 391, 123482.	6.6	16
2860	The one-pot synthesis of CuNi nanoparticles with a Ni-rich surface for the electrocatalytic methanol oxidation reaction. Dalton Transactions, 2020, 49, 1646-1651.	1.6	39
2861	Vanadium-containing electro and photocatalysts for the oxygen evolution reaction: a review. Journal of Materials Chemistry A, 2020, 8, 2171-2206.	5.2	94
2862	Large-scale production of holey graphite as high-rate anode for lithium ion batteries. Journal of Energy Chemistry, 2020, 48, 122-127.	7.1	30
2864	WN/nitrogen-doped reduced graphite oxide hybrids for triiodide reduction in dye-sensitized solar cells. Research on Chemical Intermediates, 2020, 46, 1705-1714.	1.3	3
2865	N configuration control of N-doped carbon for stabilizing Cu nanoparticles: The synergistic effects on oxy-carbonylation of methanol. Carbon, 2020, 158, 836-845.	5.4	12
2866	CeO 2 Encapsulated by Iron, Sulfur, and Nitrogenâ€Doped Carbons for Enhanced Oxygen Reduction Reaction Catalytic Activity. ChemElectroChem, 2020, 7, 642-648.	1.7	14
2867	Induced magnetism in oxygen-decorated N-doped graphene. Carbon, 2020, 159, 102-109.	5.4	7
2868	Comparing the oxygen reduction reaction on selectively edge halogen doped graphene from quantum mechanics. Journal of Catalysis, 2020, 381, 295-307.	3.1	5
2869	A Mechanochemicalâ€Assisted Synthesis of Boron, Nitrogen Coâ€Doped Porous Carbons as Metalâ€Free Catalysts. Chemistry - A European Journal, 2020, 26, 2041-2050.	1.7	12
2870	CoTiO3/NrGO nanocomposites for oxygen evolution and oxygen reduction reactions: Synthesis and electrocatalytic performance. Electrochimica Acta, 2020, 331, 135396.	2.6	30

#	Article	IF	Citations
2871	Liquefied Sunshine: Transforming Renewables into Fertilizers and Energy Carriers with Electromaterials. Advanced Materials, 2020, 32, e1904804.	11.1	49
2872	Recent Progress in Twoâ€Dimensional Ferroelectric Materials. Advanced Electronic Materials, 2020, 6, 1900818.	2.6	236
2873	Experimental and theoretical evidence of P-type conduction in fluorinated hexagonal boron nitride nano-sheets. Ceramics International, 2020, 46, 7298-7305.	2.3	6
2874	Oxygen and nitrogen co-doped ordered mesoporous carbon materials enhanced the electrochemical selectivity of O2 reduction to H2O2. Journal of Colloid and Interface Science, 2020, 562, 540-549.	5.0	46
2875	Progress and Challenges Toward the Rational Design of Oxygen Electrocatalysts Based on a Descriptor Approach. Advanced Science, 2020, 7, 1901614.	5.6	133
2876	3D Carbon Materials for Efficient Oxygen and Hydrogen Electrocatalysis. Advanced Energy Materials, 2020, 10, 1902494.	10.2	97
2877	Carbon Materials Derived from Poly(aniline-co-p-phenylenediamine) Cryogels. Polymers, 2020, 12, 11.	2.0	8
2878	Cuprum Metal-Organic-Framework and Polyacrylonitrile-Derived Cu-N-C Electrocatalyst for Application in Zinc-Air Batteries. Nano, 2020, 15, 2050012.	0.5	4
2879	A MOF derived Co-NC@CNT composite with a 3D interconnected conductive carbon network as a highly efficient cathode catalyst for Liâ€“O₂ batteries. Sustainable Energy and Fuels, 2020, 4, 6105-6111.	2.5	13
2880	Oxygenâ€“nitrogenâ€“sulfur self-doping hierarchical porous carbon derived from lotus leaves for high-performance supercapacitor electrodes. Journal of Power Sources, 2020, 479, 228799.	4.0	69
2881	A highly efficient photocatalytic methanol fuel cell based on non-noble metal photoelectrodes: Study on its energy band engineering via experimental and density functional theory method. Journal of Power Sources, 2020, 478, 228756.	4.0	19
2882	Ab initio study of oxygen evolution reaction and hydrogen evolution reaction via water splitting on pure and nitrogen-doped graphene surface. Materials Today Communications, 2020, 25, 101602.	0.9	6
2883	Single-Atom Catalysts across the Periodic Table. Chemical Reviews, 2020, 120, 11703-11809.	23.0	690
2884	Enhancing the performance of microbial desalination cells using Î´MnO2/graphene nanocomposite as a cathode catalyst. Journal of Water Reuse and Desalination, 2020, 10, 214-226.	1.2	19
2885	Shale-oil-based nitrogen-doped porous carbon as efficient metal-free electrocatalyst for oxygen reduction reaction. Catalysis Communications, 2020, 146, 106131.	1.6	4
2886	Oâ€“Nâ€“S Self-Doped Hierarchical Porous Carbon Synthesized from Lotus Leaves with High Performance for Dye Adsorption. ACS Omega, 2020, 5, 27032-27042.	1.6	8
2887	A facile synthesis of zeolitic analcime/spongy graphene nanocomposites as novel hybrid electrodes for symmetric supercapacitors. Journal of Energy Storage, 2020, 32, 101953.	3.9	3
2888	MnS-Nanoparticles-Decorated Three-Dimensional Graphene Hybrid as Highly Efficient Bifunctional Electrocatalyst for Hydrogen Evolution Reaction and Oxygen Reduction Reaction. Catalysts, 2020, 10, 1141.	1.6	9

#	Article	IF	Citations
2889	Constructing Niâ€“Mo2C Nanohybrids Anchoring on Highly Porous Carbon Nanotubes as Efficient Multifunctional Electrocatalysts. Nano, 2020, 15, 2050135.	0.5	4
2890	A review of advanced metal-free carbon catalysts for oxygen reduction reactions towards the selective generation of hydrogen peroxide. Journal of Materials Chemistry A, 2020, 8, 20849-20869.	5.2	88
2891	Recent Progress on Two-dimensional Electrocatalysis. Chemical Research in Chinese Universities, 2020, 36, 611-621.	1.3	140
2892	Covalent modification of reduced graphene oxide with piperazine as a novel nanoadsorbent for removal of H2S gas. Research on Chemical Intermediates, 2020, 46, 4447-4463.	1.3	6
2893	Efficient electro-catalytic oxidation of ethylene glycol using flower-like graphitic carbon nitride/iron oxide/palladium nanocomposite for fuel cell application. Fuel, 2020, 280, 118646.	3.4	35
2894	Carbon-based materials for photo- and electrocatalytic synthesis of hydrogen peroxide. Nanoscale, 2020, 12, 16008-16027.	2.8	63
2895	Templated N-Doped Carbons for Energy Storage and Conversion. ECS Transactions, 2020, 97, 803-816.	0.3	0
2896	Unique structural advances of graphdiyne for energy applications. EnergyChem, 2020, 2, 100041.	10.1	48
2897	Evaluating Potential Catalytic Active Sites on Nitrogen-Doped Graphene for the Oxygen Reduction Reaction: An Approach Based on Constant Electrode Potential Density Functional Theory Calculations. Journal of Physical Chemistry C, 2020, 124, 25675-25685.	1.5	8
2898	The Dual Capacity Contribution Mechanism of SnSbâ€Anchored Nitrogenâ€Doped 3D Reduced Graphene Oxide Enhances the Performance of Sodiumâ€Ion Batteries. ChemElectroChem, 2020, 7, 4663-4671.	1.7	5
2899	NaClâ€Promoted Hierarchically Porous Carbon Selfâ€Coâ€Doped with Iron and Nitrogen for Efficient Oxygen Reduction. ChemistrySelect, 2020, 5, 13703-13710.	0.7	1
2900	Steadyâ€State Electrocatalytic Activity Evaluation with the Redox Competition Mode of Scanning Electrochemical Microscopy: A Gold Probe and a Boronâ€Doped Diamond Substrate. ChemElectroChem, 2020, 7, 4633-4640.	1.7	10
2901	A Review of Strategies for the Synthesis of N-Doped Graphene-Like Materials. Nanomaterials, 2020, 10, 2286.	1.9	40
2902	Copper- and Nitrogen-Codoped Graphene with Versatile Catalytic Performances for Fenton-Like Reactions and Oxygen Reduction Reaction. Catalysts, 2020, 10, 1326.	1.6	1
2903	Elucidating the Role of Oxideâ€“Oxide/Carbon Interfaces of CuO_xâ€“CeO₂/C in Boosting Electrocatalytic Performance. Langmuir, 2020, 36, 15141-15152.	1.6	25
2904	Enhanced Oxygen Reduction Catalysis of Carbon Nanohybrids from Nitrogen-Rich Edges. Langmuir, 2020, 36, 13752-13758.	1.6	5
2905	Iron Phthalocyanine/Graphene Composites as Promising Electrocatalysts for the Oxygen Reduction Reaction. Energies, 2020, 13, 4073.	1.6	15
2906	Surface-defect-engineered photocatalyst for nitrogen fixation into value-added chemical feedstocks. Catalysis Science and Technology, 2020, 10, 6098-6110.	2.1	41

#	Article	IF	Citations
2908	Efficient bi-directional OER/ORR catalysis of metal-free C6H4NO2/g-C3N4: Density functional theory approaches. Applied Surface Science, 2020, 531, 147292.	3.1	18
2909	Recent progress of graphene based nanomaterials in bioelectrochemical systems. Science of the Total Environment, 2020, 749, 141225.	3.9	105
2910	Towards novel building materials: High-strength nanocomposites based on graphene, graphite oxide and magnesium oxychloride. Applied Materials Today, 2020, 20, 100766.	2.3	24
2911	Novel magnetic and transport properties of FePP@GNP bilayers formed by Fe-porphyrin embedded into graphene nanopieces. Materials Chemistry and Physics, 2020, 254, 123547.	2.0	1
2912	A computational evaluation of MoS₂-based materials for the electrocatalytic oxygen reduction reaction. New Journal of Chemistry, 2020, 44, 14189-14197.	1.4	14
2913	Oneâ€pot synthesis of multifunctional electrocatalyst for hydrogen evolution, oxygen evolution and oxygen reduction. ChemCatChem, 2020, 12, 5534-5539.	1.8	4
2914	Analysis of reaction pathways and catalytic sites on metal-free porous biochar for persulfate activation process. Chemosphere, 2020, 261, 127747.	4.2	45
2915	Tailoring the performance of mechanically robust highly conducting Silver/3D graphene aerogels with superior electromagnetic shielding effectiveness. Diamond and Related Materials, 2020, 109, 108043.	1.8	11
2916	Oxygen Activation on Four-Atom Metal Clusters and Alloys. Journal of Structural Chemistry, 2020, 61, 515-522.	0.3	0
2917	Broadband dielectric spectroscopy and small-angle neutron scattering investigations of polyurethaneâ€“graphene foams. Journal of Materials Science: Materials in Electronics, 2020, 31, 15843-15851.	1.1	1
2918	Advances and Trends in Chemically Doped Graphene. Advanced Materials Interfaces, 2020, 7, 2000999.	1.9	58
2919	Advanced Electrocatalysts with Single-Metal-Atom Active Sites. Chemical Reviews, 2020, 120, 12217-12314.	23.0	563
2920	Interactions, electronic and optical properties of nanographeneâ€“peptide complexes: a theoretical study. RSC Advances, 2020, 10, 38654-38662.	1.7	1
2921	Methylamine terminated molecules on Ni(1 1 1): A path to low temperature synthesis of nitrogen-doped graphene. FlatChem, 2020, 24, 100205.	2.8	4
2922	Enhancing oxygen reduction reaction in air-cathode microbial fuel cells treating wastewater with cobalt and nitrogen co-doped ordered mesoporous carbon as cathode catalysts. Environmental Research, 2020, 191, 110195.	3.7	10
2923	N-Doped Graphene Oxide Nanoparticles Studied by EPR. Applied Magnetic Resonance, 2020, 51, 1481-1495.	0.6	6
2924	Enhanced Fuel Decomposition in the Presence of Colloidal Functionalized Graphene Sheet-Supported Platinum Nanoparticles. ACS Applied Energy Materials, 2020, 3, 7637-7648.	2.5	8
2925	Influence of pyrrolic and pyridinic-N in the size and distribution behaviour of Pd nanoparticles and ORR mechanism. Applied Surface Science, 2020, 533, 147500.	3.1	22

#	Article	IF	Citations
2926	Graphitic-N-rich N-doped graphene as a high performance catalyst for oxygen reduction reaction in alkaline solution. International Journal of Hydrogen Energy, 2020, 45, 32402-32412.	3.8	40
2927	Flexible Graphene Based Polymeric Electrodes for Low Energy Applications. , 2020, , .		3
2928	Enhanced heterogenous hydration of SO 2 through immobilization of pyridinic-N on carbon materials. Royal Society Open Science, 2020, 7, 192248.	1.1	1
2929	Recent advances in nanostructured transition metal nitrides for fuel cells. Journal of Materials Chemistry A, 2020, 8, 20803-20818.	5.2	45
2930	Graphite Intercalation Compounds Derived by Green Chemistry as Oxygen Reduction Reaction Catalysts. ACS Applied Materials & Interfaces, 2020, 12, 42678-42685.	4.0	18
2931	Preparation and physicochemical properties of nitrogen-doped graphene inks. New Carbon Materials, 2020, 35, 444-451.	2.9	7
2932	Hole-punching for enhancing electrocatalytic activities of 2D graphene electrodes: Less is more. Journal of Chemical Physics, 2020, 153, 074701.	1.2	2
2933	Atomic-Level Functionalized Graphdiyne for Electrocatalysis Applications. Catalysts, 2020, 10, 929.	1.6	11
2934	Bacterial Celluloseâ€"Graphene Based Nanocomposites. International Journal of Molecular Sciences, 2020, 21, 6532.	1.8	31
2935	Atomic-Level Electronic Properties of Carbon Nitride Monolayers. ACS Nano, 2020, 14, 14008-14016.	7.3	22
2936	Nitrogen-doped vertical graphene nanosheets by high-flux plasma enhanced chemical vapor deposition as efficient oxygen reduction catalysts for Znâ€"air batteries. Journal of Materials Chemistry A, 2020, 8, 23248-23256.	5.2	30
2937	Interaction of modified nucleic bases with graphene and doped graphenes: a DFT study. Bulletin of Materials Science, 2020, 43, 1.	0.8	2
2938	Modified graphene supported Agâ€"Cu NPs with enhanced bimetallic synergistic effect in oxidation and Chanâ€"Lam coupling reactions. RSC Advances, 2020, 10, 30048-30061.	1.7	14
2939	A universal descriptor based on p_z-orbitals for the catalytic activity of multi-doped carbon bifunctional catalysts for oxygen reduction and evolution. Nanoscale, 2020, 12, 19375-19382.	2.8	28
2940	Gel Electrocatalysts: An Emerging Material Platform for Electrochemical Energy Conversion. Advanced Materials, 2020, 32, e2003191.	11.1	78
2941	Disperse Multimetal Atom-Doped Carbon as Efficient Bifunctional Electrocatalysts for Oxygen Reduction and Evolution Reactions: Design Strategies. Journal of Physical Chemistry C, 2020, 124, 27387-27395.	1.5	16
2942	Reactive Plasma N-Doping of Amorphous Carbon Electrodes: Decoupling Disorder and Chemical Effects on Capacitive and Electrocatalytic Performance. Frontiers in Chemistry, 2020, 8, 593932.	1.8	4
2943	Carbon Nitride Anchored on a Nitrogen-Doped Carbon Nanotube Surface for Enhanced Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2020, 12, 56954-56962.	4.0	19

#	Article	IF	Citations
2944	Plasmonic nitriding of graphene on a graphite substrate via gold nanoparticles and NH3/Ar plasma. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	0.9	1
2945	Recent advances in grapheneâ€based materials for fuel cell applications. Energy Science and Engineering, 2021, 9, 958-983.	1.9	93
2946	Heteroatom doped graphene engineering for energy storage and conversion. Materials Today, 2020, 39, 47-65.	8.3	400
2947	Identification of Active Sites of Pure and Nitrogen-Doped Carbon Materials for Oxygen Reduction Reaction Using Constant-Potential Calculations. Journal of Physical Chemistry C, 2020, 124, 12016-12023.	1.5	73
2948	Optimizing the structural design of a nanocomposite catalyst layer for PEM fuel cells for improving mass-specific power density. Nanoscale, 2020, 12, 13858-13878.	2.8	28
2949	Recent advances in photodynamic therapy based on emerging two-dimensional layered nanomaterials. Nano Research, 2020, 13, 1485-1508.	5.8	36
2950	Advancement of Platinum (Pt)-Free (Non-Pt Precious Metals) and/or Metal-Free (Non-Precious-Metals) Electrocatalysts in Energy Applications: A Review and Perspectives. Energy & Fuels, 2020, 34, 6634-6695.	2.5	100
2951	Recent Advancement of pâ€•and dâ€Block Elements, Single Atoms, and Grapheneâ€Based Photoelectrochemical Electrodes for Water Splitting. Advanced Energy Materials, 2020, 10, 2000280.	10.2	88
2952	Large-Scale Electric-Field Confined Silicon with Optimized Charge-Transfer Kinetics and Structural Stability for High-Rate Lithium-Ion Batteries. ACS Nano, 2020, 14, 7066-7076.	7.3	114
2953	Synthesis, properties and potential applications of hydrogenated graphene. Chemical Engineering Journal, 2020, 397, 125408.	6.6	33
2954	Efficient H2O2 generation and spontaneous OH conversion for in-situ phenol degradation on nitrogen-doped graphene: Pyrolysis temperature regulation and catalyst regeneration mechanism. Journal of Hazardous Materials, 2020, 397, 122681.	6.5	47
2955	Understanding active sites and mechanism of oxygen reduction reaction on FeN4â€“doped graphene from DFT study. International Journal of Hydrogen Energy, 2020, 45, 15465-15475.	3.8	21
2956	Performance improvement of N-doped carbon ORR catalyst via large through-hole structure. Nanotechnology, 2020, 31, 335717.	1.3	19
2957	Active N dopant states of electrodes regulate extracellular electron transfer of Shewanella oneidensis MR-1 for bioelectricity generation: Experimental and theoretical investigations. Biosensors and Bioelectronics, 2020, 160, 112231.	5.3	15
2958	Unique hole-accepting carbon-dots promoting selective carbon dioxide reduction nearly 100% to methanol by pure water. Nature Communications, 2020, 11, 2531.	5.8	168
2959	Chemistry of Germanene: Surface Modification of Germanane Using Alkyl Halides. ACS Nano, 2020, 14, 7319-7327.	7.3	26
2960	Self-grown one-dimensional nickel sulfo-selenide nanostructured electrocatalysts for water splitting reactions. International Journal of Hydrogen Energy, 2020, 45, 15904-15914.	3.8	25
2961	One-step plasma electrochemical synthesis and oxygen electrocatalysis of nanocomposite of few-layer graphene structures with cobalt oxides. Materials Today Energy, 2020, 17, 100459.	2.5	8

#	Article	IF	Citations
2962	Controlled synthesis of N-type single-walled carbon nanotubes with 100% of quaternary nitrogen. Carbon, 2020, 167, 881-887.	5.4	22
2963	Materials Electrochemistsâ€™ Never-Ending Quest for Efficient Electrocatalysts: The Devil Is in the Impurities. ACS Catalysis, 2020, 10, 7087-7092.	5.5	41
2964	Heteroatom-doped C₃N as a promising metal-free catalyst for a high-efficiency carbon dioxide reduction reaction. New Journal of Chemistry, 2020, 44, 11824-11828.	1.4	6
2965	Carbonized polyaniline bridging nanodiamond-graphene hybrids for enhanced microwave absorptions with ultrathin thickness. Nanotechnology, 2020, 31, 415701.	1.3	11
2966	Origin of Ubiquitous Stripes at the Graphiteâ€“Water Interface. Langmuir, 2020, 36, 7789-7794.	1.6	14
2967	First-principles study of the oxygen reduction reaction on the boron-doped C9N4 metal-free catalyst. Applied Surface Science, 2020, 527, 146828.	3.1	16
2968	Transfer-Free Growth of Bi₂O₂Se on Silicon Dioxide via Chemical Vapor Deposition. ACS Applied Electronic Materials, 2020, 2, 2123-2131.	2.0	18
2969	Boosting areal energy density of 3D printed all-solid-state flexible microsupercapacitors via tailoring graphene composition. Energy Storage Materials, 2020, 30, 412-419.	9.5	38
2970	Electrochemical sensors based on nitrogen-doped reduced graphene oxide for the simultaneous detection of ascorbic acid, dopamine and uric acid. Journal of Alloys and Compounds, 2020, 842, 155873.	2.8	111
2971	Boron and nitrogen doping in graphene: an experimental and density functional theory (DFT) study. Nano Express, 2020, 1, 010027.	1.2	19
2972	Efficient electrocatalytic activity for oxygen reduction reaction by phosphorus-doped graphene using supercritical fluid processing. Bulletin of Materials Science, 2020, 43, 1.	0.8	8
2973	Mn₃O₄ nanoparticle-decorated hollow mesoporous carbon spheres as an efficient catalyst for oxygen reduction reaction in Znâ€“air batteries. Nanoscale Advances, 2020, 2, 3367-3374.	2.2	12
2974	Functional Role of Fe, Cu-Doping in Ni-Based Perovskite Electrocatalysts for Oxygen Evolution Reaction. Nano, 2020, 15, 2050077.	0.5	5
2975	Salt-washed graphene oxide and its cytotoxicity. Journal of Hazardous Materials, 2020, 398, 123114.	6.5	8
2976	Hierarchical porous oviform carbon capsules with double-layer shells derived from mushroom spores for efficient sodium ion storage. Journal of Electroanalytical Chemistry, 2020, 871, 114310.	1.9	10
2977	Z-scheme photocatalytic dye degradation on AgBr/Zn(Co)Fe2O4 photocatalysts supported on nitrogen-doped graphene. Materials Today Sustainability, 2020, 9, 100043.	1.9	16
2978	Synthesis of <scp>Ï€â€Extended</scp> Carbazoles via <scp>Oneâ€Pot</scp> Câ€”C Coupling and Chlorination Promoted by <scp>FeCl₃</scp>. Chinese Journal of Chemistry, 2020, 38, 1538-1544.	2.6	5
2979	A facile approach to high-performance trifunctional electrocatalysts by substrate-enhanced electroless deposition of Pt/NiO/Ni on carbon nanotubes. Nanoscale, 2020, 12, 14615-14625.	2.8	32

#	Article	IF	Citations
2980	Nitrogen-Doped Graphene via In-situ Alternating Voltage Electrochemical Exfoliation for Supercapacitor Application. Frontiers in Chemistry, 2020, 8, 428.	1.8	11
2981	Progress in Computational and Machineâ€Learning Methods for Heterogeneous Smallâ€Molecule Activation. Advanced Materials, 2020, 32, e1907865.	11.1	46
2982	Chemical properties and applications. , 2020, , 251-371.		2
2983	Summary and prospects. , 2020, , 561-591.		0
2984	Novel Heteroatom-Doped Fe/N/C Electrocatalysts With Superior Activities for Oxygen Reduction Reaction in Both Acid and Alkaline Solutions. Frontiers in Chemistry, 2020, 8, 78.	1.8	10
2985	Forming indium-carbon (Inâ€“C) bonds at the edges of graphitic nanoplatelets. Materials Today Advances, 2020, 6, 100030.	2.5	7
2986	Graphitic N in nitrogen-Doped carbon promotes hydrogen peroxide synthesis from electrocatalytic oxygen reduction. Carbon, 2020, 163, 154-161.	5.4	131
2987	Advances in Solar Power Generation and Energy Harvesting. Springer Proceedings in Energy, 2020, , .	0.2	2
2988	The Chemistry and Promising Applications of Graphene and Porous Graphene Materials. Advanced Functional Materials, 2020, 30, 1909035.	7.8	181
2989	Defect Engineering in Carbonâ€Based Electrocatalysts: Insight into Intrinsic Carbon Defects. Advanced Functional Materials, 2020, 30, 2001097.	7.8	319
2990	A facile and simple approach to synthesis and characterization of methacrylated graphene oxide nanostructured polyaniline nanocomposites. Nanotechnology Reviews, 2020, 9, 53-60.	2.6	30
2991	A Deep Blue B,N-Doped Heptacene Emitter That Shows Both Thermally Activated Delayed Fluorescence and Delayed Fluorescence by Tripletâ€“Triplet Annihilation. Journal of the American Chemical Society, 2020, 142, 6588-6599.	6.6	189
2992	An MXene-based membrane for molecular separation. Environmental Science: Nano, 2020, 7, 1289-1304.	2.2	78
2993	Rational design of highly efficient metal-polyaniline/carbon cloth catalyst towards enhanced oxygen reduction reaction. Ionics, 2020, 26, 5065-5073.	1.2	4
2994	Fabrication of a Nitrogen and Boron-Doped Reduced Graphene Oxide Membrane-Less Amperometric Sensor for Measurement of Dissolved Oxygen in a Microbial Fermentation. Chemosensors, 2020, 8, 44.	1.8	3
2995	Functionalised hexagonal boron nitride for energy conversion and storage. Journal of Materials Chemistry A, 2020, 8, 14384-14399.	5.2	96
2996	Role of perovskites as a biâ€functional catalyst for electrochemical water splitting: A review. International Journal of Energy Research, 2020, 44, 9714-9747.	2.2	38
2997	Oriented Synthesis of Pyridinic-N Dopant within the Highly Efficient Multifunction Carbon-Based Materials for Oxygen Transformation and Energy Storage. ACS Sustainable Chemistry and Engineering, 2020, 8, 10431-10443.	3.2	14

#	Article	IF	Citations
2998	N-self-doped porous carbon derived from animal-heart as an electrocatalyst for efficient reduction of oxygen. Journal of Colloid and Interface Science, 2020, 579, 832-841.	5.0	9
2999	Theoretical insights into oxygen reduction reaction catalyzed by phosphorus-doped divacancy C3N nanosheet. Journal of Molecular Graphics and Modelling, 2020, 100, 107647.	1.3	5
3000	Graphene-Oxide-Modified Metal-Free Cathodes for Glycerol/Bleach Microfluidic Fuel Cells. ACS Applied Nano Materials, 2020, 3, 8286-8293.	2.4	17
3001	Pt-Decorated, Nanocarbon-Intercalated, and N-Doped Graphene with Enhanced Activity and Stability for Oxygen Reduction Reaction. ACS Applied Energy Materials, 2020, 3, 2490-2495.	2.5	26
3002	Fe3O4 nanoparticles encapsulated in single-atom Feâ€“Nâ€“C towards efficient oxygen reduction reaction: Effect of the micro and macro pores. Carbon, 2020, 162, 245-255.	5.4	88
3003	Metal-free carbocatalysis for electrochemical oxygen reduction reaction: Activity origin and mechanism. Journal of Energy Chemistry, 2020, 48, 308-321.	7.1	69
3004	Purification of hemoglobin by adsorption on nitrogen-doped flower-like carbon superstructures. Mikrochimica Acta, 2020, 187, 162.	2.5	7
3005	A first-principles study of nitrogene with monovacancy and light-atom substituted doping. Nanotechnology, 2020, 31, 205202.	1.3	3
3006	Graphene oxide-based colorimetric detection of organophosphorus pesticides via a multi-enzyme cascade reaction. Nanoscale, 2020, 12, 5829-5833.	2.8	49
3007	3D nitrogen-doped porous graphene aerogel as high-performance electrocatalyst for determination of gallic acid. Microchemical Journal, 2020, 155, 104706.	2.3	19
3008	Tunable Onset of Hydrogen Evolution in Graphene with Hot Electrons. Nano Letters, 2020, 20, 1791-1799.	4.5	6
3009	SiO2 stabilizes electrochemically active nitrogen in few-layer carbon electrodes of extraordinary capacitance. Journal of Energy Chemistry, 2020, 49, 179-188.	7.1	7
3010	Catalytic Properties of Chemically Modified Graphene Sheets to Enhance Etching of Ge Surface in Water. Journal of Physical Chemistry C, 2020, 124, 6121-6129.	1.5	12
3011	MOF-derived electrocatalysts for oxygen reduction, oxygen evolution and hydrogen evolution reactions. Chemical Society Reviews, 2020, 49, 1414-1448.	18.7	1,128
3012	Metalâ€free graphene/boron nitride heterointerface for CO₂ reduction: Surface curvature controls catalytic activity and selectivity. EcoMat, 2020, 2, e12013.	6.8	17
3013	Enhancing the Electrocatalysis of LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂by Introducing Lithium Deficiency for Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2020, 12, 10496-10502.	4.0	33
3014	CuN3 doped graphene as an active electrocatalyst for oxygen reduction reaction in fuel cells: A DFT study. Journal of Molecular Graphics and Modelling, 2020, 96, 107537.	1.3	13
3015	Will Any Crap We Put into Graphene Increase Its Electrocatalytic Effect?. ACS Nano, 2020, 14, 21-25.	7.3	158

#	Article	IF	Citations
3016	The mechanism study of oxygen reduction reaction (ORR) on non-equivalent P, N co-doped graphene. Applied Surface Science, 2020, 511, 145382.	3.1	44
3017	Recent advances on photocatalytic nanomaterials for hydrogen energy evolution in sustainable environment. International Journal of Environmental Analytical Chemistry, 0, , 1-19.	1.8	12
3018	One-step ball milling-prepared nano Fe2O3 and nitrogen-doped graphene with high oxygen reduction activity and its application in microbial fuel cells. Frontiers of Environmental Science and Engineering, 2020, 14, 1.	3.3	11
3019	Deciphering the Role of Quaternary N in O₂ Reduction over Controlled N-Doped Carbon Catalysts. Chemistry of Materials, 2020, 32, 1384-1392.	3.2	41
3020	Sensitive detection of estriol with an electrochemical sensor based on core-shell N-MWCNT/GONR-imprinted electrode. Ionics, 2020, 26, 2633-2641.	1.2	12
3021	N, S-Doped porous carbons for persulfate activation to remove tetracycline: Nonradical mechanism. Journal of Hazardous Materials, 2020, 391, 122055.	6.5	121
3022	Two-dimensional materials for energy conversion and storage. Progress in Materials Science, 2020, 111, 100637.	16.0	134
3023	Emerging covalent organic frameworks tailored materials for electrocatalysis. Nano Energy, 2020, 70, 104525.	8.2	143
3024	Highly Sensitive and Contactless Ammonia Detection Based on Nanocomposites of Phosphate-Functionalized Reduced Graphene Oxide/Polyaniline Immobilized on Microstrip Resonators. ACS Applied Materials & Interfaces, 2020, 12, 9746-9754.	4.0	53
3025	Unadulterated carbon as robust multifunctional electrocatalyst for overall water splitting and oxygen transformation. Nano Research, 2020, 13, 401-411.	5.8	30
3026	Nitrogen-rich holey graphene for efficient oxygen reduction reaction. Carbon, 2020, 162, 66-73.	5.4	71
3027	Design of nitrogen-doped graphitized 2D hierarchical porous carbons as efficient solid base catalysts for transesterification to biodiesel. Green Chemistry, 2020, 22, 903-912.	4.6	26
3028	Manganese Oxide Nanorods Decorated Table Sugar Derived Carbon as Efficient Bifunctional Catalyst in Rechargeable Zn-Air Batteries. Catalysts, 2020, 10, 64.	1.6	21
3029	Mechanism of Electrocatalytically Active Precious Metal (Ni, Pd, Pt, and Ru) Complexes in the Graphene Basal Plane for ORR Applications in Novel Fuel Cells. Energy & Fuels, 2020, 34, 2425-2434.	2.5	72
3030	Oxygen Reduction Reaction Electrocatalysts for Microbial Fuel Cells. ACS Symposium Series, 2020, , 73-96.	0.5	1
3031	Heteroatom- and metalloid-doped carbon catalysts for oxygen reduction reaction: a mini-review. Ionics, 2020, 26, 1563-1589.	1.2	41
3032	First principle studies of oxygen reduction reaction on N doped graphene: Impact of N concentration, position and co-adsorbate effect. Applied Surface Science, 2020, 510, 145470.	3.1	16
3033	Nitrogen-doped carbide-derived carbon/carbon nanotube composites as cathode catalysts for anion exchange membrane fuel cell application. Applied Catalysis B: Environmental, 2020, 272, 119012.	10.8	72

#	Article	IF	Citations
3034	Tuning magnetism and transport property of planar and wrinkled FePP@GNR hybrid materials. AIP Advances, 2020, 10, .	0.6	2
3035	Metal-free heteroatom-doped carbon-based catalysts for ORR: A critical assessment about the role of heteroatoms. Carbon, 2020, 165, 434-454.	5.4	231
3037	Selective Câ^'C Coupling by Spatially Confined Dimeric Metal Centers. IScience, 2020, 23, 101051.	1.9	37
3038	A strategy to unlock the potential of CrN as a highly active oxygen reduction reaction catalyst. Journal of Materials Chemistry A, 2020, 8, 8575-8585.	5.2	38
3039	Autogenous Formation of Gold on Layered Black Phosphorus for Catalytic Purification of Waste Water. ACS Applied Materials & Interfaces, 2020, 12, 22702-22709.	4.0	11
3040	Nitrogen and sulfur co-doped fibrous-like carbon electrocatalyst derived from conductive polymers for highly active oxygen reduction catalysis. Synthetic Metals, 2020, 264, 116383.	2.1	5
3041	3D spongy nanofiber structure Feâ€"NC catalysts built by a graphene regulated electrospinning method. Chemical Communications, 2020, 56, 6277-6280.	2.2	10
3042	In situ construction of a poly-3,4-ethylenedioxythiophene skeleton on carbon nanotubes to improve long-term stability for oxygen reduction reaction. New Journal of Chemistry, 2020, 44, 6435-6442.	1.4	4
3043	Recent Advances in Plasmonic Nanostructures for Enhanced Photocatalysis and Electrocatalysis. Advanced Materials, 2021, 33, e2000086.	11.1	232
3044	Diyne-linked and fully Ï€-conjugated polymetalloporphyrin nanosheets for outstanding heterogeneous catalysis. Science Bulletin, 2021, 66, 354-361.	4.3	7
3045	Degradation of ofloxacin using peroxymonosulfate activated by nitrogen-rich graphitized carbon microspheres: Structure and performance controllable study. Journal of Environmental Sciences, 2021, 99, 10-20.	3.2	5
3046	Carbon hybrid with 3D nano-forest architecture in-situ catalytically constructed by CoFe alloy as advanced multifunctional electrocatalysts for Zn-air batteries-driven water splitting. Journal of Energy Chemistry, 2021, 53, 422-432.	7.1	42
3047	Carbon-based electrocatalysts for sustainable energy applications. Progress in Materials Science, 2021, 116, 100717.	16.0	216
3048	Confinement in two-dimensional materials: Major advances and challenges in the emerging renewable energy conversion and other applications. Progress in Solid State Chemistry, 2021, 61, 100294.	3.9	24
3049	On the molecular properties of graphene-pyrazines conjugated Ru and Fe complexes: Computational insights. Materials Today Communications, 2021, 26, 101694.	0.9	0
3050	Electrochemical Synthesis of H2O2 by Two-Electron Water Oxidation Reaction. CheM, 2021, 7, 38-63.	5.8	155
3051	Rare earth insitu-doped ZIF-67 derived N doped C encapsulated Sm2O3/Co nanoparticles as excellent oxygen reduction reaction catalyst for Al-air batteries. Journal of Power Sources, 2021, 482, 229052.	4.0	21
3052	Si-doped graphene nanosheets for NOx gas sensing. Sensors and Actuators B: Chemical, 2021, 328, 129005.	4.0	42

#	Article	IF	Citations
3053	Anchoring of Transition Metals to Graphene Derivatives as an Efficient Approach for Designing Singleâ€Atom Catalysts. Advanced Materials Interfaces, 2021, 8, 2001392.	1.9	6
3054	Enhanced oxygen reduction reaction performance of ReOx/NC (ReÂ=ÂLa, Ce, Pr, Sm, Eu, Tb, Er, Tm and) Tj ETQq1 1 0.784314 rgBT /Ove Applied Surface Science, 2021, 535, 147689.	3.1	17
3055	Gradient electrospinning and controlled pyrolysis derived Fe O @N-doped carbon nanorods towards enhanced lithium storage. Journal of Alloys and Compounds, 2021, 851, 156097.	2.8	6
3056	Eu2O3â€“Cu/NC nanocomposite catalyst with improved oxygen reduction reaction activity for Zn-air batteries. International Journal of Hydrogen Energy, 2021, 46, 3974-3983.	3.8	11
3057	Removal of 2,4-dichlorophenoxyacetic acid by the boron-nitrogen co-doped carbon nanotubes: Insights into peroxymonosulfate adsorption and activation. Separation and Purification Technology, 2021, 259, 118196.	3.9	41
3058	Surface functionalization of acidified graphene through amidation for enhanced oxygen reduction reaction. Applied Surface Science, 2021, 536, 147760.	3.1	22
3059	Binary composites of nickel-manganese phosphates for supercapattery devices. Journal of Energy Storage, 2021, 33, 102020.	3.9	37
3060	Regulating carbon work function to boost electrocatalytic activity for the oxygen reduction reaction. Chinese Journal of Catalysis, 2021, 42, 938-944.	6.9	13
3061	Strategies for engineering the MXenes toward highly active catalysts. Materials Today Nano, 2021, 13, 100104.	2.3	10
3062	Rheological and tribological characterization of novel modified graphene/oilâ€based nanofluids using force microscopy. Microscopy Research and Technique, 2021, 84, 814-827.	1.2	2
3063	DFT study of Ni-doped graphene nanosheet as a drug carrier for multiple sclerosis drugs. Computational and Theoretical Chemistry, 2021, 1196, 113114.	1.1	17
3064	Porosity and composition of nitrogen-doped carbon materials templated by the thermolysis products of calcium tartrate and their performance in electrochemical capacitors. Journal of Alloys and Compounds, 2021, 858, 158259.	2.8	11
3065	The density functional theory study of 2D nonmetallic catalyst defective graphene for acetylene hydration. International Journal of Quantum Chemistry, 2021, 121, e26561.	1.0	1
3066	Microwave-assisted ultrafast in-situ growth of N-doped carbon quantum dots on multiwalled carbon nanotubes as an efficient electrocatalyst for photovoltaics. Journal of Colloid and Interface Science, 2021, 586, 349-361.	5.0	32
3067	Structurally and chemically engineered graphene for capacitive deionization. Journal of Materials Chemistry A, 2021, 9, 1429-1455.	5.2	45
3068	Boosting the cathode function toward the oxygen reduction reaction in microbial fuel cell using nanostructured surface modification. Electrochemical Science Advances, 2021, 1, e2000002.	1.2	5
3069	Coralâ€like nitrogen doped carbon derived from polyanilineâ€silicon nitride hybrid for highly active oxygen reduction electrocatalysis. Electrochemical Science Advances, 2021, 1, e2000010.	1.2	2
3070	Recent progress in the development of biomass-derived nitrogen-doped porous carbon. Journal of Materials Chemistry A, 2021, 9, 3703-3728.	5.2	167

#	Article	IF	Citations
3071	Defects-rich porous carbon microspheres as green electrocatalysts for efficient and stable oxygen-reduction reaction over a wide range of pH values. Chemical Engineering Journal, 2021, 406, 126883.	6.6	59
3072	Polyethyleneimine-functionalized mesoporous carbon nanosheets as metal-free catalysts for the selective oxidation of H2S at room temperature. Applied Catalysis B: Environmental, 2021, 283, 119650.	10.8	28
3073	Self-assembly of the surfactant mixtures on graphene in the presence of electrolyte: a molecular simulation study. Adsorption, 2021, 27, 69-79.	1.4	3
3074	Optimizing the oxygen reduction catalytic activity of a bipyridine-based polymer through tuning the molecular weight. Journal of Materials Chemistry A, 2021, 9, 3322-3327.	5.2	6
3075	Reduced Graphene Oxide Aerogel inside Melamine Sponge as an Electrocatalyst for the Oxygen Reduction Reaction. Materials, 2021, 14, 322.	1.3	5
3076	Graphene Nanofiber-Based Composites for Fuel Cell Application. Carbon Nanostructures, 2021, , 149-177.	0.1	1
3077	Bottom-up pore-generation strategy modulated active nitrogen species for oxygen reduction reaction. Materials Chemistry Frontiers, 2021, 5, 2684-2693.	3.2	4
3078	Review of Graphene Supercapacitors and Different Modified Graphene Electrodes. Smart Grid and Renewable Energy, 2021, 12, 1-15.	0.7	9
3079	CO₂ turned into a nitrogen doped carbon catalyst for fuel cells and metalâ€“air battery applications. Green Chemistry, 2021, 23, 4435-4445.	4.6	23
3080	Graphene Based Materials for Supercapacitors and Fuel Cells. , 2021, , 399-399.		1
3081	Nitrogen and oxygen tailoring of a solid carbon active site for two-electron selectivity electrocatalysis. Inorganic Chemistry Frontiers, 2021, 8, 173-181.	3.0	11
3082	Room Temperature Gas Sensor Based on Reduced Graphene Oxide for Environmental Monitoring. , 2021, , 3243-3261.		0
3083	Design of non-transition-metal-doped nanoribbon catalysis to achieve efficient nitrogen fixation. Materials Advances, 2021, 2, 7423-7430.	2.6	2
3084	Defect engineering and characterization of active sites for efficient electrocatalysis. Nanoscale, 2021, 13, 3327-3345.	2.8	60
3085	Facile synthesis of branched Au nanocrystals with sub-10-nm arms and their applications for ethanol oxidation reaction. Journal of Nanoparticle Research, 2021, 23, 1.	0.8	4
3086	Polyanilineâ€“Copper Composite: A Non-precious Metal Cathode Catalyst for Low-Temperature Fuel Cells. Energy & Fuels, 2021, 35, 3385-3395.	2.5	9
3087	Waste-Recovered Nanomaterials for Emerging Electrocatalytic Applications. Topics in Mining, Metallurgy and Materials Engineering, 2021, , 247-292.	1.4	1
3088	Catalyst Materials for Oxygen Reduction Reaction. , 2021, , 85-182.		0

#	Article	IF	Citations
3089	Synthesizing Highâ€quality Graphene from Spent Anode Graphite and Further Functionalization Applying in ORR Electrocatalyst. ChemistrySelect, 2021, 6, 90-95.	0.7	8
3090	Enhanced electrostatic potential with high energy and power density of a symmetric and asymmetric solid-state supercapacitor of boron and nitrogen co-doped reduced graphene nanosheets for energy storage devices. New Journal of Chemistry, 2021, 45, 12408-12425.	1.4	11
3091	Carbon-based metal-free electrocatalysts: from oxygen reduction to multifunctional electrocatalysis. Chemical Society Reviews, 2021, 50, 11785-11843.	18.7	174
3092	Nanostructured multifunctional electrocatalysts for efficient energy conversion systems: Recent perspectives. Nanotechnology Reviews, 2021, 10, 137-157.	2.6	28
3093	Ionic liquids as precursors for Feâ€“N doped carbon nanotube electrocatalysts for the oxygen reduction reaction. Nanoscale, 2021, 13, 15804-15811.	2.8	12
3094	Heteroatom-doped carbon-based oxygen reduction electrocatalysts with tailored four-electron and two-electron selectivity. Chemical Communications, 2021, 57, 7350-7361.	2.2	43
3095	Van der Waals interactions and oscillatory behaviour of carbon onions interacting with a fully constrained graphene sheet. Bulletin of Materials Science, 2021, 44, 1.	0.8	4
3096	INTRODUCTION TO TWO-DIMENSIONAL MATERIALS. Surface Review and Letters, 2021, 28, 2140005.	0.5	14
3097	Increasing the Hotâ€Electron Driven Hydrogen Evolution Reaction Rate on a Metalâ€Free Graphene Electrode. Advanced Materials Interfaces, 2021, 8, 2001706.	1.9	3
3098	A review of g-C3N4 based catalysts for direct methanol fuel cells. International Journal of Hydrogen Energy, 2022, 47, 3371-3395.	3.8	30
3099	Honeycomb-like Self-Supported Coâ€“Nâ€“C Catalysts with an Ultrastable Structure: Highly Efficient Electrocatalysts toward Oxygen Reduction Reaction in Alkaline and Acidic Solutions. ACS Applied Energy Materials, 2021, 4, 2522-2530.	2.5	17
3100	Recent innovations of silk-derived electrocatalysts for hydrogen evolution reaction, oxygen evolution reaction and oxygen reduction reaction. International Journal of Hydrogen Energy, 2021, 46, 7848-7865.	3.8	30
3101	Metal-free nitrogen-doped graphenic materials as cathode catalysts for the oxygen reduction reaction in polymer electrolyte membrane fuel cells. Journal of Applied Electrochemistry, 2021, 51, 727-738.	1.5	2
3102	Development of Co/Co9S8 metallic nanowire anchored on N-doped CNTs through the pyrolysis of melamine for overall water splitting. Electrochimica Acta, 2021, 368, 137642.	2.6	40
3103	Morphological engineering of carbon-based materials: in the quest of efficient catalysts for overall water splitting. International Journal of Hydrogen Energy, 2021, 46, 7284-7296.	3.8	12
3104	Preparation and Applications of Fluorinated Graphenes. Journal of Carbon Research, 2021, 7, 20.	1.4	13
3105	Advances in green synthesis and applications of graphene. Nano Research, 2021, 14, 3724-3743.	5.8	18
3106	Reduced Graphene Oxide Inserted into PEDOT:PSS Layer to Enhance the Electrical Behaviour of Light-Emitting Diodes. Nanomaterials, 2021, 11, 645.	1.9	8

#	Article	IF	Citations
3107	Recent Advances in Nonprecious Metal Oxide Electrocatalysts and Photocatalysts for N₂ Reduction Reaction under Ambient Condition. Small Science, 2021, 1, 2000069.	5.8	63
3108	Alternative view of oxygen reduction on porous carbon electrocatalysts: The substance of complex oxygen-surface interactions. IScience, 2021, 24, 102216.	1.9	13
3109	Covalent Organic Frameworks for Efficient Energy Electrocatalysis: Rational Design and Progress. Advanced Energy and Sustainability Research, 2021, 2, 2000090.	2.8	29
3110	Facile Route for the Preparation of Functionalized Reduced Graphene Oxide/Polyaniline Composite and Its Enhanced Electrochemical Performance. ECS Journal of Solid State Science and Technology, 2021, 10, 031003.	0.9	7
3111	Porous Carbon Nanosheets Derived from ZIFâ€8 Treated with KCl as Highly Efficient Electrocatalysts for the Oxygen Reduction Reaction. Energy Technology, 2021, 9, 2100035.	1.8	21
3112	Synthesis and characterization of nitrogen-doped carbon nanotubes. Journal of Materials Science: Materials in Electronics, 2021, 32, 9694-9701.	1.1	0
3113	Vectorial Charge Transfer across Bipolar Membrane Loaded with CdS and Au Nanoparticles. Journal of Physical Chemistry C, 2021, 125, 6870-6876.	1.5	10
3114	Crumpled Versus Flat Gold Nanosheets: Temperature-Regulated Synthesis and Their Plasmonic and Catalytic Properties. Langmuir, 2021, 37, 4227-4235.	1.6	15
3115	Production of biodiesel from waste cooking oil using ZnCuO/N-doped graphene nanocomposite as an efficient heterogeneous catalyst. Arabian Journal of Chemistry, 2021, 14, 102982.	2.3	51
3116	Active-N-Dominated Carbon Frameworks Supported CoNC Integrated with Co Nanoparticles as an Enhanced Bifunctional Oxygen Catalyst. Nano, 2021, 16, 2150038.	0.5	2
3117	The Influence of Porous Co/CeO_{1.88}-Nitrogen-Doped Carbon Nanorods on the Specific Capacity of Li-O₂ Batteries. ACS Applied Materials & Interfaces, 2021, 13, 17699-17706.	4.0	7
3118	Abundant Co-Nx sites onto hollow MOF-Derived nitrogen-doped carbon materials for enhanced oxygen reduction. Journal of Power Sources, 2021, 492, 229632.	4.0	34
3119	Nitrogen-doped graphene supported Ni as an efficient and stable catalyst for levulinic acid hydrogenation. Nanotechnology, 2021, , .	1.3	0
3120	Heterogeneous Fenton-like surface properties of oxygenated graphitic carbon nitride. Journal of Colloid and Interface Science, 2021, 587, 479-488.	5.0	21
3121	Graphene-on-Glass Preparation and Cleaning Methods Characterized by Single-Molecule DNA Origami Fluorescent Probes and Raman Spectroscopy. ACS Nano, 2021, 15, 6430-6438.	7.3	20
3122	A review of biomass-derived graphene and graphene-like carbons for electrochemical energy storage and conversion. New Carbon Materials, 2021, 36, 350-372.	2.9	29
3123	Tunable Synthesis of Predominant Semi-Ionic and Covalent Fluorine Bonding States on a Graphene Surface. Nanomaterials, 2021, 11, 942.	1.9	8
3124	Dipoles in 4,12,4-graphyne. Applied Surface Science, 2021, 545, 148991.	3.1	12

#	Article	IF	Citations
3125	Two-dimensional nanomaterials with engineered bandgap: Synthesis, properties, applications. Nano Today, 2021, 37, 101059.	6.2	82
3126	Catalytic Reduction of Graphene Oxide Membranes and Water Selective Channel Formation in Waterâ€“Alcohol Separations. Membranes, 2021, 11, 317.	1.4	0
3127	Preparation and characterization of melamine-led nitrogen-doped carbon blacks at different pyrolysis temperatures. Journal of Solid State Chemistry, 2021, 296, 121972.	1.4	24
3128	Highly Porous Chitosan-derived Nitrogen-doped Carbon Applicable for High-performance Gas Diffusion Oxygen Electrodes. Chemistry Letters, 2021, 50, 636-639.	0.7	0
3129	Comparative first principlesâ€based molecular dynamics study of catalytic mechanism and reaction energetics of water oxidation reaction on 2D â€surface. Journal of Computational Chemistry, 2021, 42, 1138-1149.	1.5	6
3130	Oxygen Reduction Reaction on N-Doped Graphene: Effect of Positions and Scaling Relations of Adsorption Energies. Journal of Physical Chemistry C, 2021, 125, 8551-8561.	1.5	19
3131	A systematic review on graphene-based nanofluids application in renewable energy systems: Preparation, characterization, and thermophysical properties. Sustainable Energy Technologies and Assessments, 2021, 44, 101058.	1.7	19
3132	NO electrochemical reduction over Si-N4 embedded graphene: A DFT investigation. Applied Surface Science, 2021, 544, 148869.	3.1	24
3133	A review on amorphous noble-metal-based electrocatalysts for fuel cells: Synthesis, characterization, performance, and future perspective. International Journal of Hydrogen Energy, 2021, 46, 14190-14211.	3.8	37
3134	Discovery of Single-Atom Catalyst: Customized Heteroelement Dopants on Graphene. Accounts of Materials Research, 2021, 2, 394-406.	5.9	19
3135	Graphene family for hydrogen peroxide production in electrochemical system. Science of the Total Environment, 2021, 769, 144491.	3.9	14
3136	Functionalized Germanene-Based Nanomaterials for the Detection of Single Nucleotide Polymorphism. ACS Applied Nano Materials, 2021, 4, 5164-5175.	2.4	17
3137	High-performance Feâ€“Nâ€“C electrocatalysts with a â€œchain mailâ€•protective shield. Nano Materials Science, 2021, 3, 420-428.	3.9	9
3138	Recent advances in MXene-based nanoarchitectures as electrode materials for future energy generation and conversion applications. Coordination Chemistry Reviews, 2021, 435, 213806.	9.5	97
3139	Inside-out dual-doping effects on tubular catalysts: Structural and chemical variation for advanced oxygen reduction performance. Nano Research, 2022, 15, 361-367.	5.8	18
3140	Lanthanide based double perovskites: Bifunctional catalysts for oxygen evolution/reduction reactions. International Journal of Hydrogen Energy, 2021, 46, 17163-17172.	3.8	20
3141	Binary nanocomposites of reduced graphene oxide and cobalt (II, III) oxide for supercapacitor devices. Materials Technology, 2022, 37, 1168-1182.	1.5	5
3142	Electrochemical Catalysts for Green Hydrogen Energy. Advanced Energy and Sustainability Research, 2021, 2, 2100019.	2.8	4

#	Article	IF	Citations
3143	Fe/N-codoped carbocatalysts loaded on carbon cloth (CC) for activating peroxymonosulfate (PMS) to degrade methyl orange dyes. Applied Surface Science, 2021, 549, 149300.	3.1	64
3144	Relationships between texture, surface chemistry and performance of N-doped carbon xerogels in the oxygen reduction reaction. Applied Surface Science, 2021, 548, 149242.	3.1	20
3145	Trace Metal Loading of Bâ€Nâ€Coâ€doped Graphitic Carbon for Active and Stable Bifunctional Oxygen Reduction and Oxygen Evolution Electrocatalysts. ChemElectroChem, 2021, 8, 1685-1693.	1.7	4
3146	Interfacial Covalent Bonds Regulated Electronâ€Deficient 2D Black Phosphorus for Electrocatalytic Oxygen Reactions. Advanced Materials, 2021, 33, e2008752.	11.1	56
3148	Eco-Friendly Nitrogen-Doped Graphene Preparation and Design for the Oxygen Reduction Reaction. Molecules, 2021, 26, 3858.	1.7	5
3149	Non-noble metal single atom catalysts with S, N co-doped defective graphene support: A theoretical study of highly efficient acetylene hydration. Materials Today Communications, 2021, 27, 102216.	0.9	2
3150	The role of carrier gas on the structural properties of carbon coated GaN. Materials Today Communications, 2021, 27, 102325.	0.9	0
3151	Facile and economic synthesis of heteroatoms co-doped graphene using garlic biomass as a highly stable electrocatalyst toward 4 eâ^' ORR. Journal of the Iranian Chemical Society, 2022, 19, 257-267.	1.2	3
3152	Highly Stable, Low-Cost Metal-Free Oxygen Reduction Reaction Electrocatalyst Based on Nitrogen-Doped Pseudo-Graphite. Energy & Fuels, 2021, 35, 10146-10155.	2.5	4
3153	Electrochemical Sensor Based on Nitrogen Doped Porous Reduced Graphene Oxide to Detection of Ciprofloxacin in Pharmaceutical Samples. Russian Journal of Electrochemistry, 2021, 57, 654-662.	0.3	17
3154	FeNi-functionalized 3D N, P doped graphene foam as a noble metal-free bifunctional electrocatalyst for direct methanol fuel cells. Journal of Alloys and Compounds, 2021, 867, 158732.	2.8	38
3155	Oxygen Reduction Reaction Performance Boosting Effect of Nitrogen/Sulfur Co-Doped Graphene Supported Cobalt Phosphide Nanoelectrocatalyst: pH-Universal Electrocatalyst. ECS Journal of Solid State Science and Technology, 2021, 10, 061003.	0.9	33
3156	N, S Codoped Carbon Matrixâ€Encapsulated Co₉S₈ Nanoparticles as a Highly Efficient and Durable Bifunctional Oxygen Redox Electrocatalyst for Rechargeable Znâ€“Air Batteries. Advanced Energy Materials, 2021, 11, 2101249.	10.2	102
3157	2D graphene derivatives as heterogeneous catalysts to produce biofuels via esterification and trans-esterification reactions. Applied Materials Today, 2021, 23, 101053.	2.3	15
3158	Electronic cloaking effect of localized states induced in graphene nanoribbons. Journal of Physics Condensed Matter, 2021, 33, 335304.	0.7	3
3159	Computationally exploring the role of S-dopant and S-linker in activating the catalytic efficiency of graphene quantum dot for ORR. Catalysis Today, 2021, 370, 36-45.	2.2	7
3160	N-doped carbon nanotube arrays on reduced graphene oxide as multifunctional materials for energy devices and absorption of electromagnetic wave. Carbon, 2021, 177, 216-225.	5.4	88
3161	Si-doped graphene nanosheets as a metal-free catalyst for electrochemical detection of nitroaromatic explosives. Journal of Colloid and Interface Science, 2021, 594, 848-856.	5.0	11

#	Article	IF	Citations
3162	An azine-based polymer derived hierarchically porous Nâ€“doped carbon for hydrophilic dyes removal. Journal of Hazardous Materials, 2021, 413, 125299.	6.5	20
3163	Influence of Magnetic Moment on Single Atom Catalytic Activation Energy Barriers. Catalysis Letters, 2022, 152, 1347-1357.	1.4	6
3164	Adsorption properties of the intermediates of oxygen reduction reaction on bismuthene and graphene/bismuthene heterojunction based on DFT study. Theoretical Chemistry Accounts, 2021, 140, 1.	0.5	1
3165	N,O-codoped carbon spheres with uniform mesoporous entangled Co3O4 nanoparticles as a highly efficient electrocatalyst for oxygen reduction in a Zn-air battery. Journal of Colloid and Interface Science, 2021, 604, 746-756.	5.0	13
3166	Are Carbon-Based Materials Good Supports for the Catalytic Reforming of Ammonia?. Journal of Physical Chemistry C, 2021, 125, 15950-15958.	1.5	10
3167	Nitrogen-enriched carbon powder prepared by ball-milling of graphene oxide with melamine: an efficient electrocatalyst for oxygen reduction reaction. Mendeleev Communications, 2021, 31, 529-531.	0.6	5
3168	Engineering Carbon Materials for Electrochemical Oxygen Reduction Reactions. Advanced Energy Materials, 2021, 11, 2100695.	10.2	63
3169	Single boron atom anchored on graphitic carbon nitride nanosheet (B/g-C₂N) as a photocatalyst for nitrogen fixation: A first-principles study*. Chinese Physics B, 2021, 30, 083101.	0.7	3
3170	Application of graphene in<scp>lowâ€temperature</scp>fuel cell technology: An overview. International Journal of Energy Research, 2021, 45, 18318-18336.	2.2	10
3171	Synthesis of nitrogen and phosphorus co-doped graphene as efficient electrocatalyst for oxygen reduction reaction under strong alkaline media in advanced chlor-alkali cell. Carbon Trends, 2021, 4, 100043.	1.4	12
3172	Earth-abundant metal-free carbon-based electrocatalysts for Zn-air batteries to power electrochemical generation of H2O2 for in-situ wastewater treatment. Chemical Engineering Journal, 2021, 416, 128338.	6.6	21
3173	Enhanced Oxygen Evolution Reaction by Efficient Bubble Dynamics of Aligned Nonoxidized Graphene Aerogels. ACS Sustainable Chemistry and Engineering, 2021, 9, 10326-10334.	3.2	12
3174	Sulfur-doping effects on the supercapacitive behavior of porous spherical graphene electrode derived from layered double hydroxide template. Applied Surface Science, 2021, 558, 149867.	3.1	19
3175	Achieving Selective and Efficient Electrocatalytic Activity for CO2 Reduction on N-Doped Graphene. Frontiers in Chemistry, 2021, 9, 734460.	1.8	9
3176	Analyses and insights into 2D crystallite architected membrane electrode assemblies for polymer electrolyte fuel cells. Chemical Engineering Journal, 2021, 417, 129280.	6.6	6
3177	Toward Quantum Confinement in Graphitic Carbon Nitride-Based Polymeric Monolayers. Journal of Physical Chemistry A, 2021, 125, 7597-7606.	1.1	5
3178	ZnOâ€“Co₃O₄/Nâ€“C Cage Derived from the Hollow Zn/Co ZIF for Enhanced Degradation of Bisphenol A with Persulfate. Inorganic Chemistry, 2021, 60, 13041-13050.	1.9	9
3179	Green Synthesis of Cu Nanoparticles in Modulating the Reactivity of Amine-Functionalized Composite Materials towards Cross-Coupling Reactions. Nanomaterials, 2021, 11, 2260.	1.9	1

#	Article	IF	Citations
3180	Nanostructured Fe-N-C pyrolyzed catalyst for the H2O2 electrochemical sensing. Electrochimica Acta, 2021, 387, 138468.	2.6	11
3181	Application of supercritical fluid in the synthesis of graphene materials: a review. Journal of Nanoparticle Research, 2021, 23, 1.	0.8	5
3182	A Review on Experimental Identification of Active Sites in Model Bifunctional Electrocatalytic Systems for Oxygen Reduction and Evolution Reactions. ChemElectroChem, 2021, 8, 3433-3456.	1.7	13
3183	Effect of plasma-assisted electrochemical treatment of the boron-doped synthetic diamond compact electrodes on the oxygen electroreduction kinetics. Electrochimica Acta, 2021, 390, 138843.	2.6	2
3185	Density functional theory study of active sites on nitrogen-doped graphene for oxygen reduction reaction. Royal Society Open Science, 2021, 8, 210272.	1.1	11
3186	Investigation on Electron Transfer Process of Oxygen Reduction Reactions Catalyzed by Nitrogen-doped Graphitic Carbon in Acidic and Alkaline Media. Journal of the Electrochemical Society, 2021, 168, 096508.	1.3	4
3187	Assessment of the Accuracy of Density Functionals for Calculating Oxygen Reduction Reaction on Nitrogen-Doped Graphene. Journal of Chemical Theory and Computation, 2021, 17, 6405-6415.	2.3	9
3188	Geometric model of 3D curved graphene with chemical dopants. Carbon, 2021, 182, 223-232.	5.4	7
3189	Selfâ€Assembly of Surfaceâ€Functionalized Ag_{1.8}Mn₈O₁₆ Nanorods with Reduced Graphene Oxide Nanosheets as an Efficient Bifunctional Electrocatalyst for Rechargeable Zincâ€Air Batteries. Chemistry - an Asian Journal, 2021, 16, 3677-3682.	1.7	4
3190	Mild adsorption of carbon nitride (C3N3) nanosheet on a cellular membrane reveals its suitable biocompatibility. Colloids and Surfaces B: Biointerfaces, 2021, 205, 111896.	2.5	3
3191	Entropic Stabilization of Water at Graphitic Interfaces. Journal of Physical Chemistry Letters, 2021, 12, 9162-9168.	2.1	5
3192	Graphene-based sponges for electrochemical degradation of persistent organic contaminants. Water Research, 2021, 203, 117492.	5.3	36
3193	Manganese oxide supported partially reduced graphene oxide as a highly active and durable catalyst for the amination of benzene. Catalysis Communications, 2021, 157, 106329.	1.6	5
3194	Embedding Pt-Ni octahedral nanoparticles in the 3D nitrogen-doped porous graphene for enhanced oxygen reduction activity. Electrochimica Acta, 2021, 391, 138956.	2.6	10
3195	Hybridized intercalation of CoMoS4 in interlayer-expanded cobalt-LMO nanosheets as high active bifunctional catalysts in Zn-air battery. Electrochimica Acta, 2021, 391, 138980.	2.6	4
3196	Dual oxidation and sulfurization enabling hybrid Co/Co3O4@CoS in S/N-doped carbon matrix for bifunctional oxygen electrocatalysis and rechargeable Zn-air batteries. Chemical Engineering Journal, 2021, 419, 129619.	6.6	77
3197	First-principles study of plasmons in doped graphene nanostructures*. Chinese Physics B, 2021, 30, 097301.	0.7	1
3198	Density Functional Theory Study of the Immobilization and Hindered Surface Migration of Pd₃ and Pd₄ Nanoclusters over Defect-Ridden Graphene: Implications for Heterogeneous Catalysis. ACS Applied Nano Materials, 2021, 4, 9068-9079.	2.4	7

#	Article	IF	Citations
3199	Oxygen reduction reaction on Pd nanoparticles supported on novel mesoporous carbon materials. Electrochimica Acta, 2021, 394, 139132.	2.6	14
3200	Defect-rich and metal-free N, S co-doped 3D interconnected mesoporous carbon material as an advanced electrocatalyst towards oxygen reduction reaction. Carbon, 2021, 184, 127-135.	5.4	56
3201	Nitrogen-doped graphene on a curved nickel surface. Carbon, 2021, 183, 711-720.	5.4	2
3202	â€œEnvironmental phosphorylationâ€•boosting photocatalytic CO2 reduction over polymeric carbon nitride grown on carbon paper at air-liquid-solid joint interfaces. Chinese Journal of Catalysis, 2021, 42, 1667-1676.	6.9	33
3203	Temperature-dependent site selection of boron doping in chemically derived graphene. Carbon, 2021, 184, 253-265.	5.4	5
3204	N-doped carbon nanosheets with ultra-high specific surface area for boosting oxygen reduction reaction in Zn-air batteries. Applied Surface Science, 2021, 562, 150114.	3.1	26
3205	Fe atom clusters embedded N-doped graphene decorated with ultrathin mesoporous carbon nitride nanosheets for high efficient photocatalytic performance. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 629, 127360.	2.3	6
3206	Construction of Ag3PO4/TiO2/C with p-n heterojunction using Shiff base-Ti complex as precursor: Preparation, performance and mechanism. Powder Technology, 2021, 393, 597-609.	2.1	22
3207	Single noble metal atoms doped 2D materials for catalysis. Applied Catalysis B: Environmental, 2021, 297, 120389.	10.8	49
3208	Nitrogen-doped graphene nanomaterials for electrochemical catalysis/reactions: A review on chemical structures and stability. Carbon, 2021, 185, 198-214.	5.4	62
3209	Performance evaluation of functionalized carbon aerogel as oxygen reduction reaction electrocatalyst in zinc-air cell. Journal of Power Sources, 2021, 511, 230458.	4.0	12
3210	Coordination-driven hierarchically structured composites with N-CNTs-grafted graphene-confined ultra-small Co nanoparticles as effective oxygen electrocatalyst in rechargeable Zn-air battery. Ceramics International, 2021, 47, 30091-30098.	2.3	10
3211	Nanoscale confinement in carbon nanotubes encapsulated zero-valent iron for phenolics degradation by heterogeneous Fenton: Spatial effect and structureâ€“activity relationship. Separation and Purification Technology, 2021, 276, 119232.	3.9	16
3212	One-step combustion synthesis of carbon-coated NiO/Ni composites for lithium and sodium storage. Journal of Alloys and Compounds, 2021, 884, 160927.	2.8	9
3213	Preparation and application of 0D-2D nanomaterial hybrid heterostructures for energy applications. Materials Today Advances, 2021, 12, 100169.	2.5	20
3214	Advanced opportunities and insights on the influence of nitrogen incorporation on the physico-/electro-chemical properties of robust electrocatalysts for electrocatalytic energy conversion. Coordination Chemistry Reviews, 2021, 449, 214209.	9.5	28
3215	A temperature-dependent phosphorus doping on Ti3C2Tx MXene for enhanced supercapacitance. Journal of Colloid and Interface Science, 2021, 604, 239-247.	5.0	30
3216	Electronic and magnetic properties of homonuclear and heteronuclear transition metal pairs in graphene. Applied Surface Science, 2021, 569, 150999.	3.1	4

#	Article	IF	Citations
3217	Nitrogen-doped graphene as an efficient metal-free catalyst for ammonia and non-enzymatic glucose sensing. Journal of Physics and Chemistry of Solids, 2022, 160, 110359.	1.9	12
3218	The use of polymer-graphene composites in catalysis. , 2022, , 537-556.		0
3219	The use of polymer-graphene composites in fuel cell and solar energy. , 2022, , 425-505.		1
3220	Insights into co-removal of trichloroacetic acid and bromate by an electroreduction process: Competitive reaction mechanism and enhanced atomic H* stabilization. Chemical Engineering Journal, 2022, 429, 132139.	6.6	14
3221	Ultrafine Fe nanoparticles embedded in N-doped carbon nanotubes derived from highly dispersed g-C₃N₄ nanofibers for the oxygen reduction reaction. New Journal of Chemistry, 2021, 45, 5421-5427.	1.4	3
3222	Cycloaddition between nitrogen-doped graphene (6Ï€-component) and benzene (4Ï€-component): a theoretical approach using density functional theory with vdW-DF correction. Physical Chemistry Chemical Physics, 2021, 23, 5870-5877.	1.3	0
3224	Hybrid Carbon Film Electrodes for Electroanalysis. Analytical Sciences, 2021, 37, 37-47.	0.8	12
3225	A highly active defect engineered Cl-doped carbon catalyst for the N₂ reduction reaction. Journal of Materials Chemistry A, 2021, 9, 5807-5814.	5.2	12
3226	3D GBM-supported Transition Metal Oxide Nanocatalysts and Heteroatom-doped 3D Graphene Electrocatalysts for Potential Application in Fuel Cells. Chemistry in the Environment, 2021, , 139-178.	0.2	2
3227	The Measurements of the Oxygen Reduction Reaction. , 2021, , 29-83.		0
3228	High-performance electrocatalyst based on polyazine derived mesoporous nitrogen-doped carbon for oxygen reduction reaction. RSC Advances, 2021, 11, 29555-29563.	1.7	1
3230	Role of Nitrogen Precursor on the Activity Descriptor towards Oxygen Reduction Reaction in Ironâ€Based Catalysts. ChemistrySelect, 2018, 3, 6542-6550.	0.7	9
3231	Progress in the Understanding and Applications of the Intrinsic Reactivity of Grapheneâ€Based Materials. Small Science, 2021, 1, 2000026.	5.8	40
3232	Room Temperature Gas Sensor Based on Reduce Graphene Oxide for Environmental Monitoring. , 2020, , 1-19.		1
3234	Functionalization of Grapheneâ€”A Critical Overview of its Improved Physical, Chemical and Electrochemical Properties. Carbon Nanostructures, 2019, , 139-173.	0.1	3
3235	Characteristics of Graphene/Reduced Graphene Oxide. Springer Series in Materials Science, 2020, , 155-177.	0.4	28
3236	Bio-Inspired Engineering of 3D Carbon Nanostructures. Springer Series in Biomaterials Science and Engineering, 2016, , 365-420.	0.7	1
3237	Electrochemical Exfoliation Synthesis of Graphene. Springer Theses, 2017, , 39-50.	0.0	6

#	Article	IF	Citations
3238	Silver nanoparticleâ€“decorated PANI/reduced graphene oxide for sensing of hydrazine in water and inhibition studies on microorganism. Ionics, 2020, 26, 3123-3133.	1.2	13
3239	Future of analytical chemistry with graphene. Comprehensive Analytical Chemistry, 2020, 91, 355-389.	0.7	7
3240	Graphene oxide: A new direction in dentistry. Applied Materials Today, 2020, 19, 100576.	2.3	46
3241	Shock induced conversion of carbon dioxide to few layer graphene. Carbon, 2017, 115, 471-476.	5.4	17
3242	Electrocatalytic activity of nitrogen-doped holey carbon nanotubes in oxygen reduction and evolution reactions and their application in rechargeable zincâ€“air batteries. Carbon, 2020, 166, 245-255.	5.4	30
3243	Highly efficient tungsten-doped hierarchical structural N-Enriched porous carbon counter electrode material for dye-sensitized solar cells. Electrochimica Acta, 2020, 351, 136455.	2.6	14
3244	Covalent Organic Frameworks for Catalysis. EnergyChem, 2020, 2, 100035.	10.1	129
3245	Duckweed derived nitrogen self-doped porous carbon materials as cost-effective electrocatalysts for oxygen reduction reaction in microbial fuel cells. International Journal of Hydrogen Energy, 2020, 45, 15336-15345.	3.8	33
3246	Unraveling the effect of nitrogen doping on graphene nanoflakes and the adsorption properties of ionic liquids: A DFT study. Journal of Molecular Liquids, 2020, 312, 113400.	2.3	16
3247	Single-Iron Supported on Defective Graphene as Efficient Catalysts for Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2020, 124, 13283-13290.	1.5	28
3248	Calcination of Porphyrin-Based Conjugated Microporous Polymers Nanotubes As Nanoporous N-Rich Metal-Free Electrocatalysts for Efficient Oxygen Reduction Reaction. ACS Applied Energy Materials, 2020, 3, 5260-5268.	2.5	29
3249	CHAPTER 14. Graphene-Based Biosensors for Food Analysis. Food Chemistry, Function and Analysis, 2016, , 327-353.	0.1	1
3250	Biomass chitin-derived honeycomb-like nitrogen-doped carbon/graphene nanosheet networks for applications in efficient oxygen reduction and robust lithium storage. Journal of Materials Chemistry A, 2016, 4, 11789-11799.	5.2	71
3251	Biofilm evolution and viability during in situ preparation of a graphene/exoelectrogen composite biofilm electrode for a high-performance microbial fuel cell. RSC Advances, 2017, 7, 42172-42179.	1.7	16
3252	Rational prediction of multifunctional bilayer single atom catalysts for the hydrogen evolution, oxygen evolution and oxygen reduction reactions. Nanoscale, 2020, 12, 20413-20424.	2.8	17
3253	Graphene oxide sensors of high sensitivity fabricated using cold atmospheric-pressure hydrogen plasma for use in the detection of small organic molecules. Journal of Applied Physics, 2020, 128, .	1.1	7
3254	Graphene-supported single-atom catalysts and applications in electrocatalysis. Nanotechnology, 2021, 32, 032001.	1.3	33
3255	Stability study of iodinated reduced graphene oxide and its application in self-assembled Al/Bi₂O₃ nanothermite composites. Nano Futures, 2020, 4, 045002.	1.0	5

#	Article	IF	Citations
3256	Electronic properties of chemically doped graphene. Physical Review Materials, 2019, 3, .	0.9	36
3257	A Method for Synthesis of Nitrogen-Doped Graphene with High Specific Surface Area. Doklady Physical Chemistry, 2020, 495, 159-165.	0.2	4
3259	Synthesis, Properties, and Application of Graphene-Based Materials Obtained from Carbon Nanotubes and Acetylene Black. Ukrainian Journal of Physics, 2016, 61, 909-916.	0.1	2
3261	Use of Grape Leaves for Producing Graphene for Use as an Oxygen Reduction Electrocatalyst. International Journal of Electrochemical Science, 0, , 4754-4773.	0.5	3
3262	Graphene Oxide and Its Derivatives: Their Synthesis and Use in Organic Synthesis. Current Organic Chemistry, 2019, 23, 188-204.	0.9	11
3263	Practical Challenges Associated with Catalyst Development for the Commercialization of Li-air Batteries. Journal of Electrochemical Science and Technology, 2014, 5, 1-18.	0.9	2
3264	Synthesis of Nitrogen Doped Graphene through Microwave Irradiation. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2012, 27, 146-150.	0.6	8
3265	Facile Approach to Preparation of Nitrogen-doped Graphene and Its Superca-pacitive Performance. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2013, 28, 677-682.	0.6	5
3266	Direct Electrodeposition of Graphene and Platinum Based Alloys-Analysis by SEM/EDX. Asian Journal of Scientific Research, 2015, 8, 245-263.	0.3	3
3267	Nanocomposites of nitrogen-doped graphene and cobalt tungsten oxide as efficient electrode materials for application in electrochemical devices. AIMS Materials Science, 2016, 3, 1456-1473.	0.7	8
3268	Characterization techniques for graphene-based materials in catalysis. AIMS Materials Science, 2017, 4, 755-788.	0.7	52
3269	Nitrogen Doped Graphene as Potential Material for Hydrogen Storage. Graphene, 2017, 06, 41-60.	0.3	81
3270	Electrocatalytic Reduction of Oxygen at Perovskite (BSCF)-MWCNT Composite Electrodes. Materials Sciences and Applications, 2014, 05, 199-211.	0.3	5
3271	Practical Challenges Associated with Catalyst Development for the Commercialization of Li-air Batteries. Journal of Electrochemical Science and Technology, 2014, 5, 1-18.	0.9	3
3272	Catalytic Effects of Heteroatom-doped Graphene Nanosheets on the Performance of Li-O2Batteries. Journal of Electrochemical Science and Technology, 2014, 5, 49-52.	0.9	7
3273	Density functional study on the adsorption characteristics of O, O2, OH, and OOH of B-, P-doped, and B, P codoped graphenes. Wuli Xuebao/Acta Physica Sinica, 2016, 65, 018201.	0.2	5
3274	Synthesis of Nitrogen-Doped Graphene by Plasma-Enhanced Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2012, 51, 055101.	0.8	17
3275	Breaking the Linear Scaling Relationship by a Proton Donor for Improving Electrocatalytic Oxygen Reduction Kinetics. ACS Catalysis, 2021, 11, 12712-12720.	5.5	4

#	Article	IF	Citations
3276	Defective/Doped Grapheneâ€Based Materials as Cathodes for Metalâ€“Air Batteries. Energy and Environmental Materials, 2022, 5, 1103-1116.	7.3	16
3277	Simultaneous realization of holey in-plane defects and expanded interlayers in N-containing nanocarbons from a non-covalent-bonded organic framework for efficient oxygen reduction reaction. Electrochimica Acta, 2021, 400, 139475.	2.6	7
3278	Graphene Biodevices for Early Disease Diagnosis Based on Biomarker Detection. ACS Sensors, 2021, 6, 3841-3881.	4.0	45
3279	Dual heteroatom-doped reduced graphene oxide and its application in dye-sensitized solar cells. Optical Materials, 2021, 122, 111689.	1.7	7
3281	Surface Characterization of Graphene. , 2013, , 73-90.		0
3282	Degradation behavior and electrochemical analysis of a PEFC catalyst layer. Tanso, 2015, 2015, 21-30.	0.1	0
3283	Density Functional Study of Oxygen Reduction Reaction on Oxygen Doped Graphene. , 0, , .		1
3285	Preparation and electrochemical performance of nitrogen-doped graphene nanoplatelets. Wuli Xuebao/Acta Physica Sinica, 2016, 65, 178102.	0.2	2
3286	High crystallinity graphene synthesis from graphene oxide. Tanso, 2016, 2016, 171-181.	0.1	0
3287	Synthesis, properties, application of graphene oxide and reduced graphene oxide obtained from multi-walled carbon nanotubes. Himia, Fizika Ta Tehnologia Poverhni, 2016, 7, 3-11.	0.2	0
3288	Determining the Catalytic Properties of a Material Using Relative Bond Strength. Asian Journal of Chemical Sciences, 2017, 2, 1-13.	0.4	0
3290	Elementary acts of the reaction of molecular oxygen recovery over nitrogen-doped sp2-carbon cluster: quantum chemical study. Surface, 2017, 9(24), 14-27.	0.4	0
3291	Oxygen reduction reaction on covalently and noncovalently modified carbon nanowalls. Materials Protection, 2018, 59, 514-518.	0.1	0
3292	Carbon paper coated with Metal-free C-N electrocatalyst for Oxygen Reduction Reaction in Proton Exchange Membrane Fuel Cell. International Journal of Electrochemical Science, 0, , 7020-7033.	0.5	1
3293	Carbon Nanostructured Catalysts as High Efficient Materials for Low Temperature Fuel Cells. , 2019, , 1139-1166.		0
3294	Local electronic structure and activity of nitrogen-doped carbon. Tanso, 2019, 2019, 204-210.	0.1	2
3296	An Efficient Bifunctional Electrocatalyst of Phosphorous Carbon Co-doped MOFs. Nanoscale Research Letters, 2020, 15, 169.	3.1	3
3297	N and S Co-doped Ordered Mesoporous Carbon: An Efficient Electrocatalyst for Oxygen Reduction Reaction in Microbial Fuel Cells. Current Nanoscience, 2020, 16, 625-638.	0.7	2

#	Article	IF	Citations
3298	Metal-nitrogen intimacy of the nitrogen-doped ruthenium oxide for facilitating electrochemical hydrogen production. Applied Catalysis B: Environmental, 2022, 303, 120873.	10.8	19
3299	Carbon-Based Metal-Free Electrocatalysts: Past, Present, and Future. Accounts of Materials Research, 2021, 2, 1239-1250.	5.9	29
3300	A comprehensive review on planar boron nitride nanomaterials: From 2D nanosheets towards 0D quantum dots. Progress in Materials Science, 2022, 124, 100884.	16.0	59
3301	Fundamental understanding of microbial fuel cell technology: Recent development and challenges. Chemosphere, 2022, 288, 132446.	4.2	36
3302	Role of Nanostructures in Development of Energy-Efficient Electrochemical Non-enzymatic Glucose Sensors. Springer Proceedings in Energy, 2020, , 199-207.	0.2	0
3303	Modulation of carbon induced persulfate activation by nitrogen dopants: recent advances and perspectives. Journal of Materials Chemistry A, 2021, 9, 25796-25826.	5.2	34
3304	High-Throughput Computational Studies in Catalysis and Materials Research, and Their Impact on Rational Design. , 2020, , 1-44.		1
3305	Catalytic performance of nanostructured materials recently used for developing fuel cellsâ€™ electrodes. International Journal of Hydrogen Energy, 2021, 46, 39315-39368.	3.8	20
3306	Red onions waste-derived biocarbons with remarkably high catalytic activity for the oxygen reduction reaction and high capacitance. MRS Advances, 2021, 6, 847-855.	0.5	1
3307	Enhancement of Characteristics of Nitrogen-Doped Graphene Composite Materials Prepared by Ball Milling of Graphite with Melamine: Effect of Milling Speed and Material Ratios. Sains Malaysiana, 2020, 49, 1745-1754.	0.3	1
3308	GRAPHENE- AND GRAPHITE OXIDE-REINFORCED MAGNESIUM OXYCHLORIDE CEMENT COMPOSITES FOR THE CONSTRUCTION USE. Ceramics - Silikaty, 2020, , 38-47.	0.2	1
3309	Oxygen reduction reaction catalytic activity of carbon nanotubes in aqueous acid solutions. Tanso, 2020, 2020, 185-193.	0.1	0
3310	The application of graphene-based biomaterials in biomedicine. American Journal of Translational Research (discontinued), 2019, 11, 3246-3260.	0.0	17
3311	Structure and Electrochemical Properties of Nitrogen Containing Nanocarbon Films and Their Electroanalytical Application. Bunseki Kagaku, 2021, 70, 511-520.	0.1	0
3312	Oxygen-catalyzed Reduction Reaction at Nitrogen-doped Carbon Synthesized by Post-synthesis Method Using Single-walled Carbon Nanotubes as a Substrate Electrode. Bunseki Kagaku, 2021, 70, 557-561.	0.1	0
3313	Pyridinic-N Doped Porous Graphene Supported on Metal Substrates As the Promising Electrocatalyst for Oxygen Reduction Reaction. Energy & Fuels, 2021, 35, 19634-19640.	2.5	1
3314	Self-nitrogen-doped porous carbon prepared via pyrolysis of grass-blade without additive for oxygen reduction reaction. Diamond and Related Materials, 2022, 121, 108742.	1.8	9
3315	Insights into the pH-dependent Behavior of N-Doped Carbons for the Oxygen Reduction Reaction by First-Principles Calculations. Journal of Physical Chemistry C, 2021, 125, 26429-26436.	1.5	3

#	Article	IF	Citations
3316	Role of carbon-based nanomaterials in improving the performance of microbial fuel cells. Energy, 2022, 240, 122478.	4.5	40
3317	Hybrids of Reduced Graphene Oxide Aerogel and CNT for Electrochemical O2 Reduction. Catalysts, 2021, 11, 1404.	1.6	3
3318	Pyrrolic, pyridinic, and graphitic sumanene as metalâ€free catalyst for oxygen reduction reaction â€“ A density functional theory study. Fuel Cells, 2021, 21, 490-501.	1.5	18
3319	Low-dimensional non-metal catalysts: principles for regulating p-orbital-dominated reactivity. Npj Computational Materials, 2021, 7, .	3.5	41
3320	Effect of synthesis conditions on the properties of graphene doped with nitrogen atoms. Fullerenes Nanotubes and Carbon Nanostructures, 2022, 30, 10-14.	1.0	1
3321	Boron-doped Covalent Triazine Framework for Efficient CO2 Electroreduction. Chemical Research in Chinese Universities, 2022, 38, 141-146.	1.3	9
3322	Zinc chloride-activated micro-mesoporous carbon material derived from energy grass and its electrocatalytic performance toward oxygen reduction reaction. Journal of Energy Storage, 2022, 46, 103697.	3.9	9
3323	Degradation of Sulfamethoxazole Using Pms Activated by Cobalt Sulfides Encapsulated in Nitrogen and Sulfur Co-Doped Graphene. SSRN Electronic Journal, 0, , .	0.4	0
3324	Covalent Organic Frameworks. RSC Smart Materials, 2021, , 226-343.	0.1	0
3325	Molecular cooking: Amino acids trap silicon in carbon matrix to boost lithium-ion storage. Energy Storage Materials, 2022, 46, 344-351.	9.5	25
3326	Room temperature photoluminescent study of thermally grown reduced graphene oxide quantum dots. Inorganic Chemistry Communication, 2022, 136, 109164.	1.8	3
3327	Hollow carbon nanospheres@graphitic C3N5 heterostructures for enhanced oxygen electroreduction. Applied Surface Science, 2022, 579, 152006.	3.1	15
3328	Reduced graphene oxide supported NiCo2O4 nanocomposite bifunctional electrocatalyst for glucose-oxygen fuel cell. Fuel, 2022, 312, 122937.	3.4	16
3329	Nitrogen Implantation to Graphene Oxides. A Radio Frequency Plasma Treatment and Computational Approach â€“ Implications for Electrocatalytic Application. SSRN Electronic Journal, 0, , .	0.4	0
3330	Heteroatom-doped graphene-based electrocatalysts for ORR, OER, and HER. , 2022, , 145-168.		1
3331	Metalâ€“free C2N doped with sp2â€“hybridized B atom as highâ€“efficiency photocatalyst for nitrobenzene reduction reaction: A density functional theory study. Molecular Catalysis, 2022, 518, 112080.	1.0	3
3332	Structure and Magnetism of Few-Layer Nanographene Clusters in Carbon Microspheres. Journal of Physical Chemistry C, 2022, 126, 493-504.	1.5	2
3333	A Facile Synthesis of Noble-Metal-Free Catalyst Based on Nitrogen Doped Graphene Oxide for Oxygen Reduction Reaction. Materials, 2022, 15, 821.	1.3	14

#	Article	IF	Citations
3334	Co-Doped Magnesium Oxychloride Composites with Unique Flexural Strength for Construction Use. Materials, 2022, 15, 604.	1.3	1
3335	Next-Generation 2D Nanomaterial Composites Electrodes for Electrochemical Energy Storage. Materials Horizons, 2022, , 47-73.	0.3	1
3336	Porous carbons for energy storage and conversion. , 2022, , 239-540.		1
3337	Electrospun Carbon Nanofibers Loaded with Atomic FeN_x/Fe₂O₃ Active Sites for Efficient Oxygen Reduction Reaction in Both Acidic and Alkaline Media. Advanced Materials Interfaces, 2022, 9, .	1.9	7
3338	A novel 3D hybrid carbon-based conductive network constructed by bimetallic MOF-derived CNTs embedded nitrogen-doped carbon framework for oxygen reduction reaction. International Journal of Hydrogen Energy, 2022, 47, 5474-5485.	3.8	14
3339	In silico design of dual-doped nitrogenated graphene (C₂N) employed in electrocatalytic reduction of carbon monoxide to ethylene. Journal of Materials Chemistry A, 2022, 10, 4703-4710.	5.2	12
3340	Heteroatom-Doped Metal-Free Carbon Nanomaterials as Potential Electrocatalysts. Molecules, 2022, 27, 670.	1.7	18
3341	Nanostructured transition-metal phthalocyanine complexes for catalytic oxygen reduction reaction. Nanotechnology, 2022, 33, 182001.	1.3	7
3342	Heteroatom-Anchored Porous Carbon as Efficient Electrocatalyst for Oxygen Reduction Reaction. Energy & Fuels, 2022, 36, 2068-2074.	2.5	6
3343	Recent insights on iron based nanostructured electrocatalyst and current status of proton exchange membrane fuel cell for sustainable transport. Journal of Energy Chemistry, 2022, 69, 466-489.	7.1	27
3344	Metal-organic framework-derived iron oxide modified carbon cloth as a high-power density microbial fuel cell anode. Journal of Cleaner Production, 2022, 341, 130725.	4.6	34
3345	Advanced porous borocarbonitride nanoarchitectonics: Their structural designs and applications. Carbon, 2022, 190, 142-169.	5.4	24
3346	Recent Advances in Boronâ€•and Nitrogenâ€Doped Carbonâ€Based Materials and Their Various Applications. Advanced Materials Interfaces, 2022, 9, .	1.9	48
3347	In Situ Construction of Bifunctional N-Doped Carbon-Anchored Co Nanoparticles for OER and ORR. ACS Applied Materials & Interfaces, 2022, 14, 8549-8556.	4.0	56
3348	Converting of the 2D graphene to its 3D by chicken red blood cells as sheets separator for construction supercapacitor electrode. Current Applied Physics, 2022, 37, 8-18.	1.1	4
3349	In-site salt template-assisted synthesis of FeP self-embedded P, N co-doped hierarchical porous carbon for efficient oxygen reduction reaction. Journal of the Taiwan Institute of Chemical Engineers, 2022, 133, 104252.	2.7	4
3350	Synergistic enhancement of photocatalytic CO2 reduction by plasmonic Au nanoparticles on TiO2 decorated N-graphene heterostructure catalyst for high selectivity methane production. Applied Catalysis B: Environmental, 2022, 307, 121181.	10.8	58
3351	Metal doped black phosphorene for gas sensing and catalysis: A first-principles perspective. Applied Surface Science, 2022, 586, 152743.	3.1	9

#	Article	IF	Citations
3352	Spinel Type Mnâ^'Co Oxide Coated Carbon Fibers as Efficient Bifunctional Electrocatalysts for Zincâ€Air Batteries. Batteries and Supercaps, 2022, 5, .	2.4	6
3353	Ultra-Thin Broadband Terahertz Absorption and Electromagnetic Shielding Properties of Mxene/Rgo Composite Film. SSRN Electronic Journal, 0, , .	0.4	0
3354	Spray-Pyrolysis-Derived Hollow Cofe-Nc@Cnt Electrocatalyst with Excellent Durability and Activity for Oxygen Reduction Reaction. SSRN Electronic Journal, 0, , .	0.4	0
3355	Doping of Carbon Nanostructures for Energy Application. Advances in Material Research and Technology, 2022, , 83-109.	0.3	3
3356	Advanced carbon-based nanostructured materials for fuel cells. , 2022, , 201-227.		1
3357	Artificial 2d Van Der Waals Inorganic Oxychloride Anhydrous Proton Conductor. SSRN Electronic Journal, 0, , .	0.4	0
3358	Functionality and design of Co-MOFs: unique opportunities in electrocatalysts for oxygen reduction reaction. Catalysis Science and Technology, 2022, 12, 1723-1740.	2.1	9
3359	Theoretical Investigation of the Active Sites in N-Doped Graphene Bilayer for the Oxygen Reduction Reaction in Alkaline Media in PEMFCs. Journal of Physical Chemistry C, 2022, 126, 5863-5872.	1.5	8
3360	Fluorinated MAX Phases for Photoelectrochemical Hydrogen Evolution. ACS Sustainable Chemistry and Engineering, 2022, 10, 2793-2801.	3.2	11
3361	Structural defects in graphene quantum dots: A review. International Journal of Quantum Chemistry, 2022, 122, .	1.0	17
3362	Enhancing Oxygen Reduction Reaction Activity Using Single Atom Catalyst Supported on Tantalum Pentoxide. ChemCatChem, 0, , .	1.8	1
3363	Carbon-based bifunctional electrocatalysts for oxygen reduction and oxygen evolution reactions: Optimization strategies and mechanistic analysis. Journal of Energy Chemistry, 2022, 71, 234-265.	7.1	78
3364	Electrostatic Asymmetry of Wurtzite Nanocrystals and Resulting Photocatalytic Properties. Journal of Physical Chemistry C, 2022, 126, 4751-4761.	1.5	0
3365	Successful Manufacturing Protocols of N-Rich Carbon Electrodes Ensuring High ORR Activity: A Review. Processes, 2022, 10, 643.	1.3	7
3366	The promising solarâ€powered water purification based on graphene functional architectures. EcoMat, 2022, 4, .	6.8	15
3367	s-Tetrazine-Bridged Photochromic Aromatic Framework Material. ACS Omega, 2022, 7, 11276-11284.	1.6	2
3368	Novel Porphyrinâ€Based Hypercrosslinked Polymers as Highly Efficient Electrocatalysts for Oxygen Reduction Reaction. Energy Technology, 2022, 10, .	1.8	1
3369	Designing Sites in Heterogeneous Catalysis: Are We Reaching Selectivities Competitive With Those of Homogeneous Catalysts?. Chemical Reviews, 2022, 122, 8594-8757.	23.0	118

#	Article	IF	Citations
3370	Two-dimensional covalent organic framework films prepared on various substrates through vapor induced conversion. Nature Communications, 2022, 13, 1411.	5.8	44
3371	Using Anionâ€Exchange to Induce the Formation of Edge Defects in CoN_x to Enhance ORR Activity. ChemCatChem, 2022, 14, .	1.8	7
3372	Lâ€“Cysteine Modulated ZIF for Deriving Nitrogenâ€Doped Porous Carbon: A Highly Efficient and Stable Electrocatalyst for Oxygen Reduction Reactions. ChemistrySelect, 2022, 7, .	0.7	0
3373	A DFT study of the oxygen reduction reaction mechanism on be doped graphene. Chemical Papers, 2022, 76, 4471-4480.	1.0	1
3374	Nanocarbon-Induced Etching Property of Semiconductor Surfaces: Testing Nanocarbonâ€™s Catalytic Activity for Oxygen Reduction Reaction at a Single-Sheet Level. ECS Journal of Solid State Science and Technology, 2022, 11, 041001.	0.9	3
3375	Degradation of sulfamethoxazole using PMS activated by cobalt sulfides encapsulated in nitrogen and sulfur co-doped graphene. Science of the Total Environment, 2022, 827, 154379.	3.9	38
3376	Self-supporting nitrogen-doped reduced graphene oxide@carbon nanofiber hybrid membranes as high-performance integrated air cathodes in microbial fuel cells. Carbon, 2022, 193, 242-257.	5.4	18
3377	Ultra-thin broadband terahertz absorption and electromagnetic shielding properties of MXene/rGO composite film. Carbon, 2022, 194, 127-139.	5.4	33
3378	Predoped Oxygenated Defects Activate Nitrogen-Doped Graphene for the Oxygen Reduction Reaction. ACS Catalysis, 2022, 12, 173-182.	5.5	17
3379	Preparation and Characterization of Silver-Iron Bimetallic Nanoparticles on Activated Carbon Using Plasma in Liquid Process. Nanomaterials, 2021, 11, 3385.	1.9	2
3380	MXeneâ”€A New Paradigm Toward Artificial Nitrogen Fixation for Sustainable Ammonia Generation: Synthesis, Properties, and Future Outlook. , 2022, 4, 212-245.		20
3381	Bifunctional Microwave-Assisted Molybdenum-Complex Carbon Sponge Production for Supercapacitor and Water-Splitting Applications. ACS Applied Materials & Interfaces, 2021, 13, 60966-60977.	4.0	10
3382	N, S, P-Codoped Graphene-Supported Ag-MnFe2O4 Heterojunction Nanoparticles as Bifunctional Oxygen Electrocatalyst with High Efficiency. Catalysts, 2021, 11, 1550.	1.6	4
3383	Formation of Pillar-Ions in the Li Layer Decreasing the Li/Ni Disorder and Improving the Structural Stability of Cation-Doped Ni-Rich LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂: A First-Principles Verification. ACS Applied Energy Materials, 2021, 4, 14068-14079.	2.5	14
3384	Two-Dimensional Biphenylene: A Graphene Allotrope with Superior Activity toward Electrochemical Oxygen Reduction Reaction. Journal of Physical Chemistry Letters, 2021, 12, 12230-12234.	2.1	43
3385	Boron-Functionalized Organic Framework as a High-Performance Metal-Free Catalyst for N₂ Fixation. Journal of Physical Chemistry Letters, 2021, 12, 12142-12149.	2.1	9
3386	Highly efficient C(CO)â€“C(alkyl) bond cleavage in ketones to access esters over ultrathin N-doped carbon nanosheets. Chemical Science, 2022, 13, 5196-5204.	3.7	6
3387	Synergetic Effects of Mixed-Metal Polyoxometalates@Carbon-Based Composites as Electrocatalysts for the Oxygen Reduction and the Oxygen Evolution Reactions. Catalysts, 2022, 12, 440.	1.6	3

#	Article	IF	Citations
3388	Nitrogen-doping effects on few-layer graphene as an anode material for lithium-ion batteries. Materials Today Communications, 2022, 31, 103498.	0.9	5
3389	Inhibited Surface Diffusion of High-Entropy Nano-Alloys for the Preparation of 3D Nanoporous Graphene with High Amounts of Single Atom Dopants. , 2022, 4, 978-986.		14
3390	Grapheneâ€Based Nanomaterials for Solarâ€Driven Overall Water Splitting. Chemistry - A European Journal, 2022, 28, .	1.7	4
3394	Effect of chemical substitution and external strain on phase stability and ferroelectricity in two dimensional M₂CT₂ MXenes. Nanoscale, 2022, , .	2.8	4
3395	Cubic coreâ€“shell structure of NiCoS_x/CoS₂ as a high-efficiency tri-functional catalyst for Znâ€“air battery and overall water splitting. CrystEngComm, 2022, 24, 3894-3902.	1.3	4
3396	Structures, properties, and applications of nitrogen-doped graphene. Theoretical and Computational Chemistry, 2022, , 211-248.	0.2	3
3397	Tunable Surface Chemistry in Heterogeneous Bilayer Singleâ€Atom Catalysts for Electrocatalytic NO_x Reduction to Ammonia. Advanced Functional Materials, 2022, 32, .	7.8	30
3398	Salt-Assisted Pyrolysis of Covalent Organic Framework for Controlled Active Nitrogen Functionalities for Oxygen Reduction Reaction. Bulletin of the Chemical Society of Japan, 2022, 95, 972-977.	2.0	8
3399	Carbon-based metal-free oxygen reduction reaction electrocatalysts: past, present and future. New Carbon Materials, 2022, 37, 338-354.	2.9	14
3400	Recent progress in microwave-assisted preparations of 2D materials and catalysis applications. Nanotechnology, 2022, 33, 342002.	1.3	8
3401	Synthesis of Pure Thiopheneâ€“Sulfur-Doped Graphene for an Oxygen Reduction Reaction with High Performance. Journal of Physical Chemistry Letters, 2022, 13, 4350-4356.	2.1	5
3402	Accelerated intermediate conversion through nickel doping into mesoporous Co-N/C nanopolyhedron for efficient ORR. Journal of Energy Chemistry, 2022, 73, 240-247.	7.1	23
3403	Norbornane derived N-doped sp2 carbon framework as an efficient electrocatalyst for oxygen reduction reaction and hydrogen evolution reaction. Fuel, 2022, 323, 124420.	3.4	5
3404	Co-N heteroatomic interface engineering in peanut Shell-Derived porous carbon for enhanced oxygen reduction reaction. Journal of Colloid and Interface Science, 2022, 622, 971-977.	5.0	6
3405	Persulfate-nitrogen doped graphene mixture as an oxidant for the synthesis of 3-nitro-4-aryl-2H-chromen-2-ones from aryl alkynoate esters and nitrite. Organic and Biomolecular Chemistry, 0, , .	1.5	3
3406	Mechanism of oxygen reduction reaction on Ni/CNTs and Ni/X-CNTs (X=B, N, O) catalysts: a theoretical study. Theoretical Chemistry Accounts, 2022, 141, .	0.5	0
3407	Electrocatalysis with metal-free carbon-based catalysts. , 2022, , 213-244.		1
3408	Heterogeneous carbon metal-free catalysts. , 2022, , 195-212.		0

#	Article	IF	Citations
3409	Nanocarbon-based metal-free catalysts. , 2022, , 1-19.		0
3411	Polymer nanocomposites for automotive applications. , 2022, , 267-317.		3
3412	Nitrogenâ€Rich Carbonaceous Materials for Advanced Oxygen Electrocatalysis: Synthesis, Characterization, and Activity of Nitrogen Sites. Advanced Functional Materials, 2022, 32, .	7.8	59
3413	Transformation of Co(OH)2/ZnO to Co3O4â€“ZnO/Nâ€“C composite via MOFs for enhanced Bisphenol A degradation. Journal of Sol-Gel Science and Technology, 2022, 103, 258-266.	1.1	2
3414	Coupling Fe₃C Nanoparticles and Nâ€Doping on Woodâ€Derived Carbon to Construct Reversible Cathode for Znâ€“Air Batteries. Small, 2022, 18, .	5.2	29
3415	Palladiumâ€“Cobalt Bimetallic Nanoparticles Supported on Nitrogen-Doped Graphene as Efficient Electrocatalyst for Oxygen Reduction. Journal of Electronic Materials, 2022, 51, 4580-4588.	1.0	2
3416	Design a promising non-precious electro-catalyst for oxygen reduction reaction in fuel cells. International Journal of Hydrogen Energy, 2023, 48, 6308-6316.	3.8	4
3418	Nitrogen Implantation into Graphene Oxide and Reduced Graphene Oxides Using Radio Frequency Plasma Treatment in Microscale. SSRN Electronic Journal, 0, , .	0.4	0
3419	Facile Synthesis of High Content Nitrogen-Doped Hierarchical Porous Carbon Spheres for High-Capacity Lithium-Sulfur Batteries. SSRN Electronic Journal, 0, , .	0.4	0
3420	Chapter 8. Nanocatalysis With Sustainability. RSC Nanoscience and Nanotechnology, 2022, , 220-254.	0.2	1
3421	Facial fabrication of few-layer functionalized graphene with sole functional group through Dielsâ€“Alder reaction by ball milling. RSC Advances, 2022, 12, 17990-18003.	1.7	0
3422	Oxygen reduction reaction by metal-free catalysts. , 2022, , 241-275.		1
3423	Transport properties of MoS₂/V₇(Bz)₈ and graphene/V₇(Bz)₈ vdW junctions tuned by bias and gate voltages. RSC Advances, 2022, 12, 17422-17433.	1.7	0
3424	Revealing intrinsic spin coupling in transition metal-doped graphene. Physical Chemistry Chemical Physics, 2022, 24, 16300-16309.	1.3	7
3425	The in situ investigation of the polyaniline-derived N-doped carbon with the interdigitated array electrodes towards the oxygen reduction reaction. Journal of Solid State Electrochemistry, 0, , .	1.2	0
3426	T-Phase and H-Phase Coupled TMD van der Waals Heterostructure ZrS₂/MoTe₂ with Both Rashba Spin Splitting and Type-III Band Alignment. Journal of Physical Chemistry C, 2022, 126, 10601-10609.	1.5	5
3427	Highly efficient two-step nitrogen doping of graphene oxide-based materials in oxygen presence atmosphere for high-performance transistors and electrochemical applications. Journal of Science: Advanced Materials and Devices, 2022, 7, 100481.	1.5	2
3428	Highâ€Quality Nâ€Doped Graphene with Controllable Nitrogen Bonding Configurations Derived from Ionic Liquids. Chemistry - an Asian Journal, 0, , .	1.7	0

#	Article	IF	Citations
3429	Oxygenâ€Induced Dissociation of a Single Water Molecule in Confined 2â€D Layers: A Semiempirical study. ChemPhysChem, 0, , .	1.0	2
3430	Compacts of Boron-Doped Synthetic Diamond: Acceleration of Cathodic Reactions by Plasma-Assisted and Electrochemical Treatment of the Electrodes. Russian Journal of Electrochemistry, 2022, 58, 520-527.	0.3	2
3431	Adsorption properties of radionuclides on BC3: the first principles study. Molecular Physics, 2022, 120, .	0.8	1
3433	Enhancing microbial fuel cell performance by carbon nitride-based nanocomposites. , 2022, , 63-79.		0
3434	Highly active reduced graphene oxide supported Ni nanoparticles for Câ€“S coupling reactions. Nanoscale Advances, 2022, 4, 3131-3135.	2.2	2
3435	EfficientÂActivationÂOf Peroxymonosulfate by CobaltÂAnd Nitrogen-Dopedâ€,Porousâ€,Carbonâ€,ÂFor PerfluorooctanoicÂAcidÂDegradation:ÂThe Synergism Performance and MechanismÂOf Co and N. SSRN Electronic Journal, 0, , .	0.4	0
3436	A Battery Process Activated Highly Efficient Carbon Catalyst toward Oxygen Reduction by Stabilizing Lithiumâ€“Oxygen Bonding. Advanced Functional Materials, 2022, 32, .	7.8	7
3437	Configuration Sensitivity of Electrocatalytic Oxygen Reduction Reaction on Nitrogen-Doped Graphene. Journal of Physical Chemistry Letters, 2022, 13, 6187-6193.	2.1	1
3438	Recent Progress in Carbon Dotsâ€Based Materials for Electrochemical Energy Storage Toward Environmental Sustainability. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	9
3439	Why is graphene an extraordinary material? A review based on a decade of research. Frontiers of Materials Science, 2022, 16, .	1.1	11
3440	Optimization of H2O2 production in small-scale off-grid buffer layer flow cell equipped with Cobalt@N-Doped Graphitic Carbon Coreâ€“Shell Nanohybrid electrocatalyst. Materials Today Energy, 2022, , 101092.	2.5	6
3441	High degree of N-functionalization in macroscopically assembled carbon nanotubes. Journal of Materials Science, 2022, 57, 13314-13325.	1.7	3
3442	Supercapacitor performance of nitrogen doped graphene synthesized via DMF assisted single-step solvothermal method. FlatChem, 2022, 34, 100400.	2.8	14
3444	Electric Field Polarized Feâ€'N Functionalized Graphene Oxide Nanosheet Catalyst for Efficient Oxygen Reduction Reaction. ChemistrySelect, 2022, 7, .	0.7	0
3445	Intrinsic Catalytic Activity of Carbon Nanotubes for Electrochemical Nitrate Reduction. ACS Catalysis, 2022, 12, 9135-9142.	5.5	20
3446	Tunable high-performance electromagnetic interference shielding of intrinsic N-doped chitin-based carbon aerogel. Carbon, 2022, 198, 142-150.	5.4	25
3447	Towards High-Performance Supercapacitor Electrodes via Achieving 3D Cross-Network and Favorable Surface Chemistry. ACS Applied Materials & Interfaces, 2022, 14, 34637-34648.	4.0	8
3448	Metal supported graphene catalysis: A review on the benefits of nanoparticular supported specialty sp2 carbon catalysts on enhancing the activities of multiple chemical transformations. Carbon Trends, 2022, 9, 100196.	1.4	22

#	Article	IF	Citations
3449	An In-Depth Exploration of the Electrochemical Oxygen Reduction Reaction (ORR) Phenomenon on Carbon-Based Catalysts in Alkaline and Acidic Mediums. Catalysts, 2022, 12, 791.	1.6	13
3450	Co-doped CeO₂/Nâ€“C nanorods as a bifunctional oxygen electrocatalyst and its application in rechargeable Zn-air batteries. Nanotechnology, 2022, 33, 415404.	1.3	3
3451	One-step synthesis of nitrogen-doped few-layer graphene structures decorated with Mn1.5Co1.5O4 nanoparticles for highly efficient electrocatalysis of oxygen reduction reaction. Mendeleev Communications, 2022, 32, 492-494.	0.6	2
3452	State-of-the-art and developmental trends in platinum group metal-free cathode catalyst for anion exchange membrane fuel cell (AEMFC). Applied Catalysis B: Environmental, 2023, 325, 121733.	10.8	54
3453	Novel applications of graphene and its derivatives: A short review. Current Nanomaterials, 2022, 07, .	0.2	0
3454	Nitrogen implantation into graphene oxide and reduced graphene oxides using radio frequency plasma treatment in microscale. Carbon, 2022, 199, 415-423.	5.4	9
3455	Efficient functionalization of reduced graphene oxide by 3-(pyridin-2-yl)-1,2,4,5-tetrazine and design of hybrids with silver nanoparticles for electrocatalysis. Materials Chemistry and Physics, 2022, 291, 126607.	2.0	4
3456	Synthetic carbon nanomaterials for electrochemical energy conversion. Nanoscale, 2022, 14, 13473-13489.	2.8	6
3457	N-doped graphene for electrocatalytic O₂ and CO₂ reduction. Nanoscale Advances, 2022, 4, 4197-4209.	2.2	6
3458	Diverse Electronic Structures Governed by N-Substitution in Stable Two-Dimensional Dumbbell Carbonitrides. SSRN Electronic Journal, 0, , .	0.4	0
3459	Carbon-Based Nanomaterials for Metal-Air Batteries. Springer Series in Materials Science, 2022, , 249-270.	0.4	0
3460	Nanostructured Materials for Hydrogen Storage and Generation and Oxygen Reduction Reaction. ACS Symposium Series, 0, , 131-168.	0.5	1
3461	A Simple Method for Preparation of Highly Conductive Nitrogen/Phosphorus-Doped Carbon Nanofiber Films. Materials, 2022, 15, 5955.	1.3	2
3462	Reviewâ€”Heteroatom-Doped High Porous Carbon Metal Free Nanomaterials for Energy Storage and Conversion. ECS Journal of Solid State Science and Technology, 2022, 11, 091006.	0.9	1
3463	Effects of Graphitic and Pyridinic Nitrogen Defects on Transition Metal Nucleation and Nanoparticle Formation on N-Doped Carbon Supports: Implications for Catalysis. ACS Applied Nano Materials, 2022, 5, 14922-14933.	2.4	3
3464	An Overview of Coating Processes on Metal Substrates Based on Graphene-Related Materials for Multifarious Applications. Industrial & Engineering Chemistry Research, 2022, 61, 13763-13786.	1.8	1
3465	Epitaxy of III-nitrides on two-dimensional materials and its applications. Chinese Physics B, 2022, 31, 117702.	0.7	3
3466	Novel nanostructures suspended in graphene vacancies, edges and holes. Science China Materials, 0, , .	3.5	3

#	Article	IF	Citations
3467	Activating Nitrogenâ€doped Graphene Oxygen Reduction Electrocatalysts in Acidic Electrolytes using Hydrophobic Cavities and Protonâ€conductive Particles. Angewandte Chemie - International Edition, 2022, 61, .	7.2	8
3468	Lithiation of a Silicon Oxide Cluster Adsorbed onto Graphene Oxide: Quantum-Chemical Simulation. Russian Journal of Inorganic Chemistry, 2022, 67, 1785-1793.	0.3	1
3469	Effects of anisotropy on magnetic and thermodynamic properties of a graphene cluster monolayer. Phase Transitions, 2022, 95, 823-836.	0.6	12
3470	Activating Nitrogenâ€doped Graphene Oxygen Reduction Electrocatalysts in Acidic Electrolytes using Hydrophobic Cavities and Protonâ€conductive Particles. Angewandte Chemie, 2022, 134, .	1.6	2
3471	Tin Nanoclusters Confined in Nitrogenated Carbon for the Oxygen Reduction Reaction. ACS Nano, 2022, 16, 18830-18837.	7.3	11
3472	Bimetallic ZIFs derived 3D acetylene black loading La2O3/Co bifunctional ORR/OER catalysts. Applied Surface Science, 2023, 610, 155551.	3.1	7
3473	Probing the Interaction between Nitrogen Dopants and Edge Structures of Doped Graphene Catalysts for the Highly Efficient Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2022, 126, 19113-19121.	1.5	1
3474	Multicomponent magnetic nanoparticle engineering: the role of structure-property relationship in advanced applications. Materials Today Chemistry, 2022, 26, 101220.	1.7	17
3475	Diverse electronic structures governed by N-substitution in stable two-dimensional dumbbell carbonitrides. Applied Surface Science, 2023, 609, 155463.	3.1	0
3476	Directional introduction of pyridine nitrogen functional groups in activated carbon catalysts for the catalytic production of hydrogen: An experimental and DFT calculation. Chemical Engineering Journal, 2023, 453, 139744.	6.6	5
3477	Photocatalytic Production of Oxygen by Nitrogen Doped Graphene Oxide Nanospheres: Synthesized via Bottomâ€Up Approach Using Dibenzopyrrole. ChemistrySelect, 2022, 7, .	0.7	1
3478	Recent progress in heteroatom doped carbon based electrocatalysts for oxygen reduction reaction in anion exchange membrane fuel cells. International Journal of Hydrogen Energy, 2023, 48, 3593-3631.	3.8	33
3479	Zincâ€“Air Batteries with an Efficient and Stable MnCo₂O₄/Carbon Fiber Bifunctional Electrocatalyst and a Poly(acrylic Acid)-Based Gel Electrolyte. ACS Applied Energy Materials, 2022, 5, 14164-14174.	2.5	1
3480	Chemical modification of graphene for atomic-scale catalyst supports. Nano Express, 2022, 3, 042001.	1.2	1
3481	Application of a TEMPO-Polypyrrole Polymer for NOx-Mediated Oxygen Electroreduction. Catalysts, 2022, 12, 1466.	1.6	3
3482	Scalable production of reduced graphene oxide via biowaste valorisation: an efficient oxygen reduction reaction towards metal-free electrocatalysis. New Journal of Chemistry, 2023, 47, 1360-1370.	1.4	3
3483	Enhanced Acetaminophen Electrochemical Sensing Based on Nitrogen-Doped Graphene. International Journal of Molecular Sciences, 2022, 23, 14866.	1.8	5
3484	Introduction to Electrocatalysts. ACS Symposium Series, 0, , 1-37.	0.5	6

#	Article	IF	Citations
3485	Solid-State Synthesis of Cobalt/NCS Electrocatalyst for Oxygen Reduction Reaction in Dual Chamber Microbial Fuel Cells. Nanomaterials, 2022, 12, 4369.	1.9	4
3486	Nitrogen doped carbonaceous materials as platinum free cathode electrocatalysts for oxygen reduction reaction (ORR). Reaction Kinetics, Mechanisms and Catalysis, 2023, 136, 125-147.	0.8	3
3487	Application of HTS in Material Preparation and New Devices. Nanostructure Science and Technology, 2023, , 145-192.	0.1	0
3488	N-piperidinyl substituted trioxotriangulene as an efficient catalyst for oxygen reduction reaction in fuel cell applicationâ€"a DFT study. Ionics, 2023, 29, 1115-1125.	1.2	6
3490	Elucidating Electrocatalytic Oxygen Reduction Kinetics via Intermediates by Timeâ€Dependent Electrochemiluminescence. Angewandte Chemie, 0, , .	1.6	1
3491	General outlook of the elaboration of nitrogen doped graphenic materials from the reaction between an amino alcohol and metallicÂsodium. Materials Today Chemistry, 2023, 27, 101343.	1.7	0
3492	Recent progress in heteroatom-doped carbon electrocatalysts for the two-electron oxygen reduction reaction. Chemical Engineering Journal, 2023, 456, 141042.	6.6	19
3493	Transport properties of GNR-C₆₀ single-molecule devices. Journal of Materials Chemistry C, 2023, 11, 2251-2266.	2.7	3
3494	Elucidating Electrocatalytic Oxygen Reduction Kinetics via Intermediates by Timeâ€Dependent Electrochemiluminescence. Angewandte Chemie - International Edition, 2023, 62, .	7.2	16
3495	Graphene Nanosheets Stabilized by P3HT Nanoparticles for Printable Metal-Free Electrocatalysts for Oxygen Reduction. ACS Applied Nano Materials, 2023, 6, 908-917.	2.4	7
3496	Facile Hydrothermal Fabrication of an Î±-Ni(OH)₂/N-Doped Reduced Graphene Oxide Nanohybrid as a High-Performance Anode Material for Lithium-Ion Batteries. Energy & Fuels, 2023, 37, 2368-2378.	2.5	5
3497	Electrochemical Determination of Hydrogen Peroxide by High Proportion of Pyridinic Nitrogen Doped Carbon loaded Nano-copper Sheets. New Journal of Chemistry, 0, , .	1.4	0
3498	Acidic oxygen evolution reaction: Mechanism, catalyst classification, and enhancement strategies. , 2023, 2, 53-90.		36
3499	Comprehensive Review on Nitrogen-Doped Graphene: Structure Characterization, Growth Strategy, and Capacitive Energy Storage. Energy & Fuels, 2023, 37, 902-918.	2.5	8
3500	Facile Preparation of Cobalt Nanoparticles Encapsulated Nitrogen-Doped Carbon Sponge for Efficient Oxygen Reduction Reaction. Polymers, 2023, 15, 521.	2.0	5
3502	Machine Learning Identification of Active Sites in Graphite-Conjugated Catalysts. Journal of Physical Chemistry C, 2023, 127, 2303-2313.	1.5	3
3503	Synthesis and applications of carbon-polymer composites and nanocomposite functional materials. , 2023, , 71-105.		0
3504	Facile synthesis of high-content nitrogen-doped hierarchical porous carbon spheres for high-capacity lithium-sulfur batteries. Journal of Materials Science, 2023, 58, 2700-2712.	1.7	3

#	Article	IF	Citations
3505	Heterocyclic Modulated Electronic States of Alkynylâ€Containing Conjugated Microporous Polymers for Efficient Oxygen Reduction. Small, 2023, 19, .	5.2	14
3506	Rational design of porous Fex-N@MOF as a highly efficient catalyst for oxygen reduction over a wide pH range. Journal of Alloys and Compounds, 2023, 944, 169039.	2.8	5
3507	Treatment of Hydrophobic Polycyclic Aromatic Hydrocarbons and Toxicity Using GO-TiO2-Sr(OH)2/SrCO3 Nanocomposite via Photocatalytic Degradation. , 2022, 1, 60-83.		1
3508	Electronic Properties of Graphene Nanoribbons Doped with Pyrrole-Like Nitrogen. Semiconductors, 2022, 56, 406-410.	0.2	0
3509	Green approach for the synthesis of monolayer reduced graphene oxide: one-step protocol with simultaneous iodination and reduction. New Journal of Chemistry, 2023, 47, 4609-4613.	1.4	2
3510	Modification of graphene with nitrogen and oxygen via radical reactions with simple mechanical treatment. Diamond and Related Materials, 2023, 135, 109857.	1.8	0
3511	Unifying the origin of catalytic activities for carbon-based metal-free electrocatalysts. Catalysis Today, 2023, 418, 114129.	2.2	3
3512	Influence of phosphorus-doped bilayer graphene configuration on the oxygen reduction reaction in acidic solution. Carbon, 2023, 210, 118012.	5.4	0
3513	Evolution in graphene oxide-based materials characterization and modeling. , 2022, , .		0
3514	Synthesis, properties and electrocatalytic application of g-C ₃ N ₄ for oxygen electrodes of fuel cells. Nanocomposites, 2023, 9, 1-9.	2.2	2
3515	Operando Studies of Electrochemical Denitrogenation and Its Mitigation of N-Doped Carbon Catalysts in Alkaline Media. ACS Catalysis, 2023, 13, 2813-2821.	5.5	2
3516	Scalable synthesis of nitrogen and nitrogenâ€“silicon co-doped graphene: SiC4 and SiN1C3 as new active centers for boosting ORR performance. International Journal of Hydrogen Energy, 2023, 48, 17512-17525.	3.8	7
3517	In-situ synthesis of N/S co-doped Cu-based graphene-like nanosheets as high efficiency electrocatalysts for oxygen reduction reaction. International Journal of Hydrogen Energy, 2023, 48, 18268-18279.	3.8	5
3519	Templated Synthesis of Exfoliated Porous Carbon with Dominant Graphitic Nitrogen. ACS Materials Au, 2023, 3, 231-241.	2.6	3
3520	Catalytic activity of OH functionalized N-doped graphene in oxygen reduction reaction for fuel cell applications: a DFT study. Applied Physics A: Materials Science and Processing, 2023, 129, .	1.1	7
3521	A carbon catalyst doped with Co and N derived from the metal-organic framework hybrid (ZIF-8@ZIF-67) for efficient oxygen reduction reaction. New Carbon Materials, 2023, 38, 200-209.	2.9	6
3522	Identifying the key N species for electrocatalytic oxygen reduction reaction on N-doped graphene. Nano Research, 2023, 16, 6642-6651.	5.8	18
3523	Fluorination and its Effects on Electrocatalysts for Lowâ€Temperature Fuel Cells. Advanced Energy Materials, 2023, 13, .	10.2	11

#	Article	IF	Citations
3524	Synthesis and application of carbon-based nanomaterials for bioelectrochemical systems. , 2023, , 327-356.		3
3525	Electrochemical Syntheses of Polycyclic Aromatic Hydrocarbons (PAHs). Advanced Materials, 2023, 35, .	11.1	3
3526	Enhanced adhesion and corrosion resistance of reduced graphene oxide coated-steel with iron oxide nanoparticles. Applied Surface Science, 2023, 624, 157121.	3.1	2
3527	Promotion of the Efficient Electrocatalytic Production of H2O2 by N,O- Co-Doped Porous Carbon. Nanomaterials, 2023, 13, 1188.	1.9	3
3528	Synergistic effect of TiO2 nanostructured cathode in microbial fuel cell for bioelectricity enhancement. Chemosphere, 2023, 330, 138556.	4.2	2
3529	Nitrogen-Doped Graphene Oxide as Efficient Metal-Free Electrocatalyst in PEM Fuel Cells. Nanomaterials, 2023, 13, 1233.	1.9	2
3530	Comparison of Thermal and Laser-Reduced Graphene Oxide Production for Energy Storage Applications. Nanomaterials, 2023, 13, 1391.	1.9	4
3531	Emerging monoelemental 2D materials (Xenes) for biosensor applications. Nano Research, 2023, 16, 7030-7052.	5.8	3
3532	Multi-heteroelement-doped porous carbon as an efficient catalyst for alkaline oxygen reduction reaction. Diamond and Related Materials, 2023, 136, 109957.	1.8	2
3533	Twoâ€“dimensional metalâ€“organic framework nanosheets: An efficient twoâ€“electron oxygen reduction reaction electrocatalyst for boosting cathodic luminol electrochemiluminescence. Chemical Engineering Journal, 2023, 466, 143156.	6.6	9
3540	Electrical Properties of Degenerate Boron Doped Graphene. , 2023, , .		1
3545	Aqueous Batteries for Human Body Electronic Devices. ACS Energy Letters, 2023, 8, 2904-2918.	8.8	9
3546	Electrocatalysis by Graphene Materials. , 2023, , 50-80.		0
3553	Upcycling the solid wastes as precursors for graphene production. , 2023, , 1-21.		0
3554	Progress of research on the sustainable preparation of graphene and its derivatives. , 2023, , 239-304.		0
3573	Graphene-Based Materials in Energy Harvesting. Materials Horizons, 2023, , 227-247.	0.3	0
3585	Metal porphyrins and metal phthalocyanines as designable molecular model electrocatalysts. Materials Chemistry Frontiers, 2023, 8, 228-247.	3.2	2
3599	Waste and biomass valorization via its transformation into advanced materials for energy applications. , 2024, , 275-326.		0

#	Article	IF	Citations
3607	Recent progress in group-III metal chalcogenide based Janus materials: from properties to potential applications. Journal of Materials Chemistry C, 2023, 11, 16439-16451.	2.7	1
3613	Recent advances in nitrogen-doped graphene-based heterostructures and composites: mechanism and active sites for electrochemical ORR and HER. Green Chemistry, 2024, 26, 57-102.	4.6	2
3621	Low-cost Transition Metal-Nitrogen-Carbon Electrocatalysts for Oxygen Reduction Reaction: Operating Conditions from Aqueous Electrolytes to Fuel Cells. Sustainable Energy and Fuels, 0, , .	2.5	0