

CITATION REPORT

List of articles citing

Synthesis of N-doped graphene by chemical vapor deposition and its electrical properties

DOI: 10.1021/nl803279t
Nano Letters, 2009, 9, 1752-8.

Source: <https://exaly.com/paper-pdf/46785193/citation-report.pdf>

Version: 2024-04-26

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

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

#	Paper	IF	Citations
2288	Self-Terminating Confinement Approach for Large-Area Uniform Monolayer Graphene Directly over Si/SiO _x by Chemical Vapor Deposition.		
2287	Simultaneous Nitrogen Doping and Pore Generation in Thermo-Insulating Graphene Films via Colloidal Templating.		
2286	Ordered, Scalable Heterostructure Comprising Boron Nitride and Graphene for High-Performance Flexible Supercapacitors.		
2285	Synthesis of Few-Layer and Multi-Layer Graphene and Fabrication of Top-Gated Field Effect Transistors without Using Transferring Processes. 2009 , 1205, 32401		1
2284	Catalytic unzipping of carbon nanotubes to few-layer graphene sheets under microwaves irradiation. 2009 , 371, 22-30		46
2283	Dynamic Characterization of Graphene Growth and Etching by Oxygen on Ru(0001) by Photoemission Electron Microscopy. 2009 , 113, 20365-20370		42
2282	Chemically induced mobility gaps in graphene nanoribbons: a route for upscaling device performances. <i>Nano Letters</i> , 2009 , 9, 2725-9	11.5	96
2281	Spin gapless semiconductor-metal-half-metal properties in nitrogen-doped zigzag graphene nanoribbons. 2009 , 3, 1952-8		450
2280	Scalable synthesis of few-layer graphene ribbons with controlled morphologies by a template method and their applications in nanoelectromechanical switches. 2009 , 131, 11147-54		193
2279	Electronic Structure and Reactivity of Boron Nitride Nanoribbons with Stone-Wales Defects. 2009 , 5, 3088-95		118
2278	Simultaneous nitrogen doping and reduction of graphene oxide. 2009 , 131, 15939-44		1492
2277	Gas adsorption on graphene doped with B, N, Al, and S: A theoretical study. 2009 , 95, 232105		561
2276	Properties of graphene: a theoretical perspective. 2010 , 59, 261-482		827
2275	Characterization of Graphene Nanoribbons from the Unzipping of MWCNTs. 2010 , 18, 261-272		23
2274	Nitrogen-doped graphene and its electrochemical applications. 2010 , 20, 7491		934
2273	Nitrogen doped graphene nanoplatelets as catalyst support for oxygen reduction reaction in proton exchange membrane fuel cell. 2010 , 20, 7114		555
2272	Graphene nanomesh by ZnO nanorod photocatalysts. 2010 , 4, 4174-80		612

2271	Adsorption of molecular oxygen on doped graphene: Atomic, electronic, and magnetic properties. 2010 , 81,	215
2270	Nitrogen-doped graphene and its application in electrochemical biosensing. 2010 , 4, 1790-8	1777
2269	XPS evidence for molecular charge-transfer doping of graphene. 2010 , 497, 66-69	101
2268	Microwave synthesis of large few-layer graphene sheets in aqueous solution of ammonia. 2010 , 3, 126-137	105
2267	Properties, synthesis, and characterization of graphene. 2010 , 4, 45-51	42
2266	Graphene Based Electrochemical Sensors and Biosensors: A Review. 2010 , 22, 1027-1036	2430
2265	Conjugated carbon monolayer membranes: methods for synthesis and integration. 2010 , 22, 1072-7	47
2264	Controllable synthesis of graphene and its applications. 2010 , 22, 3225-41	337
2263	Thin film field-effect phototransistors from bandgap-tunable, solution-processed, few-layer reduced graphene oxide films. 2010 , 22, 4872-6	196
2262	Nanostrukturierte Kohlenstoffmaterialien aus molekularen Vorstufen. 2010 , 122, 6644-6664	27
2261	A Nanoscale Jigsaw-Puzzle Approach to Large π -Conjugated Systems. 2010 , 122, 6916-6919	12
2260	Three-Dimensional Self-Assembly of Graphene Oxide Platelets into Mechanically Flexible Macroporous Carbon Films. 2010 , 122, 10282-10286	84
2259	Nanostructured carbonaceous materials from molecular precursors. 2010 , 49, 6496-515	126
2258	A nanoscale jigsaw-puzzle approach to large π -conjugated systems. 2010 , 49, 6764-7	25
2257	Three-dimensional self-assembly of graphene oxide platelets into mechanically flexible macroporous carbon films. 2010 , 49, 10084-8	386
2256	Boron- and nitrogen-doped carbon nanotubes and graphene. 2010 , 363, 4163-4174	148
2255	Synthesis and characterization of crystalline carbon nitride nanowires. 2010 , 150, 2148-2153	25
2254	Growth and properties of few-layer graphene prepared by chemical vapor deposition. 2010 , 48, 1088-1094	294

2253	Production of graphene from graphite oxide using urea as expansion/reduction agent. 2010 , 48, 3463-3470	153
2252	Bulk growth of mono- to few-layer graphene on nickel particles by chemical vapor deposition from methane. 2010 , 48, 3543-3550	83
2251	Adjusting the texture and nitrogen content of ordered mesoporous nitrogen-doped carbon materials prepared using SBA-15 silica as a template. 2010 , 48, 3579-3591	95
2250	Growth and properties of chemically modified graphene. 2010 , 247, 2915-2919	14
2249	Heterogeneous graphene nanostructures: ZnO nanostructures grown on large-area graphene layers. 2010 , 6, 2448-52	79
2248	Growth of graphene from solid carbon sources. 2010 , 468, 549-52	1106
2247	Roles of radical characters of pristine and nitrogen-substituted hydrographene in dioxygen bindings. 2010 , 133, 174703	6
2246	Extraction of Drain Current and Effective Mobility in Epitaxial Graphene Channel Field-Effect Transistors on SiC Layer Grown on Silicon Substrates. 2010 , 49, 04DF17	14
2245	Novel Liquid Precursor-Based Facile Synthesis of Large-Area Continuous, Single, and Few-Layer Graphene Films. 2010 , 22, 3457-3461	209
2244	Hybrid thin films of graphene nanowhiskers and amorphous carbon as transparent conductors. 2010 , 46, 3502-4	32
2243	Graphene versus carbon nanotubes for chemical sensor and fuel cell applications. 2010 , 135, 2790-7	138
2242	Nitrogen/boron doping position dependence of the electronic properties of a triangular graphene. 2010 , 4, 7619-29	78
2241	Plasmon-enhanced ultraviolet photoluminescence from hybrid structures of graphene/ZnO films. 2010 , 105, 127403	116
2240	The race to replace tin-doped indium oxide: which material will win?. 2010 , 4, 11-4	701
2239	Effect of N/B doping on the electronic and field emission properties for carbon nanotubes, carbon nanocones, and graphene nanoribbons. 2010 , 2, 1069-82	132
2238	Low-Temperature Synthesis of Graphene and Fabrication of Top-Gated Field Effect Transistors without Using Transfer Processes. 2010 , 3, 025102	86
2237	Electric Field Activated Hydrogen Dissociative Adsorption to Nitrogen-Doped Graphene. 2010 , 114, 14503-14509	99
2236	Scanning tunneling microscopy simulations of nitrogen- and boron-doped graphene and single-walled carbon nanotubes. 2010 , 4, 4165-73	113

2235	The Theoretical Study of Mechanical Properties of Graphene Membranes. 2010 , 18, 497-500	16
2234	Preparation of nitrogen-doped graphene sheets by a combined chemical and hydrothermal reduction of graphene oxide. 2010 , 26, 16096-102	580
2233	Raman Spectroscopic Characterization of Graphene. 2010 , 45, 369-407	170
2232	Nitrogen-doped graphene as efficient metal-free electrocatalyst for oxygen reduction in fuel cells. 2010 , 4, 1321-6	3349
2231	Controllable N-doping of graphene. <i>Nano Letters</i> , 2010 , 10, 4975-80	11.5 726
2230	Identification of the nitrogen species on N-doped graphene layers and Pt/NG composite catalyst for direct methanol fuel cell. 2010 , 12, 12055-9	354
2229	Synthesis of nitrogen-doped graphene films for lithium battery application. 2010 , 4, 6337-42	1420
2228	Terahertz and infrared photodetection using p-i-n multiple-graphene-layer structures. 2010 , 107, 054512	62
2227	Robust Dirac point in honeycomb-structure nanoribbons with zigzag edges. 2010 , 81,	12
2226	Synthesis of graphene on silicon dioxide by a solid carbon source. <i>Nano Letters</i> , 2010 , 10, 36-42	11.5 117
2225	Graphene oxide--polyelectrolyte nanomembranes. 2010 , 4, 4667-76	237
2224	Synthesis and characterization of transferable graphene by CVD method. 2010 ,	5
2223	Nitrogen-mediated wet-chemical formation of carbon nitride/ZnO heterojunctions for enhanced field emission. 2010 , 26, 5527-33	30
2222	How the Number and Location of Lithium Atoms Affect the First Hyperpolarizability of Graphene. 2010 , 114, 19792-19798	62
2221	Modulating the electronic and magnetic structures of P-doped graphene by molecule doping. 2010 , 22, 225501	57
2220	Formation, stabilities, and electronic properties of nitrogen defects in graphene. 2011 , 84,	162
2219	Metal free, end-opened, selective nitrogen-doped vertically aligned carbon nanotubes by a single step in situ low energy plasma process. 2011 , 21, 16162	14
2218	Theoretical investigation of formation mechanism of bipyridyl molecule on Ni(111) surface: implication for synthesis of N-doped graphene from pyridine. 2011 , 13, 6053-8	5

2217	Theoretical Investigation of the Adsorption of NH_3 on B-Doped Graphene. 2011 , 474-476, 720-724	
2216	Synthesis of Nitrogen-Doped Graphene on Pt(111) by Chemical Vapor Deposition. 2011 , 115, 10000-10005	94
2215	Study of the electronic properties of Li-intercalated nitrogen doped graphite. 2011 , 109, 687-694	65
2214	Density Functional Theory Study of O_2 and NO Adsorption on Heteroatom-Doped Graphenes Including the van der Waals Interaction. 2011 , 115, 10971-10978	32
2213	Controlled modulation of electronic properties of graphene by self-assembled monolayers on SiO_2 substrates. 2011 , 5, 1535-40	92
2212	Synthesis of nitrogen-doped graphene by co-segregation method. 2011 ,	
2211	Preparation of Novel Carbon-based Nanomaterial of Graphene and Its Applications Electrochemistry. 2011 , 39, 963-971	18
2210	Monolayer graphene film/silicon nanowire array Schottky junction solar cells. 2011 , 99, 133113	107
2209	Atomistic simulations of the implantation of low-energy boron and nitrogen ions into graphene. 2011 , 83,	114
2208	Nitrogen-doped graphene nanosheets with excellent lithium storage properties. 2011 , 21, 5430	616
2207	Facile preparation of nitrogen-doped few-layer graphene via supercritical reaction. 2011 , 3, 2259-64	69
2206	Controllable healing of defects and nitrogen doping of graphene by CO and NO molecules. 2011 , 83,	62
2205	Electrical measurement of non-destructively p-type doped graphene using molybdenum trioxide. 2011 , 99, 012112	35
2204	A review of chemical vapour deposition of graphene on copper. 2011 , 21, 3324-3334	1106
2203	Large-scale growth and characterizations of nitrogen-doped monolayer graphene sheets. 2011 , 5, 4112-7	538
2202	Graphene-Based Non-Noble-Metal Catalysts for Oxygen Reduction Reaction in Acid. 2011 , 23, 3421-3428	402
2201	Interaction between metal and graphene: dependence on the layer number of graphene. 2011 , 5, 608-12	286
2200	Iodine doping in solid precursor-based CVD growth graphene film. 2011 , 21, 15209	94

2199	Ambipolar to unipolar conversion in graphene field-effect transistors. 2011 , 5, 3198-203		55
2198	Formation of Large-Area Nitrogen-Doped Graphene Film Prepared from Simple Solution Casting of Edge-Selectively Functionalized Graphite and Its Electrocatalytic Activity. 2011 , 23, 3987-3992		161
2197	Surface enhanced Raman scattering of Ag or Au nanoparticle-decorated reduced graphene oxide for detection of aromatic molecules. 2011 , 2, 1817		230
2196	Towards understanding the effects of carbon and nitrogen-doped carbon coating on the electrochemical performance of Li ₄ Ti ₅ O ₁₂ in lithium ion batteries: a combined experimental and theoretical study. 2011 , 13, 15127-33		157
2195	Catalyst-free synthesis of nitrogen-doped graphene via thermal annealing graphite oxide with melamine and its excellent electrocatalysis. 2011 , 5, 4350-8		2020
2194	Nitrogen doping-induced rectifying behavior with large rectifying ratio in graphene nanoribbons device. 2011 , 109, 124502		75
2193	Nitrogen-doped graphene for high-performance ultracapacitors and the importance of nitrogen-doped sites at basal planes. <i>Nano Letters</i> , 2011 , 11, 2472-7	11.5	1373
2192	The role of chemistry in graphene doping for carbon-based electronics. 2011 , 5, 3096-103		74
2191	Field-Emission Mechanism of Island-Shaped GrapheneBN Nanocomposite. 2011 , 115, 9471-9476		14
2190	Selective n-type doping of graphene by photo-patterned gold nanoparticles. 2011 , 5, 3639-44		77
2189	Forming mechanism of nitrogen doped graphene prepared by thermal solid-state reaction of graphite oxide and urea. 2011 , 258, 1704-1710		112
2188	Nitrogen-doped graphene: efficient growth, structure, and electronic properties. <i>Nano Letters</i> , 2011 , 11, 5401-7	11.5	595
2187	Visualizing individual nitrogen dopants in monolayer graphene. 2011 , 333, 999-1003		697
2186	Toward N-Doped Graphene via Solvothermal Synthesis. 2011 , 23, 1188-1193		872
2185	Electrical Characteristics of Cobalt Phthalocyanine Complexes Adsorbed on Graphene. 2011 , 115, 16052-16062		37
2184	Work-Function Engineering of Graphene Electrodes by Self-Assembled Monolayers for High-Performance Organic Field-Effect Transistors. 2011 , 2, 841-5		224
2183	Graphene and graphene-based nanomaterials: the promising materials for bright future of electroanalytical chemistry. 2011 , 136, 4631-40		121
2182	Highly Durable N-Doped Graphene/CdS Nanocomposites with Enhanced Photocatalytic Hydrogen Evolution from Water under Visible Light Irradiation. 2011 , 115, 11466-11473		501

2181	Intercalation of mesoporous carbon spheres between reduced graphene oxide sheets for preparing high-rate supercapacitor electrodes. 2011 , 4, 1866	394
2180	Doping effect on shift of threshold voltage of graphene-based field-effect transistors. 2011 , 47, 663	11
2179	Hydrogenation of Graphene and Hydrogen Diffusion Behavior on Graphene/Graphane Interface. 2011 ,	7
2178	Graphene Doping: A Review. 2011 , 80-89	193
2177	Experimental analysis of charge redistribution due to chemical bonding by high-resolution transmission electron microscopy. 2011 , 10, 209-15	237
2176	Gas sensing properties of graphene synthesized by chemical vapor deposition. 2011 , 31, 1405-1411	97
2175	Electronic structure tuning and band gap opening of graphene by hole/electron codoping. 2011 , 375, 3890-3894	55
2174	Synthesis and characterization of nitrogen-doped monolayer and multilayer graphene on TEM copper grids. 2011 , 516, 212-215	12
2173	Synthesis of nitrogen-doped carbon thin films and their applications in solar cells. 2011 , 49, 5022-5028	50
2172	Flame synthesis of graphene films in open environments. 2011 , 49, 5064-5070	79
2171	Graphene: learning from carbon nanotubes. 2011 , 21, 919-929	41
2170	Tailoring Electronic Properties of Graphene by π -Stacking with Aromatic Molecules. 2011 , 2, 2897-2905	210
2169	Nanostructured materials for water desalination. 2011 , 22, 292001	465
2168	Stable hole doping of graphene for low electrical resistance and high optical transparency. 2011 , 22, 425701	145
2167	Liquid-phase exfoliation, functionalization and applications of graphene. 2011 , 3, 2118-26	241
2166	Graphene nanosheet: synthesis, molecular engineering, thin film, hybrids, and energy and analytical applications. 2011 , 40, 2644-72	1085
2165	Synthesis of novel hierarchical graphene/polypyrrole nanosheet composites and their superior electrochemical performance. 2011 , 21, 11253	254
2164	Pyridinic N doped graphene: synthesis, electronic structure, and electrocatalytic property. 2011 , 21, 8038	795

2163	Nanosized N-doped graphene oxide with visible fluorescence in water for metal ion sensing. 2011 , 21, 17635	47
2162	Theory, synthesis, and oxygen reduction catalysis of Fe-porphyrin-like carbon nanotube. 2011 , 106, 175502	290
2161	Chemical doping of graphene. 2011 , 21, 3335-3345	1227
2160	Effect of N doping and Stone-Wales defects on the electronic properties of graphene nanoribbons. 2011 , 79, 335-340	37
2159	An ab initio study on gas sensing properties of graphene and Si-doped graphene. 2011 , 81, 475-479	117
2158	Graphene-Based Nanoassemblies for Energy Conversion. 2011 , 2, 242-251	553
2157	Easy-to-operate and low-temperature synthesis of gram-scale nitrogen-doped graphene and its application as cathode catalyst in microbial fuel cells. 2011 , 5, 9611-8	189
2156	Graphene Chemistry: Synthesis and Manipulation. 2011 , 2, 2425-2432	220
2155	First-principles studies on doped graphene as anode materials in lithium-ion batteries. 2011 , 130, 209-213	80
2154	When noncovalent interactions are stronger than covalent bonds: Bilayer graphene doped with second row atoms, aluminum, silicon, phosphorus and sulfur. 2011 , 508, 95-101	69
2153	Synthesis of large-area, few-layer graphene on iron foil by chemical vapor deposition. 2011 , 4, 1208-1214	106
2152	Carbon-nitrogen/graphene composite as metal-free electrocatalyst for the oxygen reduction reaction. 2011 , 56, 3583-3589	31
2151	Direct Synthesis of Vertically Interconnected 3-D Graphitic Nanosheets on Hemispherical Carbon Particles by Microwave Plasma CVD. 2011 , 6, 67-73	23
2150	Growth and characterization of graphene by chemical reduction of graphene oxide in solution. 2011 , 208, 2335-2338	15
2149	Graphene-based materials: synthesis, characterization, properties, and applications. 2011 , 7, 1876-902	1968
2148	Tailored Assembly of Carbon Nanotubes and Graphene. 2011 , 21, 1338-1354	191
2147	Tuning of Charge Densities in Graphene by Molecule Doping. 2011 , 21, 2687-2692	91
2146	Graphene Versus Carbon Nanotubes in Electronic Devices. 2011 , 21, 3806-3826	194

2145	Enhanced charge injection in pentacene field-effect transistors with graphene electrodes. 2011 , 23, 100-5	112
2144	Emerging transparent electrodes based on thin films of carbon nanotubes, graphene, and metallic nanostructures. 2011 , 23, 1482-513	1737
2143	Synthesis of nitrogen-doped graphene using embedded carbon and nitrogen sources. 2011 , 23, 1020-4	653
2142	Production of high-quality carbon nanoscrolls with microwave spark assistance in liquid nitrogen. 2011 , 23, 2460-3	98
2141	Bandgap engineering of graphene by physisorbed adsorbates. 2011 , 23, 2638-43	75
2140	Graphene as transparent electrode material for organic electronics. 2011 , 23, 2779-95	612
2139	Highly crystalline and conductive nitrogen-doped mesoporous carbon with graphitic walls and its electrochemical performance. 2011 , 17, 3390-7	83
2138	Ethanol flame synthesis of highly transparent carbon thin films. 2011 , 49, 237-241	22
2137	Multilayer graphene grown by precipitation upon cooling of nickel on diamond. 2011 , 49, 1006-1012	48
2136	Synthesis of graphene paper from pyrolyzed asphalt. 2011 , 49, 2852-2861	65
2135	One-step reduction of graphene oxide with l-glutathione. 2011 , 384, 543-548	155
2134	Substituted graphene nano-flakes: Defective structure and large nonlinear optical property. 2011 , 504, 211-215	16
2133	The production of oxygenated polycrystalline graphene by one-step ethanol-chemical vapor deposition. 2011 , 49, 3789-3795	33
2132	Tuneable electronic properties in graphene. 2011 , 6, 42-60	233
2131	Morphological and chemical features of nano and macroscale carbons affecting hydrogen peroxide decomposition in aqueous media. 2011 , 361, 129-36	31
2130	Graphene based materials: Past, present and future. 2011 , 56, 1178-1271	2607
2129	The effect of doping on the energetics and quantum conductance in graphene nanoribbons with a metallocene adsorbate. 2011 , 135, 124708	12
2128	In situ doping of graphene by exfoliation in a nitrogen ambient. 2011 , 98, 113115	25

2127	Synthesis of Large-Area and Monolayer of Graphene: Role of Transition Metal Support and Growth Time by CVD Method. 2011 , 306-307, 331-335	
2126	Electrical conductivity and resonant states of doped graphene considering next-nearest neighbor interaction. 2011 , 91, 3844-3857	9
2125	The peculiar transport properties in p-n junctions of doped graphene nanoribbons. 2011 , 110, 013718	30
2124	Graphene on Ag films for reflectively conductive layer ohmic contacts to p-type GaN in GaN-based light-emitting diodes. 2012 ,	
2123	Low bias short channel impurity mobility in graphene from first principles. 2012 , 101, 093102	9
2122	Anisotropic quantum Hall effect in epitaxial graphene on stepped SiC surfaces. 2012 , 85,	34
2121	Electron-hole transport asymmetry in boron-doped graphene field effect transistors. 2012 ,	5
2120	Ab initio study of the interactions between boron and nitrogen dopants in graphene. 2012 , 112, 034304	40
2119	Synthesis of Nitrogen-Doped Graphene by Plasma-Enhanced Chemical Vapor Deposition. 2012 , 51, 055101	11
2118	Thermal stability study of nitrogen functionalities in a graphene network. 2012 , 24, 235503	46
2117	Experimental Review of Graphene. 2012 , 2012, 1-56	303
2116	Bilayer graphene by bonding CVD graphene to epitaxial graphene. 2012 , 30, 03D110	10
2115	Synthesis of Co ₃ O ₄ /RGO as Catalyst for Degradation of Orange II in Water by Advanced Oxidation Processes Based on Sulfate Radicals. 2012 , 534, 269-272	3
2114	Sign changes of seebeck coefficients due to extrinsic-to-intrinsic transition for PbTe nanocrystals. 2012 , 9, 391-398	2
2113	Defects and doping and their role in functionalizing graphene. 2012 , 37, 1187-1194	56
2112	Work-Function Decrease of Graphene Sheet Using Alkali Metal Carbonates. 2012 , 116, 26586-26591	80
2111	Tunable Doping in Graphene by Light-Switchable Molecules. 2012 , 116, 26102-26105	15
2110	Charge-selective surface-enhanced Raman scattering using silver and gold nanoparticles deposited on silicon-carbon core-shell nanowires. 2012 , 6, 2459-70	35

2109	Epitaxial graphene on 4H-SiC(0001) grown under nitrogen flux: evidence of low nitrogen doping and high charge transfer. 2012 , 6, 10893-900	87
2108	Graphene for energy conversion and storage in fuel cells and supercapacitors. 2012 , 1, 534-551	548
2107	Atomistic description of electron beam damage in nitrogen-doped graphene and single-walled carbon nanotubes. 2012 , 6, 8837-46	101
2106	Electronic Transport in Graphene. 2012 , 17-49	
2105	Chapter 7:pH-Sensitive GraphenePolymer Nanocomposites. 2012 , 162-178	
2104	Flexible FET-type VEGF aptasensor based on nitrogen-doped graphene converted from conducting polymer. 2012 , 6, 1486-93	206
2103	Supercapacitor electrodes with especially high rate capability and cyclability based on a novel Pt nanosphere and cysteine-generated graphene. 2012 , 14, 10899-903	18
2102	Thickness identification of two-dimensional materials by optical imaging. 2012 , 23, 495713	77
2101	Layer-by-layer graphene/TCNQ stacked films as conducting anodes for organic solar cells. 2012 , 6, 5031-9	187
2100	The electric field as a novel switch for uptake/release of hydrogen for storage in nitrogen doped graphene. 2012 , 14, 1463-7	69
2099	Giant low bias negative differential resistance induced by nitrogen doping in graphene nanoribbon. 2012 , 554, 172-176	33
2098	The doping of reduced graphene oxide with nitrogen and its effect on the quenching of the material's photoluminescence. 2012 , 50, 5286-5291	53
2097	Stable doped sp ² C-hybrid nanostructures by reactive ion beam irradiation. 2012 , 22, 18403	9
2096	Direct growth of high-quality mono-layer graphene on insulating substrate by advanced plasma CVD. 2012 ,	
2095	Metal-free, nitrogen-doped graphene used as a novel catalyst for dye-sensitized solar cell counter electrodes. 2012 , 2, 2725	79
2094	Sulfur as an important co-factor in the formation of multilayer graphene in the thermolyzed asphalt reaction. 2012 , 22, 5723	21
2093	Gate-controlled nonlinear conductivity of Dirac fermion in graphene field-effect transistors measured by terahertz time-domain spectroscopy. <i>Nano Letters</i> , 2012 , 12, 551-5	11.5 142
2092	Low-cost synthesis of graphitic carbon nanofibers as excellent room temperature sensors for explosive gases. 2012 , 22, 15342	106

2091	Dual n-type doped reduced graphene oxide field effect transistors controlled by semiconductor nanocrystals. 2012 , 48, 4052-4	16
2090	Hierarchical self-assembly of hexagonal single-crystal nanosheets into 3D layered superlattices with high conductivity. 2012 , 4, 3729-33	14
2089	Communication: Oscillated band gaps of B/N-codoped Graphyne. 2012 , 137, 201101	33
2088	Carrier-mediated long-range ferromagnetism in electron-doped Fe-C4 and Fe-N4 incorporated graphene. 2012 , 86,	45
2087	The Prospective Two-Dimensional Graphene Nanosheets: Preparation, Functionalization and Applications. 2012 , 4, 1-9	113
2086	Tunable band gaps and p-type transport properties of boron-doped graphenes by controllable ion doping using reactive microwave plasma. 2012 , 6, 1970-8	206
2085	Quenching of fluorescence of reduced graphene oxide by nitrogen-doping. 2012 , 100, 233112	40
2084	Photovoltaic response of N-doped graphene-based photodetector. 2012 ,	
2083	Coral-like MnS composites with N-doped carbon as anode materials for high-performance lithium-ion batteries. 2012 , 22, 24026	115
2082	Synthesis of S-doped graphene by liquid precursor. 2012 , 23, 275605	145
2081	Electronic properties of graphene nanoribbon doped by boron/nitrogen pair: a first-principles study. 2012 , 21, 027102	11
2080	Electronic Structure and Graphenization of Hexaphenylborazine. 2012 , 116, 16305-16310	17
2079	n- and p-Type modulation of ZnO nanomesh coated graphene field effect transistors. 2012 , 4, 3118-22	21
2078	Graphene for energy harvesting/storage devices and printed electronics. 2012 , 10, 1-8	98
2077	The production of nitrogen-doped graphene from mixed amine plus ethanol flames. 2012 , 520, 6850-6855	32
2076	Magnetism and structure of graphene nanodots with interiors modified by boron, nitrogen, and charge. 2012 , 137, 054715	5
2075	Nitrogen-doped graphene quantum dots with oxygen-rich functional groups. 2012 , 134, 15-8	1623
2074	Long-range interactions between substitutional nitrogen dopants in graphene: Electronic properties calculations. 2012 , 86,	83

2073	Raman spectroscopy of boron-doped single-layer graphene. 2012 , 6, 6293-300		209
2072	Electronic properties and STM images of doped bilayer graphene. 2012 , 85,		27
2071	Prominently Improved Hydrogen Purification and Dispersive Metal Binding for Hydrogen Storage by Substitutional Doping in Porous Graphene. 2012 , 116, 21291-21296		68
2070	Stability, Electronic and Magnetic Properties of In-Plane Defects in Graphene: A First-Principles Study. 2012 , 116, 8161-8166		152
2069	Ultrasensitive flexible graphene based field-effect transistor (FET)-type bioelectronic nose. <i>Nano Letters</i> , 2012 , 12, 5082-90	11.5	274
2068	Doping monolayer graphene with single atom substitutions. <i>Nano Letters</i> , 2012 , 12, 141-4	11.5	464
2067	One-step ultrasonic synthesis of fluorescent N-doped carbon dots from glucose and their visible-light sensitive photocatalytic ability. 2012 , 36, 861		414
2066	Highly concentrated, stable nitrogen-doped graphene for supercapacitors: Simultaneous doping and reduction. 2012 , 258, 3438-3443		143
2065	Modulation of electric behavior by position-dependent substitutional impurity in zigzag-edged graphene nanoribbon. 2012 , 60, 234-238		11
2064	Chemical and thermal reduction of graphene oxide and its electrically conductive polylactic acid nanocomposites. 2012 , 72, 1430-1435		107
2063	Graphene: an emerging electronic material. 2012 , 24, 5782-825		603
2062	Crumpled nitrogen-doped graphene nanosheets with ultrahigh pore volume for high-performance supercapacitor. 2012 , 24, 5610-6		801
2061	Highly air-stable phosphorus-doped n-type graphene field-effect transistors. 2012 , 24, 5481-6		177
2060	New routes to graphene, graphene oxide and their related applications. 2012 , 24, 4924-55		282
2059	Synthese von Patchwork-Graphen aus Glucose. 2012 , 124, 9827-9830		40
2058	Synthesis of monolayer-patched graphene from glucose. 2012 , 51, 9689-92		332
2057	Synthesis of highly n-type graphene by using an ionic liquid. 2012 , 18, 12207-12		37
2056	Graphene based catalysts. 2012 , 5, 8848		642

2055	Reversibly light-modulated dirac point of graphene functionalized with spiropyran. 2012 , 6, 9207-13	72
2054	Phononic bandgaps in graphene-based materials. 2012 , 100, 203109	6
2053	Synthesis of boron doped graphene for oxygen reduction reaction in fuel cells. 2012 , 22, 390-395	708
2052	Graphene and Its Synthesis. 2012 , 415-438	5
2051	Functionalization of graphene: covalent and non-covalent approaches, derivatives and applications. 2012 , 112, 6156-214	3041
2050	Graphene enriched with pyrrolic coordination of the doped nitrogen as an efficient metal-free electrocatalyst for oxygen reduction. 2012 , 22, 23506	143
2049	Tunable properties of few-layer graphene-N-methylpyrrolidone hybrid structures. 2012 , 23, 315601	10
2048	Preparation of graphene by pressurized oxidation and multiplex reduction and its polymer nanocomposites by masterbatch-based melt blending. 2012 , 22, 6088	342
2047	Photocontrolled molecular structural transition and doping in graphene. 2012 , 6, 8878-86	54
2046	Instantaneous one-pot synthesis of Fe-N-modified graphene as an efficient electrocatalyst for the oxygen reduction reaction in acidic solutions. 2012 , 48, 10213-5	101
2045	Synthesis of large-scale undoped and nitrogen-doped amorphous graphene on MgO substrate by chemical vapor deposition. 2012 , 22, 19679	35
2044	From biomass wastes to large-area, high-quality, N-doped graphene: catalyst-free carbonization of chitosan coatings on arbitrary substrates. 2012 , 48, 9254-6	217
2043	Synthesis and upconversion luminescence of N-doped graphene quantum dots. 2012 , 101, 103107	153
2042	Lithium storage in nitrogen-rich mesoporous carbon materials. 2012 , 5, 7950	530
2041	Recent progress on graphene-based photocatalysts: current status and future perspectives. 2012 , 4, 5792-813	820
2040	Graphene-based flexible and stretchable thin film transistors. 2012 , 4, 4870-82	125
2039	One step synthesis of Fe ₂ O ₃ /nitrogen-doped graphene composite as anode materials for lithium ion batteries. 2012 , 80, 302-307	54
2038	Hydrothermal preparation of nitrogen-doped graphene sheets via hexamethylenetetramine for application as supercapacitor electrodes. 2012 , 85, 459-466	141

2037	Strain and chirality effects on the mechanical and electronic properties of silicene and silicane under uniaxial tension. 2012 , 376, 3546-3550	119
2036	Synthesis of nitrogen-doped carbon microtubes for application in lithium batteries. 2012 , 67, 987-990	10
2035	Nitrogen-doped graphene as transparent counter electrode for efficient dye-sensitized solar cells. 2012 , 47, 4252-4256	28
2034	Workfunction-tunable, N-doped reduced graphene transparent electrodes for high-performance polymer light-emitting diodes. 2012 , 6, 159-67	275
2033	Electrodeposited Ni(OH) ₂ nanoflakes on graphite nanosheets prepared by plasma-enhanced chemical vapor deposition for supercapacitor electrode. 2012 , 36, 1902	55
2032	Progress in graphene-based photoactive nanocomposites as a promising class of photocatalyst. 2012 , 4, 5814-25	128
2031	Easy synthesis of nitrogen-doped graphene-silver nanoparticle hybrids by thermal treatment of graphite oxide with glycine and silver nitrate. 2012 , 50, 5148-5155	35
2030	Nanomaterials for Sensing Applications: Introduction and Perspective. 2012 , 1-16	4
2029	Nitrogen-Functionalized Graphene Nanoflakes (GNFs:N): Tunable Photoluminescence and Electronic Structures. 2012 , 116, 16251-16258	43
2028	GRAPHENE FOR ENVIRONMENTAL AND BIOLOGICAL APPLICATIONS. 2012 , 26, 1242001	34
2027	Nitrogen-doped graphene/ZnSe nanocomposites: hydrothermal synthesis and their enhanced electrochemical and photocatalytic activities. 2012 , 6, 712-9	240
2026	An efficient method of producing stable graphene suspensions with less toxicity using dimethyl ketoxime. 2012 , 50, 5351-5358	23
2025	Direct growth of doping-density-controlled hexagonal graphene on SiO ₂ substrate by rapid-heating plasma CVD. 2012 , 6, 8508-15	81
2024	Facile Formation of Graphene P-N Junctions Using Self-Assembled Monolayers. 2012 , 116, 19095-19103	31
2023	A facile one-step method to produce Ni/graphene nanocomposites and their application to the thermal decomposition of ammonium perchlorate. 2012 , 14, 428-434	63
2022	Spectroscopic investigation of nitrogen doped graphene. 2012 , 101, 123108	43
2021	Nitrogen-doped graphene nanosheets as high efficient catalysts for oxygen reduction reaction. 2012 , 57, 3065-3070	29
2020	Effect of nitrogen doping on hydrogen storage capacity of palladium decorated graphene. 2012 , 28, 7826-33	218

2019	Atomic-scale characterization of nitrogen-doped graphite: Effects of dopant nitrogen on the local electronic structure of the surrounding carbon atoms. 2012 , 86,	195
2018	Production of Nitrogen-Doped Graphene by Low-Energy Nitrogen Implantation. 2012 , 116, 5062-5066	83
2017	Localized state and charge transfer in nitrogen-doped graphene. 2012 , 85,	117
2016	Light-driven reversible modulation of doping in graphene. <i>Nano Letters</i> , 2012 , 12, 182-7	11.5 167
2015	Nitrogen-doped graphene: beyond single substitution and enhanced molecular sensing. 2012 , 2, 586	517
2014	Towards industrial applications of graphene electrodes. 2012 , T146, 014024	117
2013	Novel Nanocarbons for Adsorption. 2012 , 3-34	11
2012	Improved gas sensing activity in structurally defected bilayer graphene. 2012 , 23, 505501	53
2011	Solvothermal Synthesis of Nitrogen-Containing Graphene for Electrochemical Oxygen Reduction in Acid Media. 2012 , 10, 29-32	15
2010	Controlled ambipolar-to-unipolar conversion in graphene field-effect transistors through surface coating with poly(ethylene imine)/poly(ethylene glycol) films. 2012 , 8, 59-62	31
2009	A facile graft from method to prepare molecular-level dispersed graphene-polymer composites. 2012 , 50, 4423-4432	40
2008	Carbon nanomaterials for advanced energy conversion and storage. 2012 , 8, 1130-66	1149
2007	Tuning electron transport in graphene-based field-effect devices using block co-polymers. 2012 , 8, 1073-80	21
2006	Converting graphene oxide monolayers into boron carbonitride nanosheets by substitutional doping. 2012 , 8, 1384-91	87
2005	Biological and chemical sensors based on graphene materials. 2012 , 41, 2283-307	1384
2004	Review on Recent Progress in Nitrogen-Doped Graphene: Synthesis, Characterization, and Its Potential Applications. 2012 , 2, 781-794	2727
2003	Nitrogen-Doped Graphene Nanosheets as Metal-Free Catalysts for Aerobic Selective Oxidation of Benzylic Alcohols. 2012 , 2, 622-631	327
2002	Nitrogen and boron doped monolayer graphene by chemical vapor deposition using polystyrene, urea and boric acid. 2012 , 36, 1385	165

2001	Bandgap Tailoring and Synchronous Microdevices Patterning of Graphene Oxides. 2012 , 116, 3594-3599	90
2000	Facile preparation of nitrogen-doped graphene as a metal-free catalyst for oxygen reduction reaction. 2012 , 14, 3381-7	236
1999	Interplay between nitrogen dopants and native point defects in graphene. 2012 , 85,	114
1998	Significant enhancement of blue emission and electrical conductivity of N-doped graphene. 2012 , 22, 17992	159
1997	Facile synthesis of nitrogen-doped graphene for measuring the releasing process of hydrogen peroxide from living cells. 2012 , 22, 6402	178
1996	Nitrogen-doped graphene with high nitrogen level via a one-step hydrothermal reaction of graphene oxide with urea for superior capacitive energy storage. 2012 , 2, 4498	604
1995	Nitrogen-doped graphene nanosheets as anode materials for lithium ion batteries: a first-principles study. 2012 , 22, 8911	445
1994	Molecular doping of graphene with ammonium groups. 2012 , 85,	34
1993	Synthesis of Nitrogen-Doped Graphene via Thermal Annealing Graphene with Urea. 2012 , 25, 325-329	25
1992	The application of graphene as electrodes in electrical and optical devices. 2012 , 23, 112001	265
1991	Connecting dopant bond type with electronic structure in N-doped graphene. <i>Nano Letters</i> , 2012 , 12, 4025-31	11.5 381
1990	Block Copolymer Templating as a Path to Porous Nanostructured Carbons with Highly Accessible Nitrogens for Enhanced (Electro)chemical Performance. 2012 , 213, 1078-1090	66
1989	The Fabrication, Properties, and Uses of Graphene/Polymer Composites. 2012 , 213, 1060-1077	454
1988	Strategies for chemical modification of graphene and applications of chemically modified graphene. 2012 , 22, 12435	395
1987	Graphene-based semiconductor photocatalysts. 2012 , 41, 782-96	2274
1986	Self-encapsulated doping of n-type graphene transistors with extended air stability. 2012 , 6, 6215-21	65
1985	N-Doped Graphene-SnO ₂ Sandwich Paper for High-Performance Lithium-Ion Batteries. 2012 , 22, 2682-2690	479
1984	Efficient Synthesis of Heteroatom (N or S)-Doped Graphene Based on Ultrathin Graphene Oxide-Porous Silica Sheets for Oxygen Reduction Reactions. 2012 , 22, 3634-3640	1071

1983	Increased Work Function in Few-Layer Graphene Sheets via Metal Chloride Doping. 2012 , 22, 4724-4731	212
1982	Facile method for rGO field effect transistor: selective adsorption of rGO on SAM-treated gold electrode by electrostatic attraction. 2012 , 24, 2299-303	24
1981	Binary and ternary atomic layers built from carbon, boron, and nitrogen. 2012 , 24, 4878-95	197
1980	Facile Synthesis of Nitrogen-Doped Graphene via Pyrolysis of Graphene Oxide and Urea, and its Electrocatalytic Activity toward the Oxygen-Reduction Reaction. 2012 , 2, 884-888	725
1979	Die chemische Synthese von Nanographen, Graphen-Nanobündeln und Graphen-Schichten. 2012 , 124, 7758-7773	130
1978	From nanographene and graphene nanoribbons to graphene sheets: chemical synthesis. 2012 , 51, 7640-54	614
1977	Can commonly used hydrazine produce n-type graphene?. 2012 , 18, 7665-70	37
1976	Plasma Synthesis of Surface-Functionalized Graphene-Based Platinum Nanoparticles: Highly Active Electrocatalysts as Electrodes for Direct Methanol Fuel Cells. 2012 , 77, 432-436	27
1975	Graphene and its derivatives: switching ON and OFF. 2012 , 41, 4688-707	219
1974	Helium Tunneling through Nitrogen-Functionalized Graphene Pores: Pressure- and Temperature-Driven Approaches to Isotope Separation. 2012 , 116, 10819-10827	93
1973	Nanoporous Graphene Membranes for Efficient $^3\text{He}/^4\text{He}$ Separation. 2012 , 3, 209-213	139
1972	Enantioselective synthesis of a chiral nitrogen-doped buckyball. 2012 , 3, 891	143
1971	Hierarchically aminated graphene honeycombs for electrochemical capacitive energy storage. 2012 , 22, 14076	239
1970	Using glucosamine as a reductant to prepare reduced graphene oxide and its nanocomposites with metal nanoparticles. 2012 , 14, 1	19
1969	Probing solid state N-doping in graphene by X-ray absorption near-edge structure spectroscopy. 2012 , 50, 335-338	99
1968	Edge doping of graphene sheets. 2012 , 50, 637-645	41
1967	On the interaction of polycyclic aromatic compounds with graphene. 2012 , 50, 2482-2492	61
1966	Effect of feed rate on the production of nitrogen-doped graphene from liquid acetonitrile. 2012 , 50, 3659-3665	15

1965	Synthesis of nitrogen-doped porous graphitic carbons using nano-CaCO ₃ as template, graphitization catalyst, and activating agent. 2012 , 50, 3753-3765	132
1964	Influence of N-doping on the structural and photoluminescence properties of graphene oxide films. 2012 , 50, 3799-3806	63
1963	A simple method to synthesize continuous large area nitrogen-doped graphene. 2012 , 50, 4476-4482	126
1962	Enhanced electrocatalytic activity of nitrogen-doped graphene for the reduction of nitro explosives. 2012 , 16, 30-33	33
1961	Preparation and electrochemical characterization of nitrogen doped graphene by microwave as supporting materials for fuel cell catalysts. 2012 , 60, 354-358	101
1960	An environment-friendly route to synthesize reduced graphene oxide as a supercapacitor electrode material. 2012 , 69, 364-370	70
1959	Towards new graphene materials: Doped graphene sheets and nanoribbons. 2012 , 78, 209-218	168
1958	Chemical vapor deposition of boron- and nitrogen-containing graphene thin films. 2012 , 177, 233-238	23
1957	The surface science of graphene: Metal interfaces, CVD synthesis, nanoribbons, chemical modifications, and defects. 2012 , 67, 83-115	660
1956	Effects of methane flux on structural and transport properties of CVD-grown graphene films. 2012 , 86, 895-898	25
1955	Characteristics of nitrogen-doped carbon nanotubes synthesized by using PECVD and Thermal CVD. 2012 , 60, 1124-1128	12
1954	Geometric and magnetic properties of Co adatom decorated nitrogen-doped graphene. 2013 , 113, 17B503	10
1953	Microwave-Induced in situ synthesis of Zn ₂ GeO ₄ /N-doped graphene nanocomposites and their lithium-storage properties. 2013 , 19, 6027-33	79
1952	Prospects for graphene-nanoparticle-based hybrid sensors. 2013 , 15, 12785-99	132
1951	Plasmon-enhanced photothermoelectric conversion in chemical vapor deposited graphene p-n junctions. 2013 , 135, 10926-9	52
1950	Probing voltage drop variations in graphene with photoelectron spectroscopy. 2013 , 85, 4172-7	13
1949	Synthesis and electrochemical applications of nitrogen-doped carbon nanomaterials. 2013 , 2, 615-635	45
1948	Nitrogen-doped graphene as low-cost counter electrode for high-efficiency dye-sensitized solar cells. 2013 , 92, 269-275	84

1947	Nitrogen-doped graphene sheets grown by chemical vapor deposition: synthesis and influence of nitrogen impurities on carrier transport. 2013 , 7, 6522-32	229
1946	Designed CVD growth of graphene via process engineering. 2013 , 46, 2263-74	152
1945	Enhanced conduction and charge-selectivity by N-doped graphene flakes in the active layer of bulk-heterojunction organic solar cells. 2013 , 6, 3000	113
1944	Application of carbon nano-materials in desalination processes. 2013 , 51, 627-636	20
1943	Applications of Nanomaterials in Sensors and Diagnostics. 2013 ,	24
1942	Nitrogen-doped carbon nanotubes derived from ZnFe-ZIF nanospheres and their application as efficient oxygen reduction electrocatalysts with in situ generated iron species. 2013 , 4, 2941	250
1941	Reduction of free-standing graphene oxide papers by a hydrothermal process at the solid/gas interface. 2013 , 3, 2971	24
1940	Nitrogen doped graphene nanosheet supported platinum nanoparticles as high performance electrochemical homocysteine biosensors. 2013 , 1, 4655-4666	50
1939	Energy-level structure of nitrogen-doped graphene quantum dots. 2013 , 1, 4908	222
1938	Simultaneous N-intercalation and N-doping of epitaxial graphene on 6H-SiC(0001) through thermal reactions with ammonia. 2013 , 6, 399-408	38
1937	KOH-activated nitrogen-doped graphene by means of thermal annealing for supercapacitor. 2013 , 17, 1809-1814	50
1936	Nitrogen-Doped Graphitic Nanoribbons: Synthesis, Characterization, and Transport. 2013 , 23, 3755-3762	28
1935	Synthesis and electronic structure of nitrogen-doped graphene. 2013 , 55, 1325-1332	20
1934	Doped Graphene: Theory, Synthesis, Characterization, and Applications. 2013 , 183-207	4
1933	Effects of Ga ion-beam irradiation on monolayer graphene. 2013 , 103, 073501	15
1932	Microstructural evolution and oxidation resistance of polyacrylonitrile-based carbon fibers doped with boron by the decomposition of B4C. 2013 , 56, 296-308	57
1931	Facile single-step preparation of Pt/N-graphene catalysts with improved methanol electrooxidation activity. 2013 , 17, 1089-1098	29
1930	Graphene for energy solutions and its industrialization. 2013 , 5, 10108-26	71

1929	Nitrogen-doped graphene/CdS hollow spheres nanocomposite with enhanced photocatalytic performance. 2013 , 34, 2138-2145	43
1928	Effects of N-doping concentration on graphene structures and properties. 2013 , 581, 74-79	7
1927	Scalable synthesis of pyrrolic N-doped graphene by atmospheric pressure chemical vapor deposition and its terahertz response. 2013 , 62, 330-336	44
1926	Nitrogen-induced local spin polarization in graphene on cobalt. 2013 , 342, 144-148	2
1925	Tunable band gap and hydrogen adsorption property of a two-dimensional porous polymer by nitrogen substitution. 2013 , 15, 666-70	20
1924	Covalent functionalization based heteroatom doped graphene nanosheet as a metal-free electrocatalyst for oxygen reduction reaction. 2013 , 5, 12255-60	61
1923	Realization of ferromagnetic graphene oxide with high magnetization by doping graphene oxide with nitrogen. 2013 , 3, 2566	83
1922	Electronic structure of boron nitride sheets doped with carbon from first-principles calculations. 2013 , 87,	129
1921	Efficient n-doping of graphene films by APPE (aminophenyl propargyl ether): a substituent effect. 2013 , 15, 18353-6	9
1920	Nitrogen-self-doped graphene as a high capacity anode material for lithium-ion batteries. 2013 , 1, 14586	35
1919	Gold intercalation of boron-doped graphene on Ni(111): XPS and DFT study. 2013 , 25, 445002	9
1918	A nitrogen-doped graphene film prepared by chemical vapor deposition of a methanol mist containing methylated melamine resin. 2013 , 113, 645-650	6
1917	Stone-Wales defects in silicene: Formation, stability, and reactivity of defect sites. 2013 , 88,	86
1916	Deposition SnO(2)/nitrogen-doped graphene nanocomposites on the separator: a new type of flexible electrode for energy storage devices. 2013 , 5, 12148-55	60
1915	Field-effect transistors based on two-dimensional materials for logic applications. 2013 , 22, 098505	20
1914	Oxygen Reduction Electrocatalysis Using N-Doped Graphene Quantum-Dots. 2013 , 4, 4160-4165	112
1913	Topological Modelling of Nanostructures and Extended Systems. 2013 ,	9
1912	Manageable N-doped graphene for high performance oxygen reduction reaction. 2013 , 3, 2771	168

1911	Synthesis of graphene from asphaltene molecules adsorbed on vermiculite layers. 2013 , 62, 213-221		50
1910	Interconnected porous and nitrogen-doped carbon network for supercapacitors with high rate capability and energy density. 2013 , 114, 165-172		33
1909	Nitrogen-doped pyrolytic carbon films as highly electrochemically active electrodes. 2013 , 15, 18688-93		4
1908	Influence of doped nitrogen and vacancy defects on the thermal conductivity of graphene nanoribbons. 2013 , 19, 4781-8		16
1907	Radical-assisted chemical doping for chemically derived graphene. 2013 , 8, 534		7
1906	Nitrogen-Functionalized Ordered Mesoporous Carbons as Multifunctional Supports of Ultrasmall Pd Nanoparticles for Hydrogenation of Phenol. 2013 , 3, 2440-2448		213
1905	Local atomic and electronic structure of boron chemical doping in monolayer graphene. <i>Nano Letters</i> , 2013 , 13, 4659-65	11.5	168
1904	All-optical technique to correlate defect structure and carrier transport in transferred graphene films. 2013 , 5, 7176-80		8
1903	Space-confinement-induced synthesis of pyridinic- and pyrrolic-nitrogen-doped graphene for the catalysis of oxygen reduction. 2013 , 52, 11755-9		538
1902	Wide-gap semiconducting graphene from nitrogen-seeded SiC. <i>Nano Letters</i> , 2013 , 13, 4827-32	11.5	31
1901	Contrasting Elastic Properties of Heavily B- and N-doped Graphene with Random Impurity Distributions Including Aggregates. 2013 , 117, 20229-20235		25
1900	In situ deposition of gold nanostructures with well-defined shapes on unfunctionalized reduced graphene oxide through chemical reduction of a dry gold precursor with ethylene glycol vapor. 2013 , 3, 1201-1209		12
1899	Synthesis of amino-functionalized graphene as metal-free catalyst and exploration of the roles of various nitrogen states in oxygen reduction reaction. 2013 , 2, 88-97		377
1898	Organometallic Hexahapto-Functionalized Graphene: Band Gap Engineering with Minute Distortion to the Planar Structure. 2013 , 117, 22156-22161		31
1897	Preparation of Graphene Nanosheet/Alumina Composites. 2013 , 745-746, 534-538		1
1896	First principles modeling of disorder scattering in graphene. 2013 , 12, 104-114		4
1895	An insight into the effect of nitrogen doping on the performance of a reduced graphene oxide counter electrode for dye-sensitized solar cells. 2013 , 3, 9005		18
1894	N-doped graphene analogue synthesized by pyrolysis of metal tetrapyridinoporphyrazine with high and stable catalytic activity for oxygen reduction. 2013 , 3, 9344		9

1893	Crumpled nitrogen-doped graphene-ultrafine Mn ₃ O ₄ nano hybrids and their application in supercapacitors. 2013 , 1, 14162	65
1892	One-pot solvothermal synthesis of ZnSe/N ₂ H ₄ /GS and ZnSe/N-GS and enhanced visible-light photocatalysis. 2013 , 5, 8414-22	32
1891	Wafer-scale synthesis and transfer of monolayer graphene. 2013 ,	1
1890	Introduction of nitrogen with controllable configuration into graphene via vacancies and edges. 2013 , 1, 14927	32
1889	Tuning electrical properties of graphite oxide by plasma. 2013 , 371, 20120308	8
1888	Effect of carbon nanofiber surface functional groups on oxygen reduction in alkaline solution. 2013 , 225, 192-199	113
1887	Synthesis of nitrogen doped graphene with high electrocatalytic activity toward oxygen reduction reaction. 2013 , 28, 24-26	201
1886	Electrocatalytic activity of nitrogen-doped graphene synthesized via a one-pot hydrothermal process towards oxygen reduction reaction. 2013 , 227, 185-190	149
1885	Simple preparation of nanoporous few-layer nitrogen-doped graphene for use as an efficient electrocatalyst for oxygen reduction and oxygen evolution reactions. 2013 , 53, 130-136	298
1884	Graphene and its derivatives for cell biotechnology. 2013 , 138, 72-86	40
1883	Graphene-related nanomaterials: tuning properties by functionalization. 2013 , 5, 4541-83	524
1882	A strategy for mass production of self-assembled nitrogen-doped graphene as catalytic materials. 2013 , 1, 1401-1406	51
1881	Preparation of graphene/polymer composites by direct exfoliation of graphite in functionalised block copolymer matrix. 2013 , 51, 148-155	62
1880	Synthesis and characterization of plasmon resonant gold nanoparticles and graphene for photovoltaics. 2013 , 178, 559-567	20
1879	Concentration dependence of the band gaps of phosphorus and sulfur doped graphene. 2013 , 67, 203-206	67
1878	Boron-doping controlled peculiar transport properties of graphene nanoribbon p-n junctions. 2013 , 153, 46-52	17
1877	One-pot, aqueous-phase synthesis of graphene oxide functionalized with heterocyclic groups to give increased solubility in organic solvents. 2013 , 3, 45-49	33
1876	Nitrogen-doped graphene by microwave plasma chemical vapor deposition. 2013 , 528, 269-273	34

1875	Carbon nanomaterials for electronics, optoelectronics, photovoltaics, and sensing. 2013 , 42, 2824-60	941
1874	Controllable chemical vapor deposition growth of few layer graphene for electronic devices. 2013 , 46, 106-15	82
1873	Oxygen Reduction Reaction Using MnO ₂ Nanotubes/Nitrogen-Doped Exfoliated Graphene Hybrid Catalyst for Li-O ₂ Battery Applications. 2013 , 160, A344-A350	77
1872	Porous-organic-framework-templated nitrogen-rich porous carbon as a more proficient electrocatalyst than Pt/C for the electrochemical reduction of oxygen. 2013 , 19, 974-80	86
1871	Nitrogen-doped porous carbon nanosheets as low-cost, high-performance anode material for sodium-ion batteries. 2013 , 6, 56-60	558
1870	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. 2013 , 54, 249-257	130
1869	Synthesis of nitrogen-doped graphene from ployacrylonitrile. 2013 , 109, 182-185	8
1868	Work-function-tuned reduced graphene oxide via direct surface functionalization as source/drain electrodes in bottom-contact organic transistors. 2013 , 25, 5856-62	82
1867	Nitrogen-tuned bonding mechanism of Li and Ti adatom embedded graphene. 2013 , 205, 160-164	6
1866	How do the electrical properties of graphene change with its functionalization?. 2013 , 9, 341-50	230
1865	Highly nitrogen-doped carbon capsules: scalable preparation and high-performance applications in fuel cells and lithium ion batteries. 2013 , 5, 2726-33	158
1864	Graphene synthesis: relationship to applications. 2013 , 5, 38-51	533
1863	Two-stage metal-catalyst-free growth of high-quality polycrystalline graphene films on silicon nitride substrates. 2013 , 25, 992-7	99
1862	High-quality and efficient transfer of large-area graphene films onto different substrates. 2013 , 56, 271-278	125
1861	A review of carbon nanotube- and graphene-based flexible thin-film transistors. 2013 , 9, 1188-205	237
1860	Synthesis of nitrogen-doped graphene by pyrolysis of ionic-liquid-functionalized graphene. 2013 , 1, 1713	38
1859	Supercapacitors based on nitrogen-doped reduced graphene oxide and borocarbonitrides. 2013 , 175-176, 43-50	59
1858	A simple process to prepare nitrogen-modified few-layer graphene for a supercapacitor electrode. 2013 , 57, 184-190	72

1857	Low-temperature preparation of nitrogen-doped graphene for supercapacitors. 2013 , 56, 218-223	74
1856	From dead leaves to high energy density supercapacitors. 2013 , 6, 1249	678
1855	Surface effects on the optical and photocatalytic properties of graphene-like ZnO:Eu ³⁺ nanosheets. 2013 , 113, 033514	21
1854	Aligning the band gap of graphene nanoribbons by monomer doping. 2013 , 52, 4422-5	198
1853	Progress, challenges, and opportunities in two-dimensional materials beyond graphene. 2013 , 7, 2898-926	3414
1852	3D Nitrogen-doped graphene prepared by pyrolysis of graphene oxide with polypyrrole for electrocatalysis of oxygen reduction reaction. 2013 , 2, 241-248	326
1851	Controllable unzipping for intramolecular junctions of graphene nanoribbons and single-walled carbon nanotubes. 2013 , 4, 1374	109
1850	Effect of nitrogen induced defects in Li dispersed graphene on hydrogen storage. 2013 , 38, 4611-4617	50
1849	Synthesis and morphology transformation of single-crystal graphene domains based on activated carbon dioxide by chemical vapor deposition. 2013 , 1, 2990	23
1848	Hydrothermal synthesis of macroscopic nitrogen-doped graphene hydrogels for ultrafast supercapacitor. 2013 , 2, 249-256	469
1847	Identifying the mechanisms of p-to-n conversion in unipolar graphene field-effect transistors. 2013 , 24, 195202	5
1846	Electronic structure of N-doped graphene with native point defects. 2013 , 87,	97
1845	Tuning the Dirac point in CVD-grown graphene through solution processed n-type doping with 2-(2-methoxyphenyl)-1,3-dimethyl-2,3-dihydro-1H-benzoimidazole. <i>Nano Letters</i> , 2013 , 13, 1890-7	11.5 120
1844	Nitrogen-doped reduced graphene oxide supports for noble metal catalysts with greatly enhanced activity and stability. 2013 , 132-133, 379-388	211
1843	Controlling the local chemical reactivity of graphene through spatial functionalization. 2013 , 60, 84-93	29
1842	Enhanced hydrogen storage properties under external electric fields of N-doped graphene with Li decoration. 2013 , 15, 3243-8	25
1841	Nitrogen-Silicon Heterodoping of Carbon Nanotubes. 2013 , 117, 8481-8490	19
1840	Graphene-Based Chemical and Biosensors. 2013 , 103-141	9

1839	Synthesis of nitrogen-doped graphene nanosheets decorated with gold nanoparticles as an improved sensor for electrochemical determination of chloramphenicol. 2013 , 99, 138-144	126
1838	Pyrrolic-structure enriched nitrogen doped graphene for highly efficient next generation supercapacitors. 2013 , 1, 2904	179
1837	Electrochemical behavior of N and Ar implanted highly oriented pyrolytic graphite substrates and activity toward oxygen reduction reaction. 2013 , 88, 477-487	47
1836	Unique role of self-assembled monolayers in carbon nanomaterial-based field-effect transistors. 2013 , 9, 1144-59	33
1835	Direct transformation of amorphous silicon carbide into graphene under low temperature and ambient pressure. 2013 , 3, 1148	28
1834	Large scale atmospheric pressure chemical vapor deposition of graphene. 2013 , 54, 58-67	212
1833	Nitrogen and silica co-doped graphene nanosheets for NO ₂ gas sensing. 2013 , 1, 6130	122
1832	Enhanced electrochemical oxygen reduction reaction by restacking of N-doped single graphene layers. 2013 , 3, 4246	30
1831	Effect of anions in Au complexes on doping and degradation of graphene. 2013 , 1, 2463	48
1830	In situ nitrogen-doped graphene grown from polydimethylsiloxane by plasma enhanced chemical vapor deposition. 2013 , 5, 600-5	98
1829	Plasma-assisted simultaneous reduction and nitrogen doping of graphene oxide nanosheets. 2013 , 1, 4431	168
1828	Gram-scale synthesis of graphene sheets by a catalytic arc-discharge method. 2013 , 9, 1330-5	43
1827	Nitrogen-doped graphene hollow nanospheres as novel electrode materials for supercapacitor applications. 2013 , 243, 973-981	140
1826	Functional Free-Standing Graphene Honeycomb Films. 2013 , 23, 2972-2978	99
1825	Energy Level Alignment and Charge Carrier Mobility in Noncovalently Functionalized Graphene. 2013 , 4, 2158-2165	70
1824	Facile synthesis of triangular shaped palladium nanoparticles decorated nitrogen doped graphene and their catalytic study for renewable energy applications. 2013 , 38, 2240-2250	95
1823	Pyrrole-fused azacoronene family: the influence of replacement with dialkoxybenzenes on the optical and electronic properties in neutral and oxidized states. 2013 , 135, 8031-40	103
1822	Selected Properties of Graphene and Carbon Nanotubes. 2013 , 119-144	

1821	Unusual formation of Fe_2O_3 hexagonal nanoplatelets in N-doped sandwiched graphene chamber for high-performance lithium-ions batteries. 2013 , 2, 257-267	88
1820	Novel Carbon-Based Nanomaterials. 2013 , 61-87	5
1819	Transparent conducting film composed of graphene and silver nanowire stacked layers. 2013 , 175, 42-46	35
1818	Microstructure and thermophysical properties of B4C/graphite composites containing substitutional boron. 2013 , 52, 10-16	24
1817	Photoluminescent nanographitic/nitrogen-doped graphitic hollow shells as a potential candidate for biological applications. 2013 , 1, 1229-1234	10
1816	Substrate-induced solvent intercalation for stable graphene doping. 2013 , 7, 1155-62	46
1815	Nitrogen-doped graphene nanoplatelets from simple solution edge-functionalization for n-type field-effect transistors. 2013 , 135, 8981-8	102
1814	Theoretical characterization of X-ray absorption, emission, and photoelectron spectra of nitrogen doped along graphene edges. 2013 , 117, 579-89	33
1813	Microscopic View on a Chemical Vapor Deposition Route to Boron-Doped Graphene Nanostructures. 2013 , 25, 1490-1495	112
1812	Doping nitrogen anion enhanced photocatalytic activity on TiO_2 hybridized with graphene composite under solar light. 2013 , 106, 97-104	41
1811	Simultaneous reduction and N-doping of graphene oxides by low-energy N_2^+ ion sputtering. 2013 , 62, 365-373	18
1810	Evolution of Raman spectra in nitrogen doped graphene. 2013 , 61, 57-62	187
1809	Tuning the Electronic Structure of Graphite Oxide through Ammonia Treatment for Photocatalytic Generation of H_2 and O_2 from Water Splitting. 2013 , 117, 6516-6524	136
1808	Incorporate boron and nitrogen into graphene to make BCN hybrid nanosheets with enhanced microwave absorbing properties. 2013 , 61, 200-208	137
1807	Using hydroxylamine as a reducer to prepare N-doped graphene hydrogels used in high-performance energy storage. 2013 , 238, 492-500	93
1806	Synthesis of boron-doped graphene monolayers using the sole solid feedstock by chemical vapor deposition. 2013 , 9, 1316-20	157
1805	A brain-coral-inspired metal-carbon hybrid synthesized using agarose gel for ultra-fast charge and discharge supercapacitor electrodes. 2013 , 49, 1554-6	19
1804	The Effect of N and B Doping on Graphene and the Adsorption and Migration Behavior of Pt Atoms. 2013 , 117, 10523-10535	59

1803	Easy and controlled synthesis of nitrogen-doped carbon. 2013 , 55, 98-107	35
1802	Solution-processable graphene quantum dots. 2013 , 14, 2627-40	29
1801	A 3N rule for the electronic properties of doped graphene. 2013 , 24, 225705	41
1800	Adsorption and Reactions of ICH ₂ CN on Cu(100) and O/Cu(100). 2013 , 117, 19916-19926	5
1799	Pyrolyzed carbon film diodes. 2013 , 5, 10673-81	5
1798	The effects of the formation of Stone-Wales defects on the electronic and magnetic properties of silicon carbide nanoribbons: a first-principles investigation. 2013 , 14, 2841-52	32
1797	Work-Function Engineering of Graphene Anode by Bis(trifluoromethanesulfonyl)amide Doping for Efficient Polymer Light-Emitting Diodes. 2013 , 23, 5049-5055	82
1796	One-pot microbial method to synthesize dual-doped graphene and its use as high-performance electrocatalyst. 2013 , 3, 3499	48
1795	Synthesis and characterization of electrochemically-reduced graphene. 2013 , 36, 1315-1321	20
1794	Photochemical doping of graphene oxide with nitrogen for photoluminescence enhancement. 2013 , 103, 123108	25
1793	Lignin-derived fused electrospun carbon fibrous mats as high performance anode materials for lithium ion batteries. 2013 , 5, 12275-82	231
1792	Graphene and its application in fuel cell catalysis: a review. 2013 , 8, 218-233	58
1791	Anodic bonded 2D semiconductors: from synthesis to device fabrication. 2013 , 24, 415708	19
1790	Nonlinear optical properties of nitrogen-doped bilayer graphene. 2013 ,	3
1789	Synthesis and Characterization of N-Doped Meso/Macroporous Carbon. 2013 , 395-396, 166-169	
1788	Microstructures and Electrocatalytic Properties of Nitrogen Doped Graphene Synthesized by Pyrolysis of Metal Tetrapyrazinoporphyrazine. 2013 , 275-277, 1762-1768	1
1787	Iron Modified Graphitized Carbon Aerogels for Sustainable Energy Applications. 2013 , 1491, 70	2
1786	Transparent Graphene-Platinum Films for Advancing the Performance of Dye-Sensitized Solar Cells. 2013 , 1549, 47-52	

1785	Chemically Functionalized Graphene and Their Applications in Electrochemical Energy Conversion and Storage. 2013 ,	8
1784	Study of simultaneous reduction and nitrogen doping of graphene oxide Langmuir-Blodgett monolayer sheets by ammonia plasma treatment. 2013 , 24, 355704	38
1783	Catalytic one-step synthesis of Pt-decorated few-layer graphenes. 2013 , 3, 26391	16
1782	Probing the electronic structure of graphene sheets with various thicknesses by scanning transmission X-ray microscopy. 2013 , 103, 253110	44
1781	SU-8 doped and encapsulated n-type graphene nanomesh with high air stability. 2013 , 103, 232113	10
1780	Charge-Transport Tuning of Solution-Processable Graphene Nanoribbons by Substitutional Nitrogen Doping. 2013 , 214, 2768-2773	37
1779	Nitrogen-doped graphitic carbon synthesized by laser annealing of sumanenemoneone imine as a bowl-shaped π -conjugated molecule. 2013 , 8, 2569-74	16
1778	Space-Confinement-Induced Synthesis of Pyridinic- and Pyrrolic-Nitrogen-Doped Graphene for the Catalysis of Oxygen Reduction. 2013 , 125, 11971-11975	174
1777	Chemical vapor deposition growth of graphene on copper substrates: current trends. 2013 , 56, 1013-1020	17
1776	Nitrogen-Doped Pt/C Electrocatalysts with Enhanced Activity and Stability toward the Oxygen Reduction Reaction. 2013 , 78, 1252-1257	6
1775	P-Type Doping of Graphene Films by Hybridization with Nickel Nanoparticles. 2013 , 52, 075101	7
1774	Solvothermal synthesis of boron-doped graphene and nitrogen-doped graphene and their electrical properties. 2013 , 5, 021408	10
1773	Enhancing electrocatalytic oxygen reduction on nitrogen-doped graphene by active sites implantation. 2013 , 3, 3306	90
1772	Aligning the Band Gap of Graphene Nanoribbons by Monomer Doping. 2013 , 125, 4518-4521	31
1771	Carbon Nanotubes and Graphene Nanoribbons: Potentials for Nanoscale Electrical Interconnects. 2013 , 2, 280-314	19
1770	Sublattice asymmetry of impurity doping in graphene: A review. 2014 , 5, 1210-7	21
1769	Resonance of graphene nanoribbons doped with nitrogen and boron: a molecular dynamics study. 2014 , 5, 717-25	5
1768	Applications of Graphene in Catalysis. 2014 , 05,	3

1767	Controlled covalent modification of epitaxial single layer graphene on 6H-SiC (0001) with arylidonium salts using electrochemical methods. 2014 , 172, 273-91	18
1766	Criticality of surface topology for charge-carrier transport characteristics in two-dimensional borocarbonitrides: design principles for an efficient electronic material. 2014 , 6, 13430-4	14
1765	Photo-electrochemical hydrogen production using novel carbon based material. 2014 ,	2
1764	Synthesis of flake-like graphene from nickel-coated polyacrylonitrile polymer. 2014 , 9, 618	14
1763	Synthesis of N-Doped meso-macroporous carbon and its application to SO ₂ absorption. 2014 , 88, 2397-2404	1
1762	Design and Applications of Nanomaterials for Sensors. 2014 ,	2
1761	Mechanism of graphene formation by graphite electro-exfoliation in ionic liquids-water mixtures. 2014 , 1, 045606	7
1760	High Reversible Capacity of Nitrogen-Doped Graphene as an Anode Material for Lithium-Ion Batteries. 2014 , 1070-1072, 459-464	2
1759	The Electrochemistry of Graphene. 2014 , 79-126	0
1758	Tuneable Resonance Properties of Graphene by Nitrogen-Dopant. 2014 , 553, 3-9	4
1757	Flexible and transparent reduced graphene oxide and silk fibroin composite films with kilo-ohm square resistance. 2014 , 11, 298	4
1756	Hydrogen adsorption and anomalous electronic properties of nitrogen-doped graphene. 2014 , 115, 153701	48
1755	Nitrogen doping of chemical vapor deposition grown graphene on 4H-SiC (0001). 2014 , 115, 233504	23
1754	First-principles study of multicontrol graphene doping using light-switching molecules. 2014 , 89,	9
1753	Tuning the work function of graphene by nitrogen plasma treatment with different radio-frequency powers. 2014 , 104, 233103	24
1752	Effect of nitrogen doping on wetting and photoactive properties of laser processed zinc oxide-graphene oxide nanocomposite layers. 2014 , 116, 024906	12
1751	High-performance solution of the transport problem in a graphene armchair structure with a generic potential. 2014 , 89, 063309	9
1750	Sumanenemoneone imines bridged by redox-active π -conjugated unit: synthesis, stepwise coordination to palladium(II), and laser-induced formation of nitrogen-doped graphitic carbon. 2014 , 9, 2568-75	13

1749	Dibromocarbene Functionalization of Boron Nitride Nanosheets: Toward Band Gap Manipulation and Nanocomposite Applications. 2014 , 26, 7039-7050	57
1748	Simultaneous Laser-Induced Reduction and Nitrogen Doping of Graphene Oxide in Titanium Oxide/Graphene Oxide Composites. 2014 , 97, 2718-2724	20
1747	Fabrication and characteristics of GaN-based light-emitting diodes with a reduced graphene oxide current-spreading layer. 2014 , 6, 22451-6	11
1746	Semiconductor to metal transition by tuning the location of N2AA in armchair graphene nanoribbons. 2014 , 115, 053707	12
1745	Nanocomposite of N-doped TiO ₂ nanorods and graphene as an effective electrocatalyst for the oxygen reduction reaction. 2014 , 6, 21978-85	60
1744	Color-switchable, emission-enhanced fluorescence realized by engineering C-dot@C-dot nanoparticles. 2014 , 6, 20700-8	47
1743	Coexistence of size-dependent and size-independent thermal conductivities in phosphorene. 2014 , 90,	159
1742	Room-temperature humidity-sensing performance of SiC nanopaper. 2014 , 6, 22673-9	31
1741	Enhanced thermal oxidation stability of reduced graphene oxide by nitrogen doping. 2014 , 20, 11999-2003	59
1740	Synchrotron soft X-ray absorption spectroscopy study of carbon and silicon nanostructures for energy applications. 2014 , 26, 7786-806	67
1739	Fabrication and Electrochemical Performance of Nitrogen-Doped Graphene Synthesized by Hydrothermal Method. 2014 , 804, 35-38	
1738	Bromine doping of multilayer graphene for low-resistance interconnects. 2014 , 53, 05GC02	8
1737	Electronic and electrochemical doping of graphene by surface adsorbates. 2014 , 5, 1842-8	78
1736	Controllable S-doping of graphene through annealing with hydrogen sulfide. 2014 ,	
1735	Synthesis of Sulfur-Doped Graphene from Sulfonated Polystyrene. 2014 , 941-944, 235-238	
1734	Facile and green reduction of covalently PEGylated nanographene oxide via a 'water-only' route for high-efficiency photothermal therapy. 2014 , 9, 86	32
1733	Facile synthesis of boron and nitrogen-doped graphene as efficient electrocatalyst for the oxygen reduction reaction in alkaline media. 2014 , 39, 16043-16052	154
1732	Non-noble Fe/N electrocatalysts supported on the reduced graphene oxide for oxygen reduction reaction. 2014 , 76, 386-400	69

1731	Effect of boron and nitrogen doping with native point defects on the vibrational properties of graphene. 2014 , 94, 35-43	16
1730	Ambipolarity of large-area Pt-functionalized graphene observed in H ₂ sensing. 2014 , 190, 134-140	18
1729	Transparent graphene-platinum nanohybrid films for counter electrodes in high efficiency dye-sensitized solar cells. 2014 , 2, 8742	27
1728	Recent progress on carbon-based support materials for electrocatalysts of direct methanol fuel cells. 2014 , 2, 6266-6291	393
1727	Controllable synthesis of doped graphene and its applications. 2014 , 10, 2975-91	46
1726	High-yield production of N-doped graphitic platelets by aqueous exfoliation of pyrolyzed chitosan. 2014 , 68, 777-783	67
1725	Density functional study on noncovalent functionalization of pyrazinamide chemotherapeutic with graphene and its prototypes. 2014 , 38, 1116	26
1724	Doped graphene for metal-free catalysis. 2014 , 43, 2841-57	608
1723	Beanpod-shaped Fe ₃ O ₄ composite as promising ORR catalyst for fuel cells operated in neutral media. 2014 , 2, 2623	45
1722	Simultaneous Etching and Doping by Cu-Stabilizing Agent for High-Performance Graphene-Based Transparent Electrodes. 2014 , 26, 2332-2336	33
1721	High Performance Photocatalysts Based on N-doped Graphene-P25 for Photocatalytic Reduction of Carbon Tetrachloride. 2014 , 24, 315-320	12
1720	Assembled Co(OH) ₂ Nanoparticles on Reduced Graphene Oxide for Enhanced Magnetism. 2014 , 27, 787-791	1
1719	Vertical junction photodetectors based on reduced graphene oxide/silicon Schottky diodes. 2014 , 6, 4909-14	88
1718	Facile synthesis of nitrogen-doped graphene supported AuPd-CeO ₂ nanocomposites with high-performance for hydrogen generation from formic acid at room temperature. 2014 , 6, 3073-7	89
1717	Nitrogen-doped graphene oxide quantum dots as photocatalysts for overall water-splitting under visible light illumination. 2014 , 26, 3297-303	642
1716	25th anniversary article: Chemically modified/doped carbon nanotubes & graphene for optimized nanostructures & nanodevices. 2014 , 26, 40-66	432
1715	Performance enhancement of bulk heterojunction solar cells with direct growth of CdS-cluster-decorated graphene nanosheets. 2014 , 20, 6010-8	11
1714	Stimulated N-doping of reduced graphene oxide on GaN under excimer laser reduction process. 2014 , 116, 412-415	12

1713	In situ nitrogen-doped nanoporous carbon nanocables as an efficient metal-free catalyst for oxygen reduction reaction. 2014 , 2, 10154	67
1712	N-doped graphene derived from biomass as a visible-light photocatalyst for hydrogen generation from water/methanol mixtures. 2014 , 20, 187-94	118
1711	Electric field manipulated reversible hydrogen storage in graphene studied by DFT calculations. 2014 , 211, 351-356	6
1710	Facile in-situ preparation of polyaniline/graphene nanocomposites using methanesulfonic acid. 2014 , 55, 2928-2935	5
1709	Larger-scale fabrication of N-doped graphene-fiber mats used in high-performance energy storage. 2014 , 252, 113-121	44
1708	Bicontinuous nanoporous N-doped graphene for the oxygen reduction reaction. 2014 , 26, 4145-50	229
1707	Porous nitrogen-doped carbon nanosheet on graphene as metal-free catalyst for oxygen reduction reaction in air-cathode microbial fuel cells. 2014 , 95, 23-8	90
1706	Direct solvothermal synthesis of B/N-doped graphene. 2014 , 53, 2398-401	57
1705	Electrodeposited nitrogen-doped graphene/carbon nanotubes nanocomposite as enhancer for simultaneous and sensitive voltammetric determination of caffeine and vanillin. 2014 , 833, 22-8	70
1704	High electrocatalytic and wettable nitrogen-doped microwave-exfoliated graphene nanosheets as counter electrode for dye-sensitized solar cells. 2014 , 10, 3347-53	52
1703	Nitrogen-doped holey graphitic carbon from 2D covalent organic polymers for oxygen reduction. 2014 , 26, 3315-20	259
1702	Gate-tunable photoemission from graphene transistors. <i>Nano Letters</i> , 2014 , 14, 2837-42	11.5 27
1701	Versatile Graphene Quantum Dots with Tunable Nitrogen Doping. 2014 , 31, 597-604	105
1700	Synthesis of nanotitania decorated few-layer graphene for enhanced visible light driven photocatalysis. 2014 , 428, 214-21	48
1699	Role of 1D metallic nanowires in polydomain graphene for highly transparent conducting films. 2014 , 26, 4575-81	41
1698	Synthesis of nitrogen-doped graphene/ZnO nanocomposites with improved photocatalytic activity. 2014 , 129, 170-173	28
1697	Synthesis of nitrogen-doped carbon and application in highly selective and sensitive dopamine sensing. 2014 , 116, 374-377	8
1696	Chemical vapor deposition of N-doped graphene and carbon films: the role of precursors and gas phase. 2014 , 8, 3337-46	107

1695	Orientation of a monolayer of dipolar molecules on graphene from X-ray absorption spectroscopy. 2014 , 30, 2559-65	26
1694	Studies on structural and magnetic properties of pristine and nickel-filled carbon nanotubes synthesized using LaNi ₅ alloy particles as a catalyst. 2014 , 243, 436-447	16
1693	Synthesis of yolk/shell Fe ₃ O ₄ @polydopamine/graphene/Pt nanocomposite with high electrocatalytic activity for fuel cells. 2014 , 246, 868-875	30
1692	Face-to-face transfer of wafer-scale graphene films. 2014 , 505, 190-4	326
1691	Pyridyne cycloaddition of graphene: External active sites for oxygen reduction reaction. 2014 , 2, 897-901	30
1690	Defect-controlled synthesis of graphene based nano-size electronic devices using in situ thermal treatment. 2014 , 15, 685-691	6
1689	Pt/XC-72 catalysts coated with nitrogen-doped carbon (Pt/XC-72@CN) for methanol electro-oxidation. 2014 , 144, 17-24	19
1688	Nitrogen-containing graphene analyzed by X-ray photoelectron spectroscopy. 2014 , 70, 59-74	94
1687	Facile synthesis of mesoporous nitrogen-doped graphene: An efficient methanol tolerant cathodic catalyst for oxygen reduction reaction. 2014 , 3, 55-63	169
1686	Enhanced capacitor effects in polyoxometalate/graphene nanohybrid materials: a synergetic approach to high performance energy storage. 2014 , 2, 3801-3807	66
1685	Vapor-phase molecular doping of graphene for high-performance transparent electrodes. 2014 , 8, 868-74	73
1684	Rapid synthesis of nitrogen-doped graphene for a lithium ion battery anode with excellent rate performance and super-long cyclic stability. 2014 , 16, 1060-6	127
1683	Quantum Dot Solar Cells. 2014 ,	18
1682	Raman spectroscopy and band structure of Pd-hybridized multilayer graphene. 2014 , 68, 687-694	2
1681	A two-dimensional hybrid with molybdenum disulfide nanocrystals strongly coupled on nitrogen-enriched graphene via mild temperature pyrolysis for high performance lithium storage. 2014 , 6, 14679-85	59
1680	Low-temperature and one-pot synthesis of sulfurized graphene nanosheets via in situ doping and their superior electrocatalytic activity for oxygen reduction reaction. 2014 , 2, 20714-20722	48
1679	Synthesis of S-doped mesoporous carbon fibres with ultrahigh S concentration and their application as high performance electrodes in supercapacitors. 2014 , 150, 108-113	57
1678	Chemical reactivity and band-gap opening of graphene doped with gallium, germanium, arsenic, and selenium atoms. 2014 , 15, 3994-4000	52

1677	N-doped graphene quantum dots-functionalized titanium dioxide nanofibers and their highly efficient photocurrent response. 2014 , 29, 1408-1416	18
1676	Large-area Si-doped graphene: controllable synthesis and enhanced molecular sensing. 2014 , 26, 7593-9	91
1675	Graphene-based composite with microwave absorption property prepared by in situ reduction. 2014 , 35, 461-467	13
1674	Stability of graphene doping with MoO ₃ and I ₂ . 2014 , 105, 103103	41
1673	Localization of metallicity and magnetic properties of graphene and of graphene nanoribbons doped with boron clusters. 2014 , 94, 1841-1858	8
1672	Patterned graphene functionalization via mask-free scanning of micro-plasma jet under ambient condition. 2014 , 104, 103105	60
1671	Stability and spectroscopy of single nitrogen dopants in graphene at elevated temperatures. 2014 , 8, 11806-15	39
1670	Biosynthesis approach to nitrogen doped graphene by denitrifying bacteria CFMI-1. 2014 , 4, 40292-40295	6
1669	Long-term air-stable n-type doped graphene by multiple lamination with polyethyleneimine. 2014 , 4, 37849	11
1668	Effects of temperature and ammonia flow rate on the chemical vapour deposition growth of nitrogen-doped graphene. 2014 , 16, 19446-52	18
1667	Low-temperature solution-processable Ni(OH) ₂ ultrathin nanosheet/N-graphene nanohybrids for high-performance supercapacitor electrodes. 2014 , 6, 5960-6	41
1666	Synthesis of nitrogen-doped graphene by chemical vapour deposition using melamine as the sole solid source of carbon and nitrogen. 2014 , 2, 7396	68
1665	N-doped porous hollow carbon nanofibers fabricated using electrospun polymer templates and their sodium storage properties. 2014 , 4, 16920-16927	47
1664	Nitrogen containing graphene-like structures from pyrolysis of pyrimidine polymers for polymer/graphene hybrid field effect transistors. 2014 , 4, 41997-42001	6
1663	TiO ₂ nanoparticles-functionalized N-doped graphene with superior interfacial contact and enhanced charge separation for photocatalytic hydrogen generation. 2014 , 6, 13798-806	136
1662	Enhanced Daylight-Induced Photocatalytic Activity of Solvent Exfoliated Graphene (SEG)/ZnO Hybrid Nanocomposites toward Degradation of Reactive Black 5. 2014 , 53, 17333-17344	74
1661	High concentration of nitrogen doped into graphene using N ₂ plasma with an aluminum oxide buffer layer. 2014 , 2, 933-939	49
1660	Microwave assisted synthesis and characterization of silicon and phosphorous co-doped carbon as an electrocatalyst for oxygen reduction reaction. 2014 , 4, 6306	27

1659	Enhanced electrocatalytic activity of MoS(x) on TCNQ-treated electrode for hydrogen evolution reaction. 2014 , 6, 17679-85	65
1658	Two and three dimensional network polymers for electrocatalysis. 2014 , 16, 11150-61	8
1657	A simple one-pot synthesis of highly fluorescent nitrogen-doped graphene quantum dots for the detection of Cr(VI) in aqueous media. 2014 , 4, 52016-52022	93
1656	A promising monolayer membrane for oxygen separation from harmful gases: nitrogen-substituted polyphenylene. 2014 , 6, 9960-4	47
1655	In situ coating of nitrogen-doped graphene-like nanosheets on silicon as a stable anode for high-performance lithium-ion batteries. 2014 , 2, 11254-11260	52
1654	Supercritical fluid assisted synthesis of N-doped graphene nanosheets and their capacitance behavior in ionic liquid and aqueous electrolytes. 2014 , 2, 4731-4738	65
1653	Highly conductive graphene nanoribbons from the reduction of graphene oxide nanoribbons with lithium aluminium hydride. 2014 , 2, 856-863	28
1652	Highly stable chemical N-doping of graphene nanomesh FET. 2014 ,	1
1651	Hydrothermal synthesis of nitrogen-doped graphene hydrogels using amino acids with different acidities as doping agents. 2014 , 2, 8352-8361	121
1650	Spiers Memorial Lecture. Advances of carbon nanomaterials. 2014 , 173, 9-46	20
1649	Nitrogen-Doped Graphene/Platinum Counter Electrodes for Dye-Sensitized Solar Cells. 2014 , 1, 1264-1269	33
1648	Electronic and magnetic properties of nitrogen-doped graphene nanoribbons with grain boundary. 2014 , 4, 1503-1511	7
1647	Geometric and electronic properties of graphene modified by "external" N-containing groups. 2014 , 16, 20749-54	10
1646	A simple approach towards nitrogen-doped graphene and metal/graphene by solid-state pyrolysis of metal phthalocyanine. 2014 , 38, 2993-2998	12
1645	Plasma synthesis of nitrogen-doped porous graphene supporting Pd nanoparticles as a new catalyst for C-C coupling reactions. 2014 , 4, 26804	19
1644	Functionalization of graphene with nitrogen using ethylenediaminetetraacetic acid and their electrochemical energy storage properties. 2014 , 4, 24248	18
1643	Supercritical fluid processing of nitric acid treated nitrogen doped graphene with enhanced electrochemical supercapacitance. 2014 , 4, 52256-52262	47
1642	Nitrogen functionalized graphite nanofibers/Ir nanoparticles for enhanced oxygen reduction reaction in polymer electrolyte fuel cells (PEFCs). 2014 , 4, 11080	20

1641	Soft-template synthesis of nitrogen-doped carbon nanodots: tunable visible-light photoluminescence and phosphor-based light-emitting diodes. 2014 , 2, 4221	42
1640	Nitrogen-doped open pore channeled graphene facilitating electrochemical performance of TiO ₂ nanoparticles as an anode material for sodium ion batteries. 2014 , 2, 5182-5186	116
1639	Facile synthesis of highly graphitized porous carbon monoliths with a balance on crystallization and pore-structure. 2014 , 2, 12785-12791	41
1638	Fabrication of CN _x /C nanotube arrays via chemical modification in situ and application in an electronic nano-device. 2014 , 4, 6031	1
1637	Activated nitrogen doped graphene shell towards electrochemical oxygen reduction reaction by its encapsulation on Au nanoparticle (Au@N-Gr) in water-in-oil nanoreactors 2014 , 2, 1383-1390	32
1636	Glucosamine-derived encapsulation of silicon nanoparticles for high-performance lithium ion batteries. 2014 , 2, 14557	25
1635	Direct synthesis of phosphorus and nitrogen co-doped monolayer graphene with air-stable n-type characteristics. 2014 , 16, 20392-7	33
1634	In situ simultaneous reduction/doping route to synthesize hematite/N-doped graphene nanohybrids with excellent photoactivity. 2014 , 4, 31754-31758	15
1633	Preparation of N-doped graphene by reduction of graphene oxide with mixed microbial system and its haemocompatibility. 2014 , 6, 4882-8	37
1632	Graphene nanoribbon heterojunctions. 2014 , 9, 896-900	443
1631	Polypyrrole-derived nitrogen and oxygen co-doped mesoporous carbons as efficient metal-free electrocatalyst for hydrazine oxidation. 2014 , 26, 6510-6	97
1630	Phosphorus and nitrogen dual-doped few-layered porous graphene: a high-performance anode material for lithium-ion batteries. 2014 , 6, 14415-22	191
1629	Pyrolysis of cellulose under ammonia leads to nitrogen-doped nanoporous carbon generated through methane formation. <i>Nano Letters</i> , 2014 , 14, 2225-9	11.5 240
1628	Photophysical Properties of Doped Carbon Dots (N, P, and B) and Their Influence on Electron/Hole Transfer in Carbon Dots/Nickel (II) Phthalocyanine Conjugates. 2014 , 118, 20034-20041	215
1627	Nitrogen-doped onion-like carbon: a novel and efficient metal-free catalyst for epoxidation reaction. 2014 , 2, 12475-12483	112
1626	Effect of graphite oxide structure on the formation of stable self-assembled conductive reduced graphite oxide hydrogel. 2014 , 2, 3846	19
1625	Theoretical characterization of sulfur and nitrogen dual-doped graphene. 2014 , 1049, 13-19	71
1624	Toward N-doped graphene nanosheets via hydrazine steaming process. 2014 , 131, 340-343	7

1623	Nonlinear optical response and transparency of hexagonal boron nitride hybrid graphene nanoribbons. 2014 , 614, 57-61	11
1622	Interplay between Oxidized Monovacancy and Nitrogen Doping in Graphene. 2014 , 118, 19795-19805	9
1621	Graphene's potential in materials science and engineering. 2014 , 4, 28987-29011	48
1620	Transport in disordered monolayer MoS2 nanoflakes--evidence for inhomogeneous charge transport. 2014 , 25, 375201	23
1619	NADH dehydrogenase-like behavior of nitrogen-doped graphene and its application in NAD(+)-dependent dehydrogenase biosensing. 2014 , 62, 170-6	33
1618	High-rate, ultralong cycle-life lithium/sulfur batteries enabled by nitrogen-doped graphene. <i>Nano Letters</i> , 2014 , 14, 4821-7	11.5 615
1617	Inverse transfer method using polymers with various functional groups for controllable graphene doping. 2014 , 8, 7968-75	23
1616	Integrating oxaliplatin with highly luminescent carbon dots: an unprecedented theranostic agent for personalized medicine. 2014 , 26, 3554-60	415
1615	Fabrication of functionalized nitrogen-doped graphene for supercapacitor electrodes. 2014 , 20, 1489-1494	22
1614	Toward new fuel cell support materials: a theoretical and experimental study of nitrogen-doped graphene. 2014 , 7, 2609-20	40
1613	Liquid crystal size selection of large-size graphene oxide for size-dependent N-doping and oxygen reduction catalysis. 2014 , 8, 9073-80	99
1612	Facile One-Pot, One-Step Synthesis of a Carbon Nanoarchitecture for an Advanced Multifunctional Electrocatalyst. 2014 , 126, 6614-6618	24
1611	Chemical Structure of Nitrogen-Doped Graphene with Single Platinum Atoms and Atomic Clusters as a Platform for the PEMFC Electrode. 2014 , 118, 3890-3900	105
1610	Utilisation of janus material for controllable formation of graphene pñ junctions and superlattices. 2014 , 4, 4146-4154	14
1609	Metal-free doped carbon materials as electrocatalysts for the oxygen reduction reaction. 2014 , 2, 4085-4110	608
1608	Radio-frequency characteristics of graphene monolayer via nitric acid doping. 2014 , 78, 532-539	5
1607	A novel electrochemiluminescence sensor based on nitrogen-doped graphene/CdTe quantum dots composite. 2014 , 315, 22-27	13
1606	Pd Nanoparticles deposited on nitrogen-doped HOPG: New Insights into the Pd-catalyzed Oxygen Reduction Reaction. 2014 , 141, 89-101	39

1605	Possible Oxygen Reduction Reactions for Graphene Edges from First Principles. 2014 , 118, 17616-17625	46
1604	Continuous production of nitrogen-functionalized graphene nanosheets for catalysis applications. 2014 , 6, 12758-68	18
1603	Recent advances of doped carbon as non-precious catalysts for oxygen reduction reaction. 2014 , 2, 15704-15716	16
1602	A highly conducting graphene film with dual-side molecular n-doping. 2014 , 6, 9545-9	24
1601	Heteroatom-doped graphene materials: syntheses, properties and applications. 2014 , 43, 7067-98	1258
1600	Nitrogen-enriched, double-shelled carbon/layered double hydroxide hollow microspheres for excellent electrochemical performance. 2014 , 6, 10887-95	65
1599	Laser-induced solid-phase doped graphene. 2014 , 8, 7671-7	41
1598	Nitrogen-doped carbon nanotubes and graphene composite structures for energy and catalytic applications. 2014 , 50, 6818-30	361
1597	Raman spectroscopic investigation of polycrystalline structures of CVD-grown graphene by isotope labeling. 2014 , 6, 13838-44	18
1596	Phosphorus doped graphene nanosheets for room temperature NH ₃ sensing. 2014 , 38, 2269	109
1595	Low-Temperature Growth of Large-Area Heteroatom-Doped Graphene Film. 2014 , 26, 2460-2466	77
1594	Nitrogen-doped sandwich-like porous carbon nanosheets for high volumetric performance supercapacitors. 2014 , 146, 548-555	55
1593	Electrospun porous nanorod perovskite oxide/nitrogen-doped graphene composite as a bi-functional catalyst for metal air batteries. 2014 , 10, 192-200	145
1592	Lanthanum nickel alloy catalyzed growth of nitrogen-doped carbon nanotubes by chemical vapor deposition. 2014 , 4, 20554-20566	6
1591	Preparation, characterization, viscosity, and thermal conductivity of nitrogen-doped graphene aqueous nanofluids. 2014 , 49, 7156-7171	82
1590	Mechanical exfoliation of graphite in 1-butyl-3-methylimidazolium hexafluorophosphate (BMIM-PF ₆) providing graphene nanoplatelets that exhibit enhanced electrocatalysis. 2014 , 271, 312-325	7
1589	Carbon nanotubes and graphene towards soft electronics. 2014 , 1, 15	81
1588	Strategies on the Design of Nitrogen-Doped Graphene. 2014 , 5, 119-25	73

1587	Recent progress on nitrogen/carbon structures designed for use in energy and sustainability applications. 2014 , 7, 1212-1249	487
1586	Identifying atomic sites in N-doped pristine and defective graphene from ab initio core level binding energies. 2014 , 76, 155-164	13
1585	Fabrication of high-performance graphene field-effect transistor with solution-processed Al ₂ O ₃ sensing membrane. 2014 , 104, 153506	12
1584	A quasi core-shell nitrogen-doped graphene/cobalt sulfide conductive catalyst for highly efficient dye-sensitized solar cells. 2014 , 7, 2637-2641	177
1583	Laser-Mediated Programmable N Doping and Simultaneous Reduction of Graphene Oxides. 2014 , 2, 120-125	54
1582	Preparation of nitrogen-doped graphene supporting Pt nanoparticles as a catalyst for oxygen reduction and methanol oxidation. 2014 , 728, 41-50	36
1581	Recent progress on graphene-based hybrid electrocatalysts. 2014 , 1, 379-399	277
1580	Nitrogen-doped graphene with enhanced oxygen reduction activity produced by pyrolysis of graphene functionalized with imidazole derivatives. 2014 , 39, 12749-12756	22
1579	Highly active nitrogen-doped few-layer graphene/carbon nanotube composite electrocatalyst for oxygen reduction reaction in alkaline media. 2014 , 73, 361-370	226
1578	Electroreduction of oxygen on palladium nanoparticles supported on nitrogen-doped graphene nanosheets. 2014 , 137, 206-212	56
1577	In situ one-step synthesis of hierarchical nitrogen-doped porous carbon for high-performance supercapacitors. 2014 , 6, 7214-22	262
1576	Graphene-metal material hybridization for enhanced terahertz response. 2014 , 78, 102-112	36
1575	Nanotechnology-Based Membranes for Water Purification. 2014 , 133-154	10
1574	Functional graphene nanomesh foam. 2014 , 7, 1913	192
1573	Exploring and rationalising effective n-doping of large area CVD-graphene by NH ₃ . 2014 , 16, 3632-9	40
1572	Characterizing mechanical behavior of atomically thin films: A review. 2014 , 29, 338-347	31
1571	Li-Ion Storage Performance of MnO Nanoparticles Coated with Nitrogen-Doped Carbon Derived from Different Carbon Sources. 2014 , 146, 249-256	40
1570	Achieving high-quality single-atom nitrogen doping of graphene/SiC(0001) by ion implantation and subsequent thermal stabilization. 2014 , 8, 7318-24	70

- 1569 N-doped graphene: an alternative carbon-based matrix for highly efficient detection of small molecules by negative ion MALDI-TOF MS. **2014**, 86, 9122-30 94
- 1568 Facile synthesis and optical properties of nitrogen-doped carbon dots. **2014**, 38, 1522 70
- 1567 Selective n-type doping in graphene via the aluminium nanoparticle decoration approach. **2014**, 2, 5417-5421 21
- 1566 Facile Synthesis of Highly Electrocapacitive Nitrogen-Doped Graphitic Porous Carbons. **2014**, 118, 9357-9367 71
- 1565 The Preparation of BN-Doped Atomic Layer Graphene via Plasma Treatment and Thermal Annealing. **2014**, 118, 22268-22273 17
- 1564 Bottom-up solution synthesis of narrow nitrogen-doped graphene nanoribbons. **2014**, 50, 4172-4 108
- 1563 Reduction in oxidative stress during cellular responses to chemically functionalised graphene. **2014**, 2, 5202-5208 3
- 1562 Paper-like N-doped graphene films prepared by hydroxylamine diffusion induced assembly and their ultrahigh-rate capacitive properties. **2014**, 115, 461-470 18
- 1561 Plasma-assisted nitrogen doping of graphene-encapsulated Pt nanocrystals as efficient fuel cell catalysts. **2014**, 2, 472-477 40
- 1560 Single step fabrication of N-doped graphene/Si₃N₄/SiC heterostructures. **2014**, 7, 835-843 14
- 1559 Highly Efficient Metal-Free Sulfur-Doped and Nitrogen and Sulfur Dual-Doped Reduced Graphene Oxide Counter Electrodes for Dye-Sensitized Solar Cells. **2014**, 118, 17010-17018 53
- 1558 Graphene-supported nanoelectrocatalysts for fuel cells: synthesis, properties, and applications. **2014**, 114, 5117-60 790
- 1557 Amphiphilic polymer promoted assembly of macroporous graphene/SnO₂ frameworks with tunable porosity for high-performance lithium storage. **2014**, 10, 2226-32 68
- 1556 Systematic Doping Control of CVD Graphene Transistors with Functionalized Aromatic Self-Assembled Monolayers. **2014**, 24, 3464-3470 36
- 1555 Nitrogen implantation of suspended graphene flakes: Annealing effects and selectivity of sp² nitrogen species. **2014**, 73, 371-381 61
- 1554 Efficient oxygen reduction electrocatalyst based on edge-nitrogen-rich graphene nanoplatelets: toward a large-scale synthesis. **2014**, 6, 3930-6 43
- 1553 Application of nitrogen-doped graphene nanosheets in electrically conductive adhesives. **2014**, 67, 449-456 59
- 1552 Nitrogen-containing carbon nanostructures: A promising carrier for catalysis of ammonia borane dehydrogenation. **2014**, 68, 462-472 24

1551	Immobilization of N, S-codoped BiOBr on glass fibers for photocatalytic degradation of rhodamine B. 2014 , 261, 170-175		35
1550	Fabrication of Pt nanoparticles on ethylene diamine functionalized graphene for formic acid electrooxidation. 2014 , 39, 15920-15927		16
1549	Synthesis of nitrogen-doped multilayer graphene from milk powder with melamine and their application to fuel cells. 2014 , 76, 1-9		51
1548	Atomic structure and dynamics of metal dopant pairs in graphene. <i>Nano Letters</i> , 2014 , 14, 3766-72	11.5	168
1547	Anchoring CuO nanoparticles on nitrogen-doped reduced graphene oxide nanosheets as electrode material for supercapacitors. 2014 , 727, 154-162		60
1546	Nitrogen-doped reduced graphene oxide electrodes for electrochemical supercapacitors. 2014 , 16, 2280-4		70
1545	Boron-doped graphene quantum dots for selective glucose sensing based on the "abnormal" aggregation-induced photoluminescence enhancement. 2014 , 86, 4423-30		281
1544	Designing nitrogen-enriched echinus-like carbon capsules for highly efficient oxygen reduction reaction and lithium ion storage. 2014 , 6, 8002-9		74
1543	Facile one-pot, one-step synthesis of a carbon nanoarchitecture for an advanced multifunctional electrocatalyst. 2014 , 53, 6496-500		155
1542	NMR Chemical Shifts of ¹⁵ N-Bearing Graphene. 2014 , 118, 13929-13935		10
1541	The Thinnest Carpet on the Smallest Staircase: The Growth of Graphene on Rh(533). 2014 , 118, 6242-6250		5
1540	Selective and sensitive electrochemical detection of dopamine based on water-soluble porphyrin functionalized graphene nanocomposites. 2014 , 4, 9261		49
1539	Oxygen adsorption effect on nitrogen-doped graphene electrical properties. 2014 , 7, 055101		10
1538	The Handbook of Graphene Electrochemistry. 2014 ,		123
1537	A novel Pt/CeO ₂ catalyst coated with nitrogen-doped carbon with excellent performance for DMFCs. 2014 , 2, 4038		49
1536	Synthesis, properties and applications of graphene doped with boron, nitrogen and other elements. 2014 , 9, 324-343		304
1535	A co-confined carbonization approach to aligned nitrogen-doped mesoporous carbon nanofibers and its application as an adsorbent. 2014 , 276, 192-9		12
1534	Effects of nitrogen-doping configurations with vacancies on conductivity in graphene. 2014 , 378, 2270-2274		38

1533	Optical properties of nitrogen-doped graphene thin films probed by spectroscopic ellipsometry. 2014 , 571, 675-679	14
1532	Extraction and scattering analyses of 2D and bulk carriers in epitaxial graphene-on-SiC structure. 2014 , 63, 87-92	5
1531	Fabrication of three-dimensional graphene foam with high electrical conductivity and large adsorption capability. 2014 , 311, 808-815	62
1530	Doping of Graphene by Nitrogen, Boron, and Other Elements. 2014 , 283-358	5
1529	Facile graphene n-doping by wet chemical treatment for electronic applications. 2014 , 6, 8503-8	25
1528	Processable 3-nm thick graphene platelets of high electrical conductivity and their epoxy composites. 2014 , 25, 125707	96
1527	Improved cyclability of lithium-sulfur battery cathode using encapsulated sulfur in hollow carbon nanofiber@nitrogen-doped porous carbon core-shell composite. 2014 , 78, 1-9	104
1526	FeCo nanocrystals encapsulated in N-doped carbon nanospheres/thermal reduced graphene oxide hybrids: Facile synthesis, magnetic and catalytic properties. 2014 , 77, 255-265	49
1525	Nitrogen-doping processes of graphene by a versatile plasma-based method. 2014 , 73, 216-224	51
1524	Electrochemically active MnO ₂ /RGO nanocomposites using Mn powder as the reducing agent of GO and the MnO ₂ precursor. 2014 , 130, 305-313	48
1523	Photonic Properties of Graphene Device. 2014 , 291-308	
1522	Direct Solvothermal Synthesis of B/N-Doped Graphene. 2014 , 126, 2430-2433	11
1521	Laser assisted reduction of printed GO films and traces. 2014 ,	1
1520	The influence of urea on composition, microstructure and electrochemical properties of nitrogen-enriched carbon based on polyvinylpyrrolidone/melamine formaldehyde resin. 2015 , 44, 257-265	3
1519	Electrocatalytic activity of a nitrogen-enriched mesoporous carbon framework and its hybrids with metal nanoparticles fabricated through the pyrolysis of block copolymers. 2015 , 5, 105760-105773	7
1518	Formation of Graphene P-N Junction Arrays Using Soft-Lithographic Patterning and Cross-Stacking. 2015 , 1098, 63-68	1
1517	- Recent Trends in Carbon Nanotubes/Graphene Functionalization for Gas/Vapor Sensing: A Review. 2015 , 894-923	4
1516	Chemical Vapour Deposition and Atomic Layer Deposition. 2015 , 103-106	1

1515 - Different Functionalization Methods of Carbon-Based Nanomaterials. **2015**, 54-83

1514 Silicon and silicon-nitrogen impurities in graphene: Structure, energetics, and effects on electronic transport. **2015**, 92, 21

1513 Heteroatom-Doped Nanoporous Carbon for Electrocatalysis. **2015**, 43-74

1512 Charge transfer and electronic doping in nitrogen-doped graphene. **2015**, 5, 14564 62

1511 Graphene as Transparent Electrodes for Solar Cells. **2015**, 249-280 3

1510 Evolution of the Raman properties of nitrogen-doped graphene sheets with reducing agent. **2015**, 70, 10402 1

1509 Multifunctional graphene-based nanostructures for efficient electrocatalytic reduction of oxygen. **2015**, 90, 2132-2151 20

1508 Well-Combined Magnetically Separable Hybrid Cobalt Ferrite/Nitrogen-Doped Graphene as Efficient Catalyst with Superior Performance for Oxygen Reduction Reaction. **2015**, 11, 5833-43 63

1507 Nanoporous Graphene with Single-Atom Nickel Dopants: An Efficient and Stable Catalyst for Electrochemical Hydrogen Production. **2015**, 54, 14031-5 480

1506 Selective nitrogen functionalization of graphene by Bucherer-type reaction. **2015**, 21, 8090-5 16

1505 Thermal Reaction of 2,4-Dibromopyridine on Cu(100). **2015**, 119, 26471-26480 8

1504 Freestanding 3D Graphene-Nickel Encapsulated Nitrogen-Rich Aligned Bamboo Like Carbon Nanotubes for High-Performance Supercapacitors with Robust Cycle Stability. **2015**, 2, 1500191 74

1503 Soft-Templating Synthesis of N-Doped Mesoporous Carbon Nanospheres for Enhanced Oxygen Reduction Reaction. **2015**, 10, 1546-53 52

1502 Nitrogen-Doped Carbon Electrodes: Influence of Microstructure and Nitrogen Configuration on the Electrical Conductivity of Carbonized Polyacrylonitrile and Poly(ionic liquid) Blends. **2015**, 216, 1930-1944 38

1501 Tuning the Electronic Structure of Graphene through Collective Electrostatic Effects. **2015**, 2, 1500323 8

1500 Free-Standing SnO₂/Nitrogen-Doped Graphene Films as High-Performance Binder-Free Electrodes for Flexible Lithium-Ion Batteries. **2015**, 3, 1225-1232 10

1499 Tuning Surface Wettability and Adhesivity of a Nitrogen-Doped Graphene Foam after Water Vapor Treatment for Efficient Oil Removal. **2015**, 2, 1500243 29

1498 Nanoporous Graphene with Single-Atom Nickel Dopants: An Efficient and Stable Catalyst for Electrochemical Hydrogen Production. **2015**, 127, 14237-14241 69

1497	Nitrogen-Doped Ordered Mesoporous Carbon with Different Morphologies for the Oxygen Reduction Reaction: Effect of Iron Species and Synergy of Textural Properties. 2015 , 7, 2882-2890	29
1496	Influence of Dopant Loading on the Photo- and Electrochemical Properties of (N, O)-Co-doped Graphene. 2015 , 16, 2094-8	5
1495	A Comparative Study of CO Oxidation on Nitrogen- and Phosphorus-Doped Graphene. 2015 , 16, 3719-27	64
1494	Porous Carbon Supports: Recent Advances with Various Morphologies and Compositions. 2015 , 7, 2788-2805	67
1493	Nitrogen-Doped Multilayer Graphene as Functional Filler for Carbon/Polyamide 12 Nanocomposites. 2015 , 300, 785-792	11
1492	Bifunctional Electrocatalytic Activity of Boron-Doped Graphene Derived from Boron Carbide. 2015 , 5, 1500658	112
1491	Highly Elastic and Conductive N-Doped Monolithic Graphene Aerogels for Multifunctional Applications. 2015 , 25, 6976-6984	83
1490	Few-Layer Topological Insulator for All-Optical Signal Processing Using the Nonlinear Kerr Effect. 2015 , 3, 1769-1778	76
1489	On the Role of Metals in Nitrogen-Doped Carbon Electrocatalysts for Oxygen Reduction. 2015 , 54, 10102-20	514
1488	Highly Durable Platinum based Cathode Electrocatalysts for PEMFC Application using Oxygen and Nitrogen Functional Groups Attached Nanocarbon Supports. 2015 , 15, 278-287	25
1487	Effect of high-pressure fluorination on electrical properties of multi-walled carbon nanotubes sheet. 2015 , 72, 20403	2
1486	Nitrogen-Doped Carbon Nanotube and Graphene Materials for Oxygen Reduction Reactions. 2015 , 5, 1574-1602	145
1485	X-ray photoelectron spectroscopy of graphitic carbon nanomaterials doped with heteroatoms. 2015 , 6, 177-92	243
1484	Density Functional Investigation of Graphene Doped with Amine-Based Organic Molecules. 2015 , 2015, 1-9	7
1483	Formation, Energetics, and Electronic Properties of Graphene Monolayer and Bilayer Doped with Heteroatoms. 2015 , 2015, 1-14	19
1482	. 2015 ,	13
1481	Confinement of massless Dirac fermions in the graphene matrix induced by the B/N heteroatoms. 2015 , 17, 5586-93	4
1480	Lateral graphene p-n junctions formed by the graphene/MoS ₂ hybrid interface. 2015 , 7, 11611-9	46

1479	Preparation of water-dispersible graphene using N-methylmorpholine N-oxide monohydrate and its application for the preparation of nanocomposites using PEDOT. 2015 , 3, 7105-7117	5
1478	Differential Response of Doped/Defective Graphene and Dopamine to Electric Fields: A Density Functional Theory Study. 2015 , 119, 13972-13978	32
1477	The influence of source molecule structure on the low temperature growth of nitrogen-doped graphene. 2015 , 17, 14115-21	8
1476	Synthesis of fluorescent BCN hybrid nanosheets: a highly efficient fluorosensor for rapid, simple, sensitive Ag ⁺ detection. 2015 , 5, 52452-52458	11
1475	Temperature-controlled morphology evolution of graphitic carbon nitride nanostructures and their photocatalytic activities under visible light. 2015 , 5, 49317-49325	84
1474	Fabrication of polypyrrole-grafted nitrogen-doped graphene and its application for electrochemical detection of paraquat. 2015 , 174, 464-471	34
1473	Single pot electrochemical synthesis of functionalized and phosphorus doped graphene nanosheets for supercapacitor applications. 2015 , 26, 6319-6328	33
1472	Nitrogen-Doped Carbon Membrane Derived from Polyimide as Free-Standing Electrodes for Flexible Supercapacitors. 2015 , 11, 3476-84	54
1471	Pyrolyzed polyaniline and graphene nano sheet composite with improved rate and cycle performance for lithium storage. 2015 , 92, 354-361	17
1470	One-step preparation of nitrogen doped titanium oxide/Au/reduced graphene oxide composite thin films for photocatalytic applications. 2015 , 5, 49771-49779	18
1469	Stable and reversible doping of graphene by using KNO ₃ solution and photo-desorption current response. 2015 , 5, 50040-50046	15
1468	Functionalized graphene and other two-dimensional materials for photovoltaic devices: device design and processing. 2015 , 44, 5638-79	238
1467	Effect of UV light-induced nitrogen doping on the field effect transistor characteristics of graphene. 2015 , 5, 70522-70526	6
1466	A nitrogen-doped graphene electrocatalyst for selective oxygen reduction in presence of glucose and D-gluconic acid in pH-neutral media. 2015 , 186, 579-590	19
1465	Catalytic dehydrochlorination of 1,2-dichloroethane to produce vinyl chloride over N-doped coconut activated carbon. 2015 , 5, 104071-104078	26
1464	Simultaneous reduction and nitrogen doping of graphite oxide by using electron beam irradiation. 2015 , 5, 104502-104508	17
1463	Engineering electrical properties of graphene: chemical approaches. 2015 , 2, 042001	37
1462	High-Rate LiTi ₂ (PO ₄) ₃ @N-C Composite via Bi-nitrogen Sources Doping. 2015 , 7, 28337-45	70

1461	Nitrogen-doped mesoporous carbon of extraordinary capacitance for electrochemical energy storage. 2015 , 350, 1508-13	1530
1460	Geometrical and electronic structures of graphene under different vacancy density and configuration. 2015 , 359, 55-60	9
1459	Nanocomposites of nitrogen-doped graphene decorated with a palladium silver bimetallic alloy for use as a biosensor for methotrexate detection. 2015 , 5, 99555-99565	44
1458	Sulfur-doping in graphene and its high selectivity gas sensing in NO ₂ . 2015 ,	3
1457	Building graphene p-n junctions for next-generation photodetection. 2015 , 10, 701-716	37
1456	Assessment of supercapacitor based on carbon material synthesized from neem tree leaves. 2015 ,	1
1455	Voltammetric determination of dopamine in the presence of ascorbic acid and uric acid at sodium dodecyl sulphate/reduced graphene oxide modified carbon paste electrode. 2015 , 211, 705-711	13
1454	Tailoring color emissions from N-doped graphene quantum dots for bioimaging applications. 2015 , 4, e364-e364	308
1453	Tuning graphene/silicon Schottky barrier height by chemical doping. 2015 ,	1
1452	Near infrared laser stimulation of human neural stem cells into neurons on graphene nanomesh semiconductors. 2015 , 126, 313-21	76
1451	One-step synthesis of nickel sulfide/N-doped graphene composite as anode materials for lithium ion batteries. 2015 , 739, 36-42	36
1450	Homogeneous deposition-assisted synthesis of iron-nitrogen composites on graphene as highly efficient non-precious metal electrocatalysts for microbial fuel cell power generation. 2015 , 278, 773-781	54
1449	Nanoscale imaging of freestanding nitrogen doped single layer graphene. 2015 , 7, 2289-94	17
1448	Magnetoresistance and charge transport in graphene governed by nitrogen dopants. 2015 , 9, 1360-6	46
1447	Heavily nitrogen doped, graphene supercapacitor from silk cocoon. 2015 , 160, 244-253	150
1446	Effect of Nitrogen Doping on the Migration of the Carbon Adatom and Monovacancy in Graphene. 2015 , 119, 4922-4933	26
1445	A ratiometric fluorescent nanoprobe based on terbium functionalized carbon dots for highly sensitive detection of an anthrax biomarker. 2015 , 51, 5036-9	160
1444	Preparation of Metal-Free Nitrogen-Doped Graphene Via Direct Electrochemical Exfoliation of Graphite in Ammonium Nitrate. 2015 , 68, 830	17

1443	2D covalent triazine framework: a new class of organic photocatalyst for water splitting. 2015 , 3, 7750-7758	183
1442	Silicon phthalocyanine covalently functionalized N-doped ultrasmall reduced graphene oxide decorated with Pt nanoparticles for hydrogen evolution from water. 2015 , 7, 3732-41	55
1441	Phosphorous, nitrogen co-doped carbon from spent coffee grounds for fuel cell applications. 2015 , 132, n/a-n/a	13
1440	A significant improvement in the electrocatalytic stability of N-doped graphene nanosheets used as a counter electrode for [Co(bpy) ₃](3+/2+) based porphyrin-sensitized solar cells. 2015 , 7, 2116-23	26
1439	A simple approach to the synthesis of BCN graphene with high capacitance. 2015 , 26, 045402	54
1438	Low temperature combustion synthesis of nitrogen-doped graphene for metal-free catalytic oxidation. 2015 , 3, 3432-3440	156
1437	Raman characterization of defects and dopants in graphene. 2015 , 27, 083002	339
1436	Structural characterization and chemical reactivity of dual doped graphene. 2015 , 87, 106-115	69
1435	Directed Self Assembly Of Copper-Based Hierarchical Nanostructures on Nitrogen-Doped Graphene and Their Field Emission Studies. 2015 , 150126153530009	14
1434	Progress of new label-free techniques for biosensors: a review. 2016 , 36, 465-81	123
1433	Dopant segregation in polycrystalline monolayer graphene. <i>Nano Letters</i> , 2015 , 15, 1428-36	11.5 16
1432	Covalent functionalisation of graphene: novel approach to change electronic structure of graphene. 2015 , 19, 287-294	4
1431	Recent advancements in Pt and Pt-free catalysts for oxygen reduction reaction. 2015 , 44, 2168-201	1524
1430	Graphene modifications in polylactic acid nanocomposites: a review. 2015 , 72, 931-961	63
1429	PEDOT-decorated nitrogen-doped graphene as the transparent composite film for the counter electrode of a dye-sensitized solar cell. 2015 , 12, 374-385	73
1428	Half-filled energy bands induced negative differential resistance in nitrogen-doped graphene. 2015 , 7, 4156-62	30
1427	Nitrogen-doped graphene films from simple photochemical doping for n-type field-effect transistors. 2015 , 106, 013110	18
1426	Controlled n-doping in chemical vapour deposition grown graphene by antimony. 2015 , 48, 015307	6

1425	Controlled Synthesis of Nitrogen-Doped Graphene from a Heteroatom Polymer and Its Mechanism of Formation. 2015 , 27, 716-725	24
1424	Nitrogen-doped graphene supported Pt nanoparticles with enhanced performance for methanol oxidation. 2015 , 40, 2641-2647	62
1423	Simple approach to advanced binder-free nitrogen-doped graphene electrode for lithium batteries. 2015 , 5, 3881-3887	10
1422	Solvothermal synthesis of oxygen/nitrogen functionalized graphene-like materials with diversified morphology from different carbon sources and their fluorescence properties. 2015 , 50, 1300-1308	5
1421	Thermally reduced kaolin-graphene oxide nanocomposites for gas sensing. 2015 , 5, 7676	25
1420	Low temperature critical growth of high quality nitrogen doped graphene on dielectrics by plasma-enhanced chemical vapor deposition. 2015 , 9, 164-71	104
1419	Graphene for nanoelectronics. 2015 , 54, 040102	26
1418	Nitrogen and oxygen co-doped microporous carbons derived from the leaves of <i>Euonymus japonicas</i> as high performance supercapacitor electrode material. 2015 , 210, 1-9	44
1417	Chemically converting graphene oxide to graphene with organic base for Suzuki reaction. 2015 , 67, 77-82	15
1416	Nitrogen-rich porous carbon derived from biomass as a high performance anode material for lithium ion batteries. 2015 , 3, 6534-6541	240
1415	Nitrogen-doped hierarchically porous carbon spheres as efficient metal-free electrocatalysts for an oxygen reduction reaction. 2015 , 283, 389-396	73
1414	Synthesis of Nitrogen Doped Multilayered Graphene Flakes: Selective Non-enzymatic Electrochemical Determination of Dopamine and Uric Acid in presence of Ascorbic Acid.. 2015 , 27, 1253-1261	11
1413	Perovskite-nitrogen-doped carbon nanotube composite as bifunctional catalysts for rechargeable lithium-air batteries. 2015 , 8, 1058-65	77
1412	Synthesis of graphene with both high nitrogen content and high surface area by annealing composite of graphene oxide and g-C ₃ N ₄ . 2015 , 12, 807-814	10
1411	Enhanced electrocatalytic activity of PANI and CoFe ₂ O ₄ /PANI composite supported on graphene for fuel cell applications. 2015 , 284, 383-391	45
1410	Frontiers of Graphene and Carbon Nanotubes. 2015 ,	20
1409	Improving Capacitance by Introducing Nitrogen Species and Defects into Graphene. 2015 , 2, 859-866	10
1408	CHAPTER 6:Doped Nanostructured Carbon Materials as Catalysts. 2015 , 268-311	2

1407	Low-Temperature Synthesis of Graphene and Fabrication of Top-Gated Field-Effect Transistors Using Transfer-Free Processes for Future LSIs. 2015 , 79-89	
1406	Monolithic nitrogen-doped graphene frameworks as ultrahigh-rate anodes for lithium ion batteries. 2015 , 3, 15738-15744	25
1405	Band-gap tuning of graphene by Be doping and Be, B co-doping: a DFT study. 2015 , 5, 55762-55773	58
1404	Highly nitrogen doped carbon nanosheets as an efficient electrocatalyst for the oxygen reduction reaction. 2015 , 51, 11791-4	46
1403	Doped graphenes in catalysis. 2015 , 408, 296-309	66
1402	Interaction of BN- and BP-doped graphene nanoflakes with some representative neutral molecules and anions. 2015 , 113, 2916-2929	
1401	A single-step room-temperature electrochemical synthesis of nitrogen-doped graphene nanoribbons from carbon nanotubes. 2015 , 3, 18222-18228	17
1400	RETRACTED: Morphological and electrical properties of few layer graphene after nitrogen doping by LPCVD technique. 2015 , 644, 97-100	8
1399	Li ₃ VO ₄ /N-doped graphene with high capacity and excellent cycle stability as anode for lithium ion batteries. 2015 , 296, 377-382	48
1398	Large area CVD growth of graphene. 2015 , 210, 95-108	140
1397	Heteroatom-Doped Graphene-Based Materials for Energy-Relevant Electrocatalytic Processes. 2015 , 5, 5207-5234	675
1396	Thiamine-Based Nitrogen, Phosphorus, and Silicon Tri-doped Carbon for Supercapacitor Applications. 2015 , 3, 2194-2202	34
1395	A graphene titanium dioxide nanocomposite (GTNC): one pot green synthesis and its application in a solid rocket propellant. 2015 , 5, 63777-63785	34
1394	Synthesis and Development of Graphene-Inorganic Semiconductor Nanocomposites. 2015 , 115, 8294-343	199
1393	Shock-wave synthesis of multilayer graphene and nitrogen-doped graphene materials from carbonate. 2015 , 94, 928-935	20
1392	Electronic and Chemical Properties of Donor, Acceptor Centers in Graphene. 2015 , 9, 9180-7	28
1391	Dual hetero atom containing bio-carbon: Multifunctional electrode material for High Performance Sodium-ion Batteries and Oxygen Reduction Reaction. 2015 , 176, 670-678	18
1390	Sandwiched graphene with nitrogen, sulphur co-doped CQDs: an efficient metal-free material for energy storage and conversion applications. 2015 , 3, 16961-16970	86

- 1389 Dopant-configuration controlled carrier scattering in graphene. **2015**, 5, 59556-59563 14
- 1388 A novel Ni₃N/graphene nanocomposite as supercapacitor electrode material with high capacitance and energy density. **2015**, 3, 16633-16641 92
- 1387 Honeycomb-like mesoporous nitrogen-doped carbon supported Pt catalyst for methanol electrooxidation. **2015**, 93, 1050-1058 73
- 1386 Nitrogen Doping Enables Covalent-Like π -Bonding between Graphenes. *Nano Letters*, **2015**, 15, 5482-91 11.5 23
- 1385 Advances in graphene-based semiconductor photocatalysts for solar energy conversion: fundamentals and materials engineering. **2015**, 7, 13278-92 100
- 1384 Customized casting of unstacked graphene with high surface area (>1300 m²g⁻¹) and its application in oxygen reduction reaction. **2015**, 93, 702-712 17
- 1383 Nanodiamond/nitrogen-doped graphene (core/shell) as an effective and stable metal-free electrocatalyst for oxygen reduction reaction. **2015**, 174, 1017-1022 16
- 1382 Nitrogen-doped carbon nanorods with excellent capacitive deionization ability. **2015**, 3, 17304-17311 59
- 1381 Effect of oxygen and nitrogen functionalization on the physical and electronic structure of graphene. **2015**, 8, 2620-2635 32
- 1380 One step microwaved-assisted hydrothermal synthesis of nitrogen doped graphene for high performance of supercapacitor. **2015**, 355, 419-428 32
- 1379 Reliable doping and carrier concentration control in graphene by aerosol-derived metal nanoparticles. **2015**, 3, 8294-8299 12
- 1378 N-doped carbon nanotubes as cathode material in Li⁺ batteries. **2015**, 26, 7895-7900 25
- 1377 Conducting films based on single-component molecular metals. **2015**, 51, 13117-9 8
- 1376 Efficient exfoliation N-doped graphene from N-containing bamboo-like carbon nanotubes for anode materials of Li-ion battery and Na-ion battery. **2015**, 120, 471-478 7
- 1375 Experimental and numerical investigation of the effective electrical conductivity of nitrogen-doped graphene nanofluids. **2015**, 17, 1 39
- 1374 Influence of interface structures on the properties of molybdenum disulfide/graphene composites: A density functional theory study. **2015**, 649, 961-967 28
- 1373 3D nitrogen-doped graphene/ β -cyclodextrin: host-guest interactions for electrochemical sensing. **2015**, 7, 11922-7 28
- 1372 Understanding nano effects in catalysis. **2015**, 2, 183-201 195

- 1371 Nitrogen doped epitaxial graphene on 4H-SiC(0001) [Experimental and theoretical study. **2015**, 94, 214-223 6
- 1370 Platinum/Boron doped graphene intercalated by carbon black for cathode catalyst in proton exchange membrane fuel cell. **2015**, 89, 500-510 42
- 1369 PtFe/nitrogen-doped graphene for high-performance electrooxidation of formic acid with composition sensitive electrocatalytic activity. **2015**, 5, 60237-60245 21
- 1368 Facile fabrication of palladium-ionic liquids-nitrogen-doped graphene nanocomposites as enhanced electro-catalyst for ethanol oxidation. **2015**, 294, 360-368 24
- 1367 Electronic Structure of Nitrogen-Doped Graphene in the Ground and Core-Excited States from First-Principles Simulations. **2015**, 119, 16660-16666 23
- 1366 Tuning the Magnetic Properties of Carbon by Nitrogen Doping of Its Graphene Domains. **2015**, 137, 7678-85 59
- 1365 CdS/Graphene Nanocomposite Photocatalysts. **2015**, 5, 1500010 584
- 1364 Ternary mesoporous WO₃/Mn₃O₄/N-doped graphene nanocomposite for enhanced photocatalysis under visible light irradiation. **2015**, 5, 3375-3382 27
- 1363 High Mobility of Graphene-Based Flexible Transparent Field Effect Transistors Doped with TiO₂ and Nitrogen-Doped TiO₂. **2015**, 7, 9453-61 27
- 1362 Comparison study of electrochemical properties of porous zinc oxide/N-doped carbon and pristine zinc oxide polyhedrons. **2015**, 285, 406-412 44
- 1361 Carbon surface functionalities and SEI formation during Li intercalation. **2015**, 92, 193-244 80
- 1360 High stability and superior catalytic reactivity of nitrogen-doped graphene supporting Pt nanoparticles as a catalyst for the oxygen reduction reaction: a density functional theory study. **2015**, 5, 34070-34077 33
- 1359 Temperature-triggered chemical switching growth of in-plane and vertically stacked graphene-boron nitride heterostructures. **2015**, 6, 6835 169
- 1358 MoS₂/Nitrogen-doped graphene as efficient electrocatalyst for oxygen reduction reaction. **2015**, 169, 142-149 59
- 1357 Fluorescent N-doped carbon dots for both cellular imaging and highly-sensitive catechol detection. **2015**, 91, 66-75 122
- 1356 Adsorption of CO₂ and H₂ on nitrogen-doped porous carbon from ionic liquid precursor. **2015**, 31, 130-137 9
- 1355 Materials for Flexible, Stretchable Electronics: Graphene and 2D Materials. **2015**, 45, 63-84 266
- 1354 Fluorescence quenching in N-doped graphene derived from graphitic nitrogen. **2015**, 5, 28247-28250 3

1353	Defect Control and n-Doping of Encapsulated Graphene by Helium-Ion-Beam Irradiation. <i>Nano Letters</i> , 2015 , 15, 4006-12	11.5	52
1352	Anisotropic thermal transport in phosphorene: effects of crystal orientation. 2015 , 7, 10648-54		90
1351	Sustainable process for all-carbon electrodes: Horticultural doping of natural-resource-derived nano-carbons for high-performance supercapacitors. 2015 , 91, 386-394		21
1350	High-concentration boron doping of graphene nanoplatelets by simple thermal annealing and their supercapacitive properties. 2015 , 5, 9817		86
1349	Synthesis of nitrogen-doped monolayer graphene with high transparent and n-type electrical properties. 2015 , 3, 6172-6177		21
1348	Three-dimensional graphene hydrogel supported ultrafine RuO ₂ nanoparticles for supercapacitor electrodes. 2015 , 39, 4035-4040		50
1347	Efficient approach to iron/nitrogen co-doped graphene materials as efficient electrochemical catalysts for the oxygen reduction reaction. 2015 , 3, 7767-7772		70
1346	Nanobiosensors and Nanobioanalyses. 2015 ,		7
1345	Anomalous Stabilization in Nitrogen-Doped Graphene. 2015 , 119, 6288-6292		10
1344	Volatile Organic Compounds. 2015 , 1023-1046		1
1343	The doping effect on the catalytic activity of graphene for oxygen evolution reaction in a lithium-air battery: a first-principles study. 2015 , 17, 14605-12		60
1342	Interfacing graphene and related 2D materials with the 3D world. 2015 , 27, 133203		22
1341	Configuration-Induced Rich Electronic Properties of Bilayer Graphene. 2015 , 119, 10623-10630		7
1340	An Amorphous Carbon Nitride Composite Derived from ZIF-8 as Anode Material for Sodium-Ion Batteries. 2015 , 8, 1856-61		76
1339	Shielding technique for deposition of Au electrical contacts on graphene by sputtering. 2015 , 33, 030601		7
1338	Facile synthesis of graphene sheets from fluorinated graphite. 2015 , 5, 40148-40153		17
1337	Poly(vinylidene fluoride)/NH ₂ -Treated Graphene Nanodot/Reduced Graphene Oxide Nanocomposites with Enhanced Dielectric Performance for Ultrahigh Energy Density Capacitor. 2015 , 7, 9668-81		65
1336	Metal-free catalysts for oxygen reduction reaction. 2015 , 115, 4823-92		1763

1335	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. 2015 , 142, 131-9	123
1334	Electrochemical doping of three-dimensional graphene networks used as efficient electrocatalysts for oxygen reduction reaction. 2015 , 7, 9394-8	48
1333	A general solid-state synthesis of chemically-doped fluorescent graphene quantum dots for bioimaging and optoelectronic applications. 2015 , 7, 10162-9	85
1332	Multiple roles of graphene in heterogeneous catalysis. 2015 , 44, 3023-35	271
1331	Three-dimensional porous stretchable and conductive polymer composites based on graphene networks grown by chemical vapour deposition and PEDOT:PSS coating. 2015 , 51, 3169-72	37
1330	Sequential repetitive chemical reduction technique to study size-property relationships of graphene attached Ag nanoparticle. 2015 , 44, 1-9	14
1329	Experimental and theoretical investigation of the superior contact properties of dielectrophoretically processed graphene and tantalum nitride electrodes. 2015 , 252, 765-772	1
1328	Wet-chemical nitrogen-doping of graphene nanoplatelets as electrocatalysts for the oxygen reduction reaction. 2015 , 3, 7659-7665	39
1327	Heteroatom substituted and decorated graphene: preparation and applications. 2015 , 17, 32077-98	54
1326	Covalent functionalization of N-doped graphene by N-alkylation. 2015 , 51, 16916-9	19
1325	Green synthesis of reduced graphene oxide by a GRAS strain Bacillus subtilis 168 with high biocompatibility to zebrafish embryos. 2015 , 5, 60024-60032	8
1324	Nitrogen-Doped Graphene Quantum Dots as a New Catalyst Accelerating the Coordination Reaction between Cadmium(II) and 5,10,15,20-Tetrakis(1-methyl-4-pyridinio)porphyrin for Cadmium(II) Sensing. 2015 , 87, 10894-901	37
1323	Effect of annealing temperature and element composition of titanium dioxide/graphene/hemin catalysts for oxygen reduction reaction. 2015 , 5, 82879-82886	15
1322	Study on the electrical control of graphene with single-stranded DNA. 2015 ,	
1321	Ultrasensitive gas detection of large-area boron-doped graphene. 2015 , 112, 14527-32	146
1320	High Yield Preparation of Graphene Oxide Film Using Improved Hummer's Technique for Current-Voltage Characteristic. 2015 , 1109, 385-389	4
1319	Über die Rolle von Metallen in Elektrokatalysatoren auf Basis von stickstoffdotiertem Kohlenstoff für die Sauerstoffreduktion. 2015 , 127, 10240-10259	69
1318	High catalytic activity of oriented 2.0.0 copper(I) oxide grown on graphene film. 2015 , 6, 8561	53

1317	Nitrogen and sulfur dual-doped graphene sheets as anode materials with superior cycling stability for lithium-ion batteries. 2015 , 184, 24-31	39
1316	Growth of dense CNT on the multilayer graphene film by the microwave plasma enhanced chemical vapor deposition technique and their field emission properties. 2015 , 5, 90111-90120	8
1315	Reversible optical switching of dirac point of graphene functionalized with azobenzene. 2015 , 85, 2167-2173	1
1314	Bipolar spin-filtering effect in B- or N-doped zigzag graphene nanoribbons with asymmetric edge hydrogenation. 2015 , 379, 2860-2865	10
1313	Adsorption of Molecules on Nitrogen-Doped Graphene: A First-Principles Study. 2015 ,	
1312	Towards scalable nano-engineering of graphene. 2014 , 4, 7314	14
1311	Hydrodechlorination activity of catalysts based on nitrogen-doped carbons from low-density polyethylene. 2015 , 87, 444-452	15
1310	Controlled synthesis of graphene nanoribbons for field effect transistors. 2015 , 649, 933-938	7
1309	Carbon-rich hexagonal (BN)C alloys. 2015 , 117, 215703	15
1308	Calculation of the graphene C 1s core level binding energy. 2015 , 91,	31
1307	Superior electrochemical performance of Li ₃ VO ₄ /N-doped C as an anode for Li-ion batteries. 2015 , 3, 17951-17955	46
1306	Sulfur doped graphene/polystyrene nanocomposites for electromagnetic interference shielding. 2015 , 133, 1267-1275	98
1305	An introduction to the chemistry of graphene. 2015 , 17, 28484-504	91
1304	Photochemical doping of graphene oxide thin film with nitrogen for photoconductivity enhancement. 2015 , 94, 1037-1043	10
1303	B: Highly Sensitive and Selective Gas Sensor. 2015 , 119, 24827-24836	87
1302	Effect of graphene on the self-assembly and rheological behavior of a triblock copolymer gel. 2015 , 5, 83936-83944	13
1301	Europium-decorated graphene quantum dots as a fluorescent probe for label-free, rapid and sensitive detection of Cu(2+) and L-cysteine. 2015 , 891, 261-8	59
1300	Nanocharacterization. 2015 , 117-180	1

1299	A first-principles study of light non-metallic atom substituted blue phosphorene. 2015 , 356, 110-114	78
1298	Facile fabrication of 3D SnO ₂ /nitrogen-doped graphene aerogels for superior lithium storage. 2015 , 5, 68822-68828	4
1297	Heteroatom doped graphene in photocatalysis: A review. 2015 , 358, 2-14	239
1296	Sulfur-doped graphene laminates for EMI shielding applications. 2015 , 3, 9802-9810	91
1295	Structural stability and O ₂ dissociation on nitrogen-doped graphene with transition metal atoms embedded: A first-principles study. 2015 , 5, 067136	26
1294	A low-cost and one-step synthesis of N-doped monolithic quasi-graphene films with porous carbon frameworks for Li-ion batteries. 2015 , 17, 43-51	68
1293	Facile Fabrication of N-Doped Graphene as Efficient Electrocatalyst for Oxygen Reduction Reaction. 2015 , 7, 19619-25	55
1292	Thermal conductivity and heat transport properties of nitrogen-doped graphene. 2015 , 62, 74-80	27
1291	Nanosized Pt anchored onto 3D nitrogen-doped graphene nanoribbons towards efficient methanol electrooxidation. 2015 , 3, 19696-19701	49
1290	Lewis acid-base surface interaction of some boron compounds with N-doped graphene; first principles study. 2015 , 15, 1271-1277	64
1289	Nitrogen doped graphene sheets as metal free anode catalysts for the high performance microbial fuel cells. 2015 , 40, 13061-13070	74
1288	CVD synthesis of nitrogen-doped graphene using urea. 2015 , 58, 1	11
1287	A molecular dynamics study on thermal and mechanical properties of graphene-paraffin nanocomposites. 2015 , 5, 82638-82644	40
1286	Tuning plasmonic and chemical enhancement for SERS detection on graphene-based Au hybrids. 2015 , 7, 20188-96	65
1285	Biogenic gold nanoparticles-reduced graphene oxide nanohybrid: synthesis, characterization and application in chemical and biological reduction of nitroaromatics. 2015 , 5, 97798-97806	24
1284	A novel electrochemical DNA-sensing nanoplatfrom based on supramolecular ionic liquids grafted on nitrogen-doped graphene aerogels. 2015 , 45, 1289-1298	6
1283	Synergistic effects of dopants on the spin density of catalytic active centres of N-doped fluorinated graphene for oxygen reduction reaction. 2015 , 1, 74-79	57
1282	Stable n-type doping of graphene via high-molecular-weight ethylene amines. 2015 , 17, 29492-5	34

1281	Electronic and optical properties in graphane. 2015 , 95, 2717-2730	3
1280	Bioinspired Synthesis of Hierarchical Porous Graphitic Carbon Spheres with Outstanding High-Rate Performance in Lithium-Ion Batteries. 2015 , 27, 336-342	73
1279	Synergistic bifunctional catalyst design based on perovskite oxide nanoparticles and intertwined carbon nanotubes for rechargeable zinc-air battery applications. 2015 , 7, 902-10	136
1278	Searching for magnetism in pyrrolic N-doped graphene synthesized via hydrothermal reaction. 2015 , 84, 460-468	75
1277	Novel tannin-based Si, P co-doped carbon for supercapacitor applications. 2015 , 275, 835-844	39
1276	Fabrication of graphene oxide decorated with nitrogen-doped graphene quantum dots and its enhanced electrochemiluminescence for ultrasensitive detection of pentachlorophenol. 2015 , 140, 1253-9	46
1275	How Much N-Doping Can Graphene Sustain?. 2015 , 6, 106-12	54
1274	Wetting behaviour of carbon nitride nanostructures grown by plasma enhanced chemical vapour deposition technique. 2015 , 328, 146-153	31
1273	Band engineering for novel two-dimensional atomic layers. 2015 , 11, 1868-84	79
1272	Metal-support interaction in platinum and palladium nanoparticles loaded on nitrogen-doped mesoporous carbon for oxygen reduction reaction. 2015 , 7, 1170-9	129
1271	Atomic-scale mechanism of grain boundary motion in graphene. 2015 , 84, 146-150	8
1270	Synthesis of sulfur-doped p-type graphene by annealing with hydrogen sulfide. 2015 , 82, 506-512	40
1269	Enhancement of weak localization for nitrogen-doped graphene by short range potentials. 2015 , 82, 346-352	8
1268	From two-dimensional materials to heterostructures. 2015 , 90, 21-45	108
1267	A three-dimensional nitrogen-doped graphene structure: a highly efficient carrier of enzymes for biosensors. 2015 , 7, 1290-5	51
1266	High N-content holey few-layered graphene electrocatalysts: scalable solvent-less production. 2015 , 3, 1682-1687	35
1265	Nitrogen and sulfur dual-doped graphene for glucose biosensor application. 2015 , 738, 100-107	23
1264	Exceptional electrochemical performance of nitrogen-doped porous carbon for lithium storage. 2015 , 82, 116-123	90

1263	Preparing two-dimensional microporous carbon from Pistachio nutshell with high areal capacitance as supercapacitor materials. 2014 , 4, 5545	133
1262	Highly stable electrocatalysts supported on nitrogen-self-doped three-dimensional graphene-like networks with hierarchical porous structures. 2015 , 3, 1492-1497	29
1261	Nitrogen-doped graphene supported highly dispersed palladium-lead nanoparticles for synergetic enhancement of ethanol electrooxidation in alkaline medium. 2015 , 152, 68-74	71
1260	Synthesis of nitrogen-doped graphene supported Pt nanoparticles catalysts and their catalytic activity for fuel cells. 2015 , 153, 566-573	44
1259	Synthesis of nitrogen-doped graphene/ZnS quantum dots composites with highly efficient visible light photodegradation. 2015 , 151, 34-42	23
1258	Wavelength-selective dual p- and n-type carrier transport of an organic/graphene/inorganic heterostructure. 2015 , 27, 282-7	21
1257	Electronic structures and stabilities of bilayer graphene doped with boron and nitrogen. 2015 , 634, 57-61	43
1256	Reversible hydrophobic to hydrophilic transition in graphene via water splitting induced by UV irradiation. 2014 , 4, 6450	78
1255	Transforming organic-rich amaranthus waste into nitrogen-doped carbon with superior performance of the oxygen reduction reaction. 2015 , 8, 221-229	266
1254	One-step etching, doping, and adhesion-control process for graphene electrodes. 2015 , 82, 168-175	16
1253	First-principle analysis of the electronic and optical properties of boron and nitrogen doped carbon mono-layer graphenes. 2015 , 81, 179-192	44
1252	Functional graphene nanosheets: The next generation membranes for water desalination. 2015 , 356, 208-225	264
1251	Significant impact of 2D graphene nanosheets on large volume change tin-based anodes in lithium-ion batteries: A review. 2015 , 274, 869-884	307
1250	Environmental Analysis by Electrochemical Sensors and Biosensors. 2015 ,	2
1249	Graphene and carbon nanotube (CNT) in MEMS/NEMS applications. 2015 , 132, 192-206	146
1248	Graphene-iron oxide nanocomposite (GINC): an efficient catalyst for ammonium perchlorate (AP) decomposition and burn rate enhancer for AP based composite propellant. 2015 , 5, 1950-1960	65
1247	Temperature-dependent nitrogen configuration of N-doped graphene by chemical vapor deposition. 2015 , 81, 814-820	34
1246	Chemical vapor deposition of high quality graphene films from carbon dioxide atmospheres. 2015 , 9, 31-42	66

1245	Au doping effect on chemically-exfoliated graphene and graphene grown via chemical vapor deposition. 2015 , 82, 96-102	19
1244	High nitrogen-doped carbon/Mn ₃ O ₄ hybrids synthesized from nitrogen-rich coordination polymer particles as supercapacitor electrodes. 2015 , 44, 151-7	32
1243	Non-precious metal nanoparticles supported on nitrogen-doped graphene as a promising catalyst for oxygen reduction reaction: Synthesis, characterization and electrocatalytic performance. 2015 , 273, 981-989	44
1242	In-situ confined growth of monodisperse Pt nanoparticle@graphene nanobox composites as electrocatalytic nanoreactors. 2015 , 11, 1003-10	21
1241	Preparation and Mechanical Properties of Graphene Nanosheet Reinforced Alumina Composites. 2015 , 17, 28-35	50
1240	DFT study of oxygen adsorption on vacancy and Stone-Wales defected single-walled carbon nanotubes with Cr-doped. 2015 , 65, 77-83	11
1239	Molecularly engineered graphene surfaces for sensing applications: A review. 2015 , 859, 1-19	169
1238	Chemically and electrochemically prepared graphene/MnO ₂ nanocomposite electrodes for zinc primary cells: a comparative study. 2015 , 21, 791-799	5
1237	Coaxial-cable structure composite cathode material with high sulfur loading for high performance lithium-sulfur batteries. 2015 , 274, 338-344	33
1236	Hydrothermal synthesis of highly nitrogen-doped few-layer graphene via solid-gas reaction. 2015 , 61, 252-258	14
1235	Single source precursor-based solvothermal synthesis of heteroatom-doped graphene and its energy storage and conversion applications. 2014 , 4, 5639	92
1234	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. 2015 , 7, 4598-810	2015
1233	Defect Engineered 2D Materials for Energy Applications. 2016 ,	1
1232	Synthesis and Applications of Semiconducting Graphene. 2016 , 2016, 1-19	15
1231	A highly sensitive NADH biosensor using nitrogen doped graphene modified electrodes. 2016 , 775, 329-336	24
1230	Multiple Dirac cones in BN co-doped Graphyne. 2016 , 4, 7339-7344	11
1229	Native defects in ultra-high vacuum grown graphene islands on Cu(1 1 1). 2016 , 28, 034003	5
1228	Surface and Interface Engineering of Graphene Oxide Films by Controllable Photoreduction. 2016 , 16, 1244-55	21

1227	Synthesis of Two-Dimensional Materials for Capacitive Energy Storage. 2016 , 28, 6104-35	441
1226	Direct CVD Graphene Growth on Semiconductors and Dielectrics for Transfer-Free Device Fabrication. 2016 , 28, 4956-75	90
1225	Supramolecular Approaches to Graphene: From Self-Assembly to Molecule-Assisted Liquid-Phase Exfoliation. 2016 , 28, 6030-51	132
1224	An Effective Approach for the Identification of Carrier Type and Local Inversion Doping in Graphene by Biased Atomic Force Microscopy. 2016 , 2, 1500255	7
1223	Co@Co ₃ O ₄ @PPD Core@bishell Nanoparticle-Based Composite as an Efficient Electrocatalyst for Oxygen Reduction Reaction. 2016 , 12, 2580-7	79
1222	Self-Sensitized Carbon Nitride Microspheres for Long-Lasting Visible-Light-Driven Hydrogen Generation. 2016 , 12, 3543-9	60
1221	A Theoretical Study on the Design, Structure, and Electronic Properties of Novel Forms of Graphynes. 2016 , 120, 15153-15161	45
1220	Pressure-Induced Charge Transfer Doping of Monolayer Graphene/MoS ₂ Heterostructure. 2016 , 12, 4063-9	31
1219	A bi-functional catalyst for oxygen reduction and oxygen evolution reactions from used baby diapers: Fe ₂ O ₃ wrapped in P and S dual doped graphitic carbon. 2016 , 6, 64258-64265	16
1218	Synthesis and characterization of nitrogen-functionalized graphene oxide in high-temperature and high-pressure ammonia. 2016 , 6, 113924-113932	16
1217	Chemical and biological sensors based on defect-engineered graphene mesh field-effect transistors. 2016 , 3, 14	13
1216	High temperature MBE of graphene on sapphire and hexagonal boron nitride flakes on sapphire. 2016 , 34, 02L101	14
1215	Time-dependent evolution of the nitrogen configurations in N-doped graphene films. 2016 , 6, 106914-106920	74
1214	Plasma engineering of graphene. 2016 , 3, 021301	93
1213	Characterization of chemical doping of graphene by in-situ Raman spectroscopy. 2016 , 108, 203111	19
1212	Dual Electrocatalytic Behavior of Oxovanadium(IV) Salen Immobilized Carbon Materials Towards Cysteine Oxidation and Cystine Reduction: Graphene Versus Single Walled Carbon Nanotubes. 2016 , 1, 6726-6734	8
1211	Graphene-based Materials in Health and Environment. 2016 ,	2
1210	Stimulus Responsive Graphene Scaffolds for Tissue Engineering. 2016 , 219-256	0

1209	Mechanism of stabilization and magnetization of impurity-doped zigzag graphene nanoribbons. 2016 , 120, 214301	5
1208	Ambipolar behavior in MoS ₂ field effect transistors by using catalytic oxidation. 2016 , 109, 183102	5
1207	Block Copolymer Templating as a Path to Porous Nanostructured Carbons with Highly Accessible Nitrogens for Enhanced (Electro)chemical Performance. 2016 , 1-19	
1206	Structural and optical properties of graphene from green carbon source via thermal chemical vapor deposition. 2016 , 31, 1947-1956	23
1205	Modification of the G-phonon mode of graphene by nitrogen doping. 2016 , 108, 041907	4
1204	Effect of nitrogen precursors on the electrochemical performance of nitrogen-doped reduced graphene oxide towards oxygen reduction reaction. 2016 , 677, 112-120	52
1203	Efficiency and long-term durability of a nitrogen-doped single-walled carbon nanotube electrocatalyst synthesized by defluorination-assisted nanotube-substitution for oxygen reduction reaction. 2016 , 4, 9184-9195	16
1202	Gas adsorption, energetics and electronic properties of boron- and nitrogen-doped bilayer graphenes. 2016 , 478, 55-61	25
1201	Fast Patterned Graphene Ribbons Via Soft Lithography. 2016 , 42, 428-432	11
1200	An electrochemical DNA biosensor based on nitrogen-doped graphene/Au nanoparticles for human multidrug resistance gene detection. 2016 , 85, 684-691	84
1199	Insight into the nitrogen-doped carbon as oxygen reduction reaction catalyst: The choice of carbon/nitrogen source and active sites. 2016 , 41, 8563-8575	34
1198	Nitrogen-doped carbon/graphene hybrid anode material for sodium-ion batteries with excellent rate capability. 2016 , 319, 195-201	129
1197	Importance of doping site of B, N, and O in tuning electronic structure of graphynes. 2016 , 105, 156-162	39
1196	Fine tuning the band-gap of graphene by atomic and molecular doping: a density functional theory study. 2016 , 6, 55990-56003	32
1195	Facile synthesis of nitrogen-doped graphene on Ni foam for high-performance supercapacitors. 2016 , 51, 6348-6356	25
1194	Facile preparation of nitrogen-doped porous carbon for high performance symmetric supercapacitor. 2016 , 20, 1613-1623	21
1193	Spillover of hydrogen on SiC-ML surface: Doping effect and bond exchange mechanism. 2016 , 41, 3928-3939	9
1192	Catalysis with two-dimensional materials and their heterostructures. 2016 , 11, 218-30	1433

1191	Physical and electrical characterization of reduced graphene oxide synthesized adopting green route. 2016 , 39, 543-550	14
1190	Nitrogen-doped graphenes as efficient electrocatalysts for the selective reduction of carbon dioxide to formate in aqueous solution. 2016 , 18, 3250-3256	189
1189	Hierarchical Sandwich-Like Structure of Ultrafine N-Rich Porous Carbon Nanospheres Grown on Graphene Sheets as Superior Lithium-Ion Battery Anodes. 2016 , 8, 10324-33	87
1188	Density-functional study on the structural and magnetic properties of N-doped graphene oxide. 2016 , 102, 39-50	12
1187	One-pot synthesis of N-doped graphene for metal-free advanced oxidation processes. 2016 , 102, 279-287	115
1186	Reduction of p-nitrophenol by magnetic Co-carbon composites derived from metal organic frameworks. 2016 , 298, 183-190	137
1185	Understanding the chemisorption-based activation mechanism of the oxygen reduction reaction on nitrogen-doped graphitic materials. 2016 , 204, 245-254	25
1184	Palladium Nanoparticles Supported on Nitrogen and Sulfur Dual-Doped Graphene as Highly Active Electrocatalysts for Formic Acid and Methanol Oxidation. 2016 , 8, 10858-65	153
1183	Interfacial interactions and synergistic effect of CoNi nanocrystals and nitrogen-doped graphene in a composite microwave absorber. 2016 , 104, 214-225	275
1182	Review of functionalization, structure and properties of graphene/polymer composite fibers. 2016 , 87, 29-45	213
1181	Preparation of edge-nitrogenated graphene nanoplatelets as an efficient electrode material for supercapacitors. 2016 , 208, 47-54	14
1180	Significant visible-light photocatalytic enhancement in Rhodamine B degradation of silver orthophosphate via the hybridization of N-doped graphene and poly(3-hexylthiophene). 2016 , 315, 23-34	30
1179	Incorporation of low energy activated nitrogen onto HOPG surface: Chemical states and thermal stability studies by in-situ XPS and Raman spectroscopy. 2016 , 382, 192-201	8
1178	Investigations of the band structures of edge-defect zigzag graphene nanoribbons using density functional theory. 2016 , 6, 39587-39594	11
1177	N-doped zeolite-templated carbon as a metal-free electrocatalyst for oxygen reduction. 2016 , 6, 43091-43097	15
1176	Understanding the ammonia sensing behavior of filter coffee powder derived N-doped carbon nanoparticles using the Freundlich-like isotherm. 2016 , 4, 8860-8865	17
1175	Synthesis of well-defined Fe ₃ O ₄ nanorods/N-doped graphene for lithium-ion batteries. 2016 , 9, 1256-1266	85
1174	Ultrafine Co ₃ O ₄ embedded in nitrogen-doped graphene with synergistic effect and high stability for supercapacitors. 2016 , 6, 48357-48364	24

1173	Energetics of a Li Atom adsorbed on B/N doped graphene with monovacancy. 2016 , 240, 67-75	13
1172	One-step synthesis of nitrogen-doped graphene-like meso-macroporous carbons as highly efficient and selective adsorbents for CO ₂ capture. 2016 , 4, 14567-14571	53
1171	Preparation of Cobalt Sulfide Nanoparticle-Decorated Nitrogen and Sulfur Co-Doped Reduced Graphene Oxide Aerogel Used as a Highly Efficient Electrocatalyst for Oxygen Reduction Reaction. 2016 , 12, 5920-5926	61
1170	Tuning graphene for energy and environmental applications: Oxygen reduction reaction and greenhouse gas mitigation. 2016 , 328, 472-481	14
1169	Band and bonding characteristics of N ₂ ⁺ ion-doped graphene. 2016 , 6, 84959-84964	0
1168	Catalyst-free bottom-up growth of graphene nanofeatures along with molecular templates on dielectric substrates. 2016 , 8, 17022-17029	13
1167	Synthesis and Study of Optical Properties of Graphene/TiO ₂ Composites Using UV-VIS Spectroscopy. 2016 , 83, 586-591	6
1166	Facile self-assembly N-doped graphene quantum dots/graphene for oxygen reduction reaction. 2016 , 216, 102-109	69
1165	The mechanism and process of spontaneous boron doping in graphene in the theoretical perspective. 2016 , 380, 3384-3388	2
1164	Oxygen Electroreduction Catalyzed by Palladium Nanoparticles Supported on Nitrogen-Doped Graphene Quantum Dots: Impacts of Nitrogen Dopants. 2016 , 4, 6580-6589	37
1163	Heavily N-doped monolayer graphene electrodes used for high-performance N-channel polymeric thin film transistors. 2016 , 6, 93855-93862	6
1162	Precisely Controllable Core-Shell Ag@Carbon Dots Nanoparticles: Application to in Situ Super-Sensitive Monitoring of Catalytic Reactions. 2016 , 8, 27956-27965	75
1161	Purely substitutional nitrogen on graphene/Pt(111) unveiled by STM and first principles calculations. 2016 , 8, 17686-17693	12
1160	A computational study on the SO ₂ adsorption by the pristine, Al, and Si doped BN nanosheets. 2016 , 100, 350-357	101
1159	The Origin of Improved Electrical Double-Layer Capacitance by Inclusion of Topological Defects and Dopants in Graphene for Supercapacitors. 2016 , 55, 13822-13827	117
1158	Nitrogen-doped hierarchically porous carbon networks: synthesis and applications in lithium-ion battery, sodium-ion battery and zinc-air battery. 2016 , 219, 592-603	138
1157	Ordered, Scalable Heterostructure Comprising Boron Nitride and Graphene for High-Performance Flexible Supercapacitors. 2016 , 28, 7750-7756	41
1156	The Origin of Improved Electrical Double-Layer Capacitance by Inclusion of Topological Defects and Dopants in Graphene for Supercapacitors. 2016 , 128, 14026-14031	12

1155	NaSnAs: An Exfoliatable Layered van der Waals Zintl Phase. 2016 , 10, 9500-9508	33
1154	Edge-selectively phosphorus-doped few-layer graphene as an efficient metal-free electrocatalyst for the oxygen evolution reaction. 2016 , 52, 13008-13011	64
1153	Role of Nitrogen-Doped Graphene for Improved High-Capacity Potassium Ion Battery Anodes. 2016 , 10, 9738-9744	512
1152	An ultrahigh volumetric capacitance of squeezable three-dimensional bicontinuous nanoporous graphene. 2016 , 8, 18551-18557	11
1151	Hierarchical porous nitrogen-rich carbon nanospheres with high and durable capabilities for lithium and sodium storage. 2016 , 8, 17911-17918	54
1150	Comparison of nitrogen-doped graphene and carbon nanotubes as supporting material for iron and cobalt nanoparticle electrocatalysts toward oxygen reduction reaction in alkaline media for fuel cell applications. 2016 , 41, 14665-14675	29
1149	A Facile Route to Bimetal and Nitrogen-Codoped 3D Porous Graphitic Carbon Networks for Efficient Oxygen Reduction. 2016 , 12, 4193-9	113
1148	Modulating the Electronic Properties of Monolayer Graphene Using a Periodic Quasi-One-Dimensional Potential Generated by Hex-Reconstructed Au(001). 2016 , 10, 7550-7	16
1147	Integrated Carbon/Red Phosphorus/Graphene Aerogel 3D Architecture via Advanced Vapor-Redistribution for High-Energy Sodium-Ion Batteries. 2016 , 6, 1601037	182
1146	Nitrogen doped graphene supported palladium-cobalt as a promising catalyst for methanol oxidation reaction: Synthesis, characterization and electrocatalytic performance. 2016 , 113, 1162-1173	60
1145	Electronic properties and nonlinear optical responses of boron/nitrogen-doped zigzag graphene nanoribbons. 2016 , 94, 620-625	6
1144	Recent progress in 2D or 3D N-doped graphene synthesis and the characterizations, properties, and modulations of N species. 2016 , 51, 10323-10349	62
1143	Large area fabrication of self-standing nanoporous graphene-on-PMMA substrate. 2016 , 184, 47-51	10
1142	Mechanical and structural properties of graphene-like carbon nitride sheets. 2016 , 6, 76915-76921	39
1141	A self-template and KOH activation co-coupling strategy to synthesize ultrahigh surface area nitrogen-doped porous graphene for oxygen reduction. 2016 , 6, 73292-73300	24
1140	Preparation of renewable lignin-derived nitrogen-doped carbon nanospheres as anodes for lithium-ion batteries. 2016 , 6, 77143-77150	33
1139	Facile Synthesis of Nitrogen-doped Graphene Derived from Graphene Oxide and Vitamin B3 as High-performance Sensor for Imidacloprid Determination. 2016 , 212, 784-790	22
1138	Symmetry and Topology of Graphenes. 2016 , 177-182	

1137	Chemical Modifications of Graphene via Covalent Bonding. 2016 , 207-220	
1136	Electrical and Optical Properties and Applications of Doped Graphene Sheets. 2016 , 197-224	4
1135	3D Macroscopic Graphene Assemblies. 2016 , 281-294	
1134	Graphene Heterostructures. 2016 , 3-20	
1133	Beta-FeOOH-supported graphitic carbon nitride as an efficient visible light photocatalyst. 2016 , 423, 463-471	30
1132	Self-Organized Criticality, Percolation, and Electrical Instability in Graphene Analogs. 2016 , 209-220	
1131	Platinum Nanoparticles Supported on Nitrogen-Doped Graphene Nanosheets as Electrocatalysts for Oxygen Reduction Reaction. 2016 , 7, 428-440	41
1130	Highly conjugated graphitic 3D carbon frameworks for supercapacitors with long cycling stability. 2016 , 109, 650-657	17
1129	Decorating in situ ultrasmall tin particles on crumpled N-doped graphene for lithium-ion batteries with a long life cycle. 2016 , 328, 482-491	34
1128	Efficient n -type doping in epitaxial graphene through strong lateral orbital hybridization of Ti adsorbate. 2016 , 109, 300-305	4
1127	Crumpled nitrogen- and boron-dual-self-doped graphene sheets as an extraordinary active anode material for lithium ion batteries. 2016 , 4, 14155-14162	28
1126	Metal coordination enhanced NiCo@N-doped porous carbon core-shell microsphere bi-functional electrocatalyst and its application in rechargeable zinc/air batteries. 2016 , 6, 83386-83392	7
1125	Electrocatalytic performances of heteroatom-containing functionalities in N-doped reduced graphene oxides. 2016 , 42, 149-156	19
1124	Nitrogen-boron Dipolar-doped Nanocarbon as a High-efficiency Electrocatalyst for Oxygen Reduction Reaction. 2016 , 222, 481-487	29
1123	Nanostructured transparent conductive films: Fabrication, characterization and applications. 2016 , 109, 1-101	78
1122	Nitrogen-doped carbon-embedded TiO ₂ nanofibers as promising oxygen reduction reaction electrocatalysts. 2016 , 330, 292-303	68
1121	Self-Assembly of Nitrogen-doped Graphene-Wrapped Carbon Nanoparticles as an Efficient Electrocatalyst for Oxygen Reduction Reaction. 2016 , 216, 347-354	16
1120	Graphene and its derivatives for laser protection. 2016 , 84, 118-157	85

1119	Few-Layer Graphene Island Seeding for Dendrite-Free Li Metal Electrodes. 2016 , 8, 26895-26901	54
1118	Surface Charge Transfer Doping of Low-Dimensional Nanostructures toward High-Performance Nanodevices. 2016 , 28, 10409-10442	105
1117	2D nanostructures for water purification: graphene and beyond. 2016 , 8, 15115-31	242
1116	Monitoring the doping of graphene on SiO ₂ /Si substrates during the thermal annealing process. 2016 , 6, 72859-72864	21
1115	Structure of functionalized nitrogen-doped graphene hydrogels derived from isomers of phenylenediamine and graphene oxide based on their high electrochemical performance. 2016 , 212, 828-838	32
1114	Hydrogenated Graphene: Preparation, Properties, and Applications. 2016 , 449-468	
1113	Synthesis Strategies for Graphene. 2016 , 73-114	
1112	Impurity-induced formation of bilayered graphene on copper by chemical vapor deposition. 2016 , 9, 2803-2810	19
1111	Effects of strain on carbon donors and acceptors in hexagonal boron nitride monolayers. 2016 , 93,	31
1110	Tunable plasmons in few-layer nitrogen-doped graphene nanostructures: A time-dependent density functional theory study. 2016 , 93,	11
1109	Line defects in graphene: How doping affects the electronic and mechanical properties. 2016 , 93,	22
1108	Recognizing nitrogen dopant atoms in graphene using atomic force microscopy. 2016 , 93,	8
1107	Boron and nitrogen doping in graphene antidot lattices. 2016 , 93,	7
1106	Structural and Electronic Properties of Nitrogen-Doped Graphene. 2016 , 116, 126805	52
1105	Plasma-induced, nitrogen-doped graphene-based aerogels for high-performance supercapacitors. 2016 , 5, e16130	125
1104	Honey-Based P, N and Si Tri-Doped Graphitic Carbon Electrocatalysts for Oxygen Reduction Reaction in Alkaline Conditions. 2016 , 1, 3527-3534	3
1103	Forming heterojunction: an effective strategy to enhance the photocatalytic efficiency of a new metal-free organic photocatalyst for water splitting. 2016 , 6, 29327	19
1102	LaO Promoted Pd/rGO Electro-catalysts for Formic Acid Oxidation. 2016 , 8, 32581-32590	31

1101	Simultaneous Graphite Exfoliation and N Doping in Supercritical Ammonia. 2016 , 8, 30964-30971	29
1100	Tunable electronic properties of graphene through controlling bonding configurations of doped nitrogen atoms. 2016 , 6, 28330	38
1099	High-Purity Amino-Functionalized Graphene Quantum Dots Derived from Graphene Hydrogel. 2016 , 11, 1650138	1
1098	Microbial synthesis of highly dispersed PdAu alloy for enhanced electrocatalysis. 2016 , 2, e1600858	65
1097	Optimization of graphene oxide synthesis parameters for improving their after-reduction material performance in functional electrodes. 2016 , 3, 105033	2
1096	Gadolinium functionalized carbon dots for fluorescence/magnetic resonance dual-modality imaging of mesenchymal stem cells. 2016 , 4, 7472-7480	25
1095	Simultaneous Nitrogen Doping and Pore Generation in Thermo-Insulating Graphene Films via Colloidal Templating. 2016 , 8, 31617-31624	4
1094	Dispersibility of vapor phase oxygen and nitrogen functionalized multi-walled carbon nanotubes in various organic solvents. 2016 , 6, 26208	18
1093	Stable, efficient p-type doping of graphene by nitric acid. 2016 , 6, 113185-113192	49
1092	One-pot hydrothermal synthesis of Nitrogen-doped graphene as high-performance anode materials for lithium ion batteries. 2016 , 6, 26146	257
1091	PMMA-Etching-Free Transfer of Wafer-scale Chemical Vapor Deposition Two-dimensional Atomic Crystal by a Water Soluble Polyvinyl Alcohol Polymer Method. 2016 , 6, 33096	56
1090	Charge transfer-resistance in nitrogen-doped/undoped graphene: Its influence on the electro-catalytic reduction of H ₂ O ₂ . 2016 , 220, 664-671	7
1089	First-Principles Computational Design of Graphene for Gas Detection. 2016 , 155-177	
1088	Carbon Nanomaterials in Flames: from 0-D to 1-D and 2-D. 2016 , 1, 1313-1325	1
1087	A versatile, superelastic polystyrene/graphene capsule-like framework. 2016 , 4, 10118-10123	24
1086	Supercapacitor Electrode Based on Nano-Vanadium Nitride Incorporated on Porous Carbon Nanospheres Derived from Ionic Amphiphilic Block Copolymers & Vanadium-Contained Ion Assembly Systems. 2016 , 211, 469-477	62
1085	High performance NiO nanosheets anchored on three-dimensional nitrogen-doped carbon nanotubes as a binder-free anode for lithium ion batteries. 2016 , 4, 10940-10947	39
1084	Nitrogen Doped Graphene as Metal Free Electrocatalyst for Efficient Oxygen Reduction Reaction in Alkaline Media and Its Application in Anion Exchange Membrane Fuel Cells. 2016 , 163, F848-F855	59

1083 Chemical Modification of Graphene. **2016**, 207-224

1082 Printed Graphene-Based Electrochemical Sensors. **2016**, 163-178

1081 Chemical Routes to Graphene Quantum Dots: Photoluminescence Mechanism and Novel Applications. **2016**, 179-194

1080 Nanographene Patterns from Focused Ion Beam-Induced Deposition: Structural Characterization of Graphene Materials by XPS and Raman Scattering. **2016**, 305-320

1079 Thermophysical and Electrophysical Properties of Composite Films Based on Modified Multi-Walled Carbon Nanotubes and Multilayered Graphene. **2016**, 321-326 2

1078 Graphene-Based Polymer Nanocomposites. **2016**, 163-178

1077 Graphene and Graphene-Oxide-Based Gas Sensors. **2016**, 299-310 1

1076 Effect of External Electric Fields on the Multifunctional Applications of Graphene. **2016**, 253-272

1075 Template-free synthesis of three-dimensional nanoporous N-doped graphene for high performance fuel cell oxygen reduction reaction in alkaline media. **2016**, 175, 405-413 34

1074 Thermopower and hall effect in silicon nitride composites containing thermally reduced graphene and pure graphene nanosheets. **2016**, 42, 11341-11347 5

1073 Structure of nitrogen-doped graphene synthesized by combination of imidazole and melamine solid precursors. **2016**, 177, 89-93 11

1072 Nitrogen-doped Carbon Coated Porous Silicon as High Performance Anode Material for Lithium-Ion Batteries. **2016**, 209, 299-307 47

1071 Effect of substitutional impurities on the electronic transport properties of graphene. **2016**, 84, 22-26 13

1070 Surface Modulation of Graphene Field Effect Transistors on Periodic Trench Structure. **2016**, 8, 18513-8 3

1069 One-Step Scalable Production of Co_{1-x}S/Graphene Nanocomposite as High-Performance Bifunctional Electrocatalyst. **2016**, 33, 569-575 16

1068 Catalytic properties of graphitic and pyridinic nitrogen doped on carbon black for oxygen reduction reaction. **2016**, 37, 1119-1126 43

1067 Wetting-Assisted Crack- and Wrinkle-Free Transfer of Wafer-Scale Graphene onto Arbitrary Substrates over a Wide Range of Surface Energies. **2016**, 26, 2070-2077 54

1066 On-Fabrication Solid-State N-Doping of Graphene by an Electron-Transporting Metal Oxide Layer for Efficient Inverted Organic Solar Cells. **2016**, 6, 1600172 42

1065	Fast P3HT Exciton Dissociation and Absorption Enhancement of Organic Solar Cells by PEG-Functionalized Graphene Quantum Dots. 2016 , 12, 994-9	49
1064	Facile preparation of nitrogen-doped graphene scrolls via acoustic cavitation as electrocatalyst for glucose biosensing. 2016 , 20, 439-447	8
1063	Gate-Tunable Dirac Point of Molecular Doped Graphene. 2016 , 10, 2930-9	38
1062	Application of carbon nanostructures toward SO ₂ and SO ₃ adsorption: a comparison between pristine graphene and N-doped graphene by DFT calculations. 2016 , 37, 176-188	92
1061	Egg yolk-derived phosphorus and nitrogen dual doped nano carbon capsules for high-performance lithium ion batteries. 2016 , 167, 93-97	32
1060	Preparing electrochemical active hierarchically porous carbons for detecting nitrite in drinkable water. 2016 , 6, 7302-7309	9
1059	Electronic structure and field emission properties of nitrogen doped graphene nano-flakes (GNFs:N) and carbon nanotubes (CNTs:N). 2016 , 380, 301-304	10
1058	Tuning the Nanofriction Between Two Graphene Layers by External Electric Fields: A Density Functional Theory Study. 2016 , 61, 1	9
1057	Effect of synthesis catalyst on structure of nitrogen-doped carbon nanotubes and electrical conductivity and electromagnetic interference shielding of their polymeric nanocomposites. 2016 , 98, 358-372	166
1056	Fundamentals of lateral and vertical heterojunctions of atomically thin materials. 2016 , 8, 3870-87	90
1055	Carbon nanocomposite catalysts for oxygen reduction and evolution reactions: From nitrogen doping to transition-metal addition. 2016 , 29, 83-110	540
1054	Efficient and low-damage nitrogen doping of graphene via plasma-based methods. 2016 , 100, 337-344	17
1053	Modified solar power: electrochemical synthesis of Nitrogen doped few layer graphene for supercapacitor applications. 2016 , 27, 3410-3419	12
1052	Enhanced sheet conductivity of LangmuirBlodgett assembled graphene thin films by chemical doping. 2016 , 3, 015002	17
1051	Nonlinear optical effects in nitrogen-doped graphene. 2016 , 6, 3526-3531	23
1050	Towards Effective Utilization of Nitrogen-Containing Active Sites: Nitrogen-doped Carbon Layers Wrapped CNTs Electrocatalysts for Superior Oxygen Reduction. 2016 , 187, 153-160	52
1049	Nitrogen ion bombardment of multilayer graphene films grown on Cu foil by LPCVD. 2016 , 107, 177-183	3
1048	Nitrogen Doping Position-Dependent Rectification of Spin-Polarized Current and Realization of Multifunction in Zigzag Graphene Nanoribbons with Asymmetric Edge Hydrogenation. 2016 , 45, 1165-1174	5

1047	Opening the band gap of graphene through silicon doping for the improved performance of graphene/GaAs heterojunction solar cells. 2016 , 8, 226-32	70
1046	Study of nitrogen doping of graphene via in-situ transport measurements. 2016 , 490, 21-24	8
1045	A novel biosensor nanomaterial for the ultrasensitive and ultrasensitive electrochemical diagnosis of the breast cancer-related BRCA1 gene. 2016 , 8, 3069-3074	14
1044	Transforming waste biomass with an intrinsically porous network structure into porous nitrogen-doped graphene for highly efficient oxygen reduction. 2016 , 18, 10392-9	78
1043	Structure and electronic properties of C2N/graphene predicted by first-principles calculations. 2016 , 6, 28484-28488	45
1042	Advances in Nanomaterials. 2016 ,	4
1041	The Synthesis, Properties, and Applications of Heteroatom-Doped Graphenes. 2016 , 103-133	3
1040	Nitrogen-doped hierarchical porous carbon derived from block copolymer for supercapacitor. 2016 , 3, 140-148	50
1039	Comprehensive electronic structure characterization of pristine and nitrogen/phosphorus doped carbon nanocages. 2016 , 103, 480-487	19
1038	Improving low-energy boron/nitrogen ion implantation in graphene by ion bombardment at oblique angles. 2016 , 8, 8761-72	24
1037	Nitrogen and Phosphorus Co-Doped Carbon Nanodots as a Novel Fluorescent Probe for Highly Sensitive Detection of Fe(3+) in Human Serum and Living Cells. 2016 , 8, 10717-25	238
1036	Upgrading of aromatic compounds in bio-oil over ultrathin graphene encapsulated Ru nanoparticles. 2016 , 4, 5842-5848	28
1035	Graphene coated with controllable N-doped carbon layer by molecular layer deposition as electrode materials for supercapacitors. 2016 , 315, 254-260	31
1034	Wide-range work-function tuning of active graphene transparent electrodes via hole doping. 2016 , 6, 32746-32756	20
1033	Synthesis of graphene. 2016 , 6, 65-83	332
1032	Phosphorus doped graphene by inductively coupled plasma and triphenylphosphine treatments. 2016 , 82, 71-75	11
1031	Preparation and optical properties of sonication-assisted nitrogen doped graphene oxide sheets. 2016 , 48, 1	
1030	Nanorods and nanoblocks of polyaniline and their solvent resistance. 2016 , 90, 183-186	4

1029	Enhanced microwave absorption properties of ferroferric oxide/graphene composites with a controllable microstructure. 2016 , 6, 16952-16962	31
1028	Growth of N-doped graphene from nitrogen containing aromatic compounds: the effect of precursors on the doped site. 2016 , 6, 13392-13398	16
1027	One-step and controllable bipolar doping of reduced graphene oxide using TMAH as reducing agent and doping source for field effect transistors. 2016 , 100, 608-616	22
1026	Ultra-high Rates and Reversible Capacity of Li-S Battery with a Nitrogen-doping Conductive Lewis Base Matrix. 2016 , 192, 467-474	22
1025	N-doped graphene as a nanostructure adsorbent for carbon monoxide: DFT calculations. 2016 , 114, 1756-1762	44
1024	Formation Mechanisms of Graphitic-N: Oxygen Reduction and Nitrogen Doping of Graphene Oxides. 2016 , 120, 5673-5681	25
1023	Microwave-Assisted Synthesis of Nitrogen-Doped Multi-Layer Graphene Quantum Dots with Oxygen-Rich Functional Groups. 2016 , 69, 357	27
1022	Adsorption mechanisms of lithium oxides (Li _x O ₂) on N-doped graphene: a density functional theory study with implications for lithium-ion batteries. 2016 , 135, 1	20
1021	On the electrocatalytic activity of nitrogen-doped reduced graphene Oxide: Does the nature of nitrogen really control the activity towards oxygen reduction?. 2016 , 128, 339-347	27
1020	Controllable Codoping of Nitrogen and Sulfur in Graphene for Highly Efficient Li-Oxygen Batteries and Direct Methanol Fuel Cells. 2016 , 28, 1737-1745	113
1019	Design of separately tunable terahertz two-peak absorber based on graphene. 2016 , 369, 65-71	16
1018	Studies on synthesis of reduced graphene oxide (RGO) via green route and its electrical property. 2016 , 79, 41-51	69
1017	Electrode modification using nanocomposites of boron or nitrogen doped graphene oxide and cobalt (II) tetra aminophenoxy phthalocyanine nanoparticles. 2016 , 196, 457-469	24
1016	Graphene scaffolds in progressive nanotechnology/stem cell-based tissue engineering of the nervous system. 2016 , 4, 3169-3190	138
1015	Novel synthesis of N-doped graphene as an efficient electrocatalyst towards oxygen reduction. 2016 , 9, 808-819	72
1014	Configuration- and concentration-dependent electronic properties of hydrogenated graphene. 2016 , 103, 84-93	14
1013	Characterisation of reduced graphene oxides prepared from natural flaky, lump and amorphous graphites. 2016 , 78, 119-127	30
1012	Band Gap Opening in Dual-Doped Monolayer Graphene. 2016 , 120, 7103-7112	46

1011	Synthesis of graphene encapsulated Fe ₃ C in carbon nanotubes from biomass and its catalysis application. 2016 , 99, 330-337	124
1010	Nitrogenated, phosphorated and arsenicated monolayer holey graphenes. 2016 , 18, 3144-50	49
1009	Facile synthesis of nitrogen and sulfur co-doped graphene-like carbon materials using methyl blue/montmorillonite composites. 2016 , 225, 137-143	26
1008	Reversible and Irreversible Responses of Defect-Engineered Graphene-Based Electrolyte-Gated pH Sensors. 2016 , 8, 834-9	39
1007	N-Doped graphene frameworks with superhigh surface area: excellent electrocatalytic performance for oxygen reduction. 2016 , 8, 2795-803	48
1006	Chemical bonding-induced rich electronic properties of oxygen adsorbed few-layer graphenes. 2016 , 18, 4000-7	4
1005	Ice-templated three dimensional nitrogen doped graphene for enhanced supercapacitor performance. 2016 , 303, 372-378	107
1004	Mechanism of boron and nitrogen in situ doping during graphene chemical vapor deposition growth. 2016 , 98, 633-637	15
1003	Review on recent advances in nitrogen-doped carbons: preparations and applications in supercapacitors. 2016 , 4, 1144-1173	706
1002	Nitrogen-Doped Graphene Synthesized from a Single Liquid Precursor for a Field Effect Transistor. 2016 , 45, 839-845	8
1001	Hierarchical Amination of Graphene for Electrochemical Energy Storage. 2016 , 73-96	
1000	Photoelectrochemical Hydrogen Production Using Novel Heteroatom-Doped Carbon Under Solar Simulated Radiation. 2016 , 52, 378-383	1
999	Synthesis of nitrogen-doped epitaxial graphene via plasma-assisted method: Role of the graphene-substrate interaction. 2016 , 643, 214-221	15
998	Ru/N-AC catalyst to produce vinyl chloride from acetylene and 1,2-dichloroethane. 2016 , 6, 1402-1409	36
997	Tuning the nature of nitrogen atoms in N-containing reduced graphene oxide. 2016 , 96, 594-602	56
996	Grain structures of nitrogen-doped graphene synthesized by solid source-based chemical vapor deposition. 2016 , 96, 448-453	35
995	Carbon Nanotubes. 2016 , 5-63	5
994	Easy one-step synthesis of N-doped graphene for supercapacitors. 2016 , 2, 69-75	44

993	Growth of nitrogen-doped graphene on copper: Multiscale simulations. 2016 , 644, 102-108	6
992	Graphene-based materials for electrochemical energy storage devices: Opportunities and challenges. 2016 , 2, 107-138	314
991	High capacity and superlong cycle life of Li ₃ VO ₄ /N/C hybrids as anode for high performance Li-ion batteries. 2016 , 301, 41-46	48
990	Nitrogen doped sublimed carbon as non-noble metal catalyst for oxygen reduction reaction. 2016 , 264, 206-213	13
989	DNA sequencing by two-dimensional materials: As theoretical modeling meets experiments. 2017 , 89, 280-292	25
988	The effect of varying N/C ratios of nitrogen precursors during non-metal graphene catalyst synthesis. 2017 , 42, 9069-9076	12
987	Certain doping concentrations caused half-metallic graphene. 2017 , 21, 111-117	18
986	Molecular assembly on two-dimensional materials. 2017 , 28, 082001	70
985	Reversible Photochemical Control of Doping Levels in Supported Graphene. 2017 , 121, 4083-4091	22
984	Effect of Si content on structure and electrochemical performance of ternary nanohybrids integrating Si nanoparticles, N-doped carbon shell, and nitrogen-doped graphene. 2017 , 7, 4209-4215	5
983	Bottom-up fabrication of nitrogen-doped mesoporous carbon nanosheets as high performance oxygen reduction catalysts. 2017 , 492, 8-14	10
982	A nitrogen-doped three-dimensional carbon framework for high performance sodium ion batteries. 2017 , 7, 1588-1592	16
981	First-principle analysis of photoelectric properties of silicon-carbon materials with graphene-like honeycomb structure. 2017 , 126, 336-343	9
980	Heteroatom Nitrogen- and Boron-Doping as a Facile Strategy to Improve Photocatalytic Activity of Standalone Reduced Graphene Oxide in Hydrogen Evolution. 2017 , 9, 4558-4569	101
979	Electronic and Optoelectronic Devices based on Two-Dimensional Materials: From Fabrication to Application. 2017 , 3, 1600364	100
978	Doping of graphene using ion beam irradiation and the atomic mechanism. 2017 , 129, 184-193	12
977	First-principles study on the electronic and transport properties of periodically nitrogen-doped graphene and carbon nanotube superlattices. 2017 , 12, 1	8
976	Experimental studies on magnetization in the excited state by using the magnetic field effect of light scattering based on multi-layer graphene particles suspended in organic solvents. 2017 , 9, 2563-2568	4

975	Graphene as a flexible template for controlling magnetic interactions between metal atoms. 2017 , 29, 085001	1
974	Effective and stable FeNi@ N-doped graphene counter electrode for enhanced performance dye sensitized solar cells. 2017 , 191, 80-84	11
973	Highly porous nitrogen-doped carbon nanoparticles synthesized via simple thermal treatment and their electrocatalytic activity for oxygen reduction reaction. 2017 , 115, 515-525	27
972	Self-Terminating Confinement Approach for Large-Area Uniform Monolayer Graphene Directly over Si/SiO ₂ by Chemical Vapor Deposition. 2017 , 11, 1946-1956	87
971	Nitrogen doped nanographene structures; study on the adsorption of nucleobases, nucleotides, and their triphosphate derivatives using mixed docking, MD, and QM/MM approaches. 2017 , 146, 044105	2
970	Nonlinear optical properties of polyaniline and poly (o -toluidine) composite thin films with multi walled carbon nano tubes. 2017 , 512, 45-53	10
969	Trivalent cerium-preponderant CeO ₂ /graphene sandwich-structured nanocomposite with greatly enhanced catalytic activity for the oxygen reduction reaction. 2017 , 5, 6656-6663	44
968	2,3-diaminopyridine functionalized reduced graphene oxide-supported palladium nanoparticles with high activity for electrocatalytic oxygen reduction reaction. 2017 , 406, 226-234	8
967	The necessity of structural irregularities for the chemical applications of graphene. 2017 , 4, 1-16	79
966	A facile one-step process for 3D N-doped noncovalent functionalization PS/rGO composites. 2017 , 4, 035603	3
965	Atomic Defects in Two-Dimensional Materials: From Single-Atom Spectroscopy to Functionalities in Opto-/Electronics, Nanomagnetism, and Catalysis. 2017 , 29, 1606434	146
964	Synthesis and characterization of nitrogen-doped graphene nanosheets/copper composite film for thermal dissipation. 2017 , 118, 1-7	53
963	Magnetic properties of a doped graphene-like bilayer. 2017 , 513, 21-28	6
962	A General Bioinspired, Metals-Based Synergic Cross-Linking Strategy toward Mechanically Enhanced Materials. 2017 , 11, 2835-2845	33
961	A hybrid MBE-based growth method for large-area synthesis of stacked hexagonal boron nitride/graphene heterostructures. 2017 , 7, 43644	39
960	De-sulfation of cellulose nanowhiskers and its effects on the dispersion behavior of graphene. 2017 , 38, 1798-1803	9
959	Femtosecond Pulse Generation with Voltage-Controlled Graphene Saturable Absorbers. 2017 , 389-433	2
958	Large-scale template-free synthesis of N-doped graphene nanotubes and N-doped SiO ₂ -coated graphene nanotubes: Growth mechanism and field-emission property. 2017 , 706, 147-155	17

957	Carbokatalyse in Flüssigphasenreaktionen. 2017 , 129, 956-985	30
956	Graphene-like Boron-Carbon-Nitrogen Monolayers. 2017 , 11, 2486-2493	110
955	Controlling Highly Dominated N Configuration in N-Doped Graphene as Oxygen Reduction Catalyst. 2017 , 164, F256-F258	3
954	Reactive template synthesis of nitrogen-doped graphene-like carbon nanosheets derived from hydroxypropyl methylcellulose and dicyandiamide as efficient oxygen reduction electrocatalysts. 2017 , 345, 120-130	24
953	Facile production of graphene nanosheets comprising nitrogen-doping through in situ cathodic plasma formation during electrochemical exfoliation. 2017 , 5, 2597-2602	25
952	A DFT study on the central-ring doped HBC nanographenes. 2017 , 73, 101-107	32
951	N doped cobalt-carbon composite for reduction of p-nitrophenol and pendimethaline. 2017 , 703, 118-124	34
950	Efficient Nitrogen Doping of Single-Layer Graphene Accompanied by Negligible Defect Generation for Integration into Hybrid Semiconductor Heterostructures. 2017 , 9, 10003-10011	36
949	On the Catalytic Activity of Pt Supported by Graphyne in the Oxidation of Ethanol. 2017 , 2, 2311-2321	3
948	Determining the nature of the gap in semiconducting graphene. 2017 , 7, 41713	8
947	Defect-Mediated Molecular Interaction and Charge Transfer in Graphene Mesh-Glucose Sensors. 2017 , 9, 14216-14221	20
946	Functional hybrid nanostructure materials: Advanced strategies for sensing applications toward volatile organic compounds. 2017 , 342, 80-105	50
945	Understanding the role of lithium sulfide clusters in lithium-sulfur batteries. 2017 , 5, 9293-9298	34
944	3D printing of materials with anisotropic heat distribution using conductive polylactic acid composites. 2017 , 126, 135-140	47
943	TiO ₂ /RGO composites: Its achievement and factors involved in hydrogen production. 2017 , 76, 1384-1392	25
942	Large rectifying ratio in a nitrogen-doped armchair graphene device modulated by the gate voltage. 2017 , 46, 150-157	15
941	Controlled Synthesis of Nitrogen-Doped Graphene on Ruthenium from Azafullerene. <i>Nano Letters</i> , 2017 , 17, 2887-2894	11,5 22
940	DFT study of the electronic structure and magnetism of defective graphene decorated with hydrogen-atom. 2017 , 91, 65-71	6

939	Doping of graphene induced by boron/silicon substrate. 2017 , 28, 215701	9
938	Effect of oxidation degree of graphene oxide on the electrochemical performance of CoAl-layered double hydroxide/graphene composites. 2017 , 7, 201-211	27
937	Mechanism of sodium adsorption on N-doped graphene nanoribbons for sodium ion battery applications: A density functional theory approach. 2017 , 119, 492-501	42
936	A Kinetic Pathway toward High-Density Ordered N Doping of Epitaxial Graphene on Cu(111) Using CNCl Precursors. 2017 , 139, 7196-7202	12
935	Nitrogen-doped reduced graphene oxide intertwined with V ₂ O ₃ nanoflakes as self-supported electrodes for flexible all-solid-state supercapacitors. 2017 , 7, 25732-25739	20
934	Black Phosphorus Based All-Optical-Signal-Processing: Toward High Performances and Enhanced Stability. 2017 , 4, 1466-1476	152
933	Fluorescent carbon dots with tunable negative charges for bio-imaging in bacterial viability assessment. 2017 , 120, 95-102	43
932	Hierarchically porous nitrogen-doped carbon nanotubes derived from core-shell ZnO@zeolitic imidazolate framework nanorods for highly efficient oxygen reduction reactions. 2017 , 5, 12322-12329	75
931	Simulated electron affinity tuning in metal-insulator-metal (MIM) diodes. 2017 , 121, 184504	11
930	Roles of nitrogen functionalities in enhancing the excitation-independent green-color photoluminescence of graphene oxide dots. 2017 , 9, 8256-8265	21
929	Facile synthesis of 3D nitrogen-doped graphene aerogel nanomeshes with hierarchical porous structures for applications in high-performance supercapacitors. 2017 , 41, 5291-5296	12
928	Tuning the plasmon resonance and work function of laser-scribed chemically doped graphene. 2017 , 120, 44-53	14
927	Nanocarbon based composite electrodes and their application in microbial fuel cells. 2017 , 5, 12673-12698	59
926	Electron-Hole Symmetry Breaking in Charge Transport in Nitrogen-Doped Graphene. 2017 , 11, 4641-4650	31
925	Copper nanoparticles modified nitrogen doped reduced graphene oxide 3-D superstructure for simultaneous determination of dihydroxybenzene isomers. 2017 , 249, 405-413	35
924	Smartly designed 3D N-doped mesoporous graphene for high-performance supercapacitor electrodes. 2017 , 241, 1-9	77
923	Synthesis of anatase TiO ₂ with exposed (001) facets grown on N-doped reduced graphene oxide for enhanced hydrogen storage. 2017 , 42, 6096-6103	19
922	Sequence-Designed Peptide Nanofibers Bridged Conjugation of Graphene Quantum Dots with Graphene Oxide for High Performance Electrochemical Hydrogen Peroxide Biosensor. 2017 , 4, 1600895	51

921	Uniform and perfectly linear current-voltage characteristics of nitrogen-doped armchair graphene nanoribbons for nanowires. 2016 , 19, 44-48	10
920	Construction of Z-scheme Ag ₂ CO ₃ /N-doped graphene photocatalysts with enhanced visible-light photocatalytic activity by tuning the nitrogen species. 2017 , 396, 1368-1374	68
919	Graphene-based flexible electronic devices. 2017 , 118, 1-43	131
918	Functional Carbon Nanomesh Clusters. 2017 , 27, 1701514	18
917	Laser in-situ synthesis of SnO ₂ /N-doped graphene nanocomposite with enhanced lithium storage properties based on both alloying and insertion reactions. 2017 , 422, 645-653	15
916	Conductive Carbon Nitride for Excellent Energy Storage. 2017 , 29, 1701674	112
915	Cobalt-Based Active Species Molecularly Immobilized on Carbon Nanotubes for the Oxygen Reduction Reaction. 2017 , 10, 3473-3481	16
914	Feature-rich electronic properties of aluminum-adsorbed graphenes. 2017 , 120, 209-218	8
913	Adsorptive graphene doping: Effect of a polymer contaminant. 2017 , 110, 223104	3
912	N-Doped graphene/PEDOT composite films as counter electrodes in DSSCs: Unveiling the mechanism of electrocatalytic activity enhancement. 2017 , 423, 443-450	23
911	Asymmetric supercapacitor based on activated expanded graphite and pinecone tree activated carbon with excellent stability. 2017 , 207, 417-426	58
910	Tuning the I V characteristic of a cruciform diamine molecular device by connected position and B/N doping. 2017 , 48, 1-6	6
909	Recent Progress in Nonnoble Metal Electrocatalysts for Oxygen Reduction for Alkaline Fuel Cells. 2017 , 267-316	
908	Amperometric nonenzymatic determination of glucose via a glassy carbon electrode modified with nickel hydroxide and N-doped reduced graphene oxide. 2017 , 184, 3103-3111	28
907	Interwoven N and P dual-doped hollow carbon fibers/graphitic carbon nitride: An ultrahigh capacity and rate anode for Li and Na ion batteries. 2017 , 122, 54-63	95
906	Ultrathin hollow-structured NiCo ₂ O ₄ nanorod supported on improved N-doped graphene for superior supercapacitor applications. 2017 , 722, 903-912	19
905	The solution plasma process for heteroatom-carbon nanosheets: the role of precursors. 2017 , 7, 3825	21
904	Soft template-assisted method for synthesis of nitrogen and sulfur co-doped three-dimensional reduced graphene oxide as an efficient metal free catalyst for oxygen reduction reaction. 2017 , 122, 237-246	73

903	Hollow Nitrogen- or Boron-Doped Carbon Submicrospheres with a Porous Shell: Preparation and Application as Supports for Hydrodechlorination Catalysts. 2017 , 56, 7665-7674	18
902	Programmable graphene doping via electron beam irradiation. 2017 , 9, 8657-8664	13
901	Large-area uniform electron doping of graphene by Ag nanofilm. 2017 , 7, 045209	9
900	Graphene and related two-dimensional materials: Structure-property relationships for electronics and optoelectronics. 2017 , 4, 021306	368
899	Coating procedure for chemical and morphological functionalization of multilayer-graphene foams. 2017 , 121, 170-180	2
898	Recent Developments in Electrocatalysts and Hybrid Electrocatalyst Support Systems for Polymer Electrolyte Fuel Cells. 2017 , 197-239	3
897	An ultralight and highly compressible anode for Li-ion batteries constructed from nitrogen-doped carbon enwrapped Fe ₃ O ₄ nanoparticles confined in a porous 3D nitrogen-doped graphene network. 2017 , 326, 151-161	28
896	On-surface synthesis of different boron-nitrogen-carbon heterostructures from dimethylamine borane. 2017 , 120, 185-193	11
895	Nitrogen-doped graphene and titanium carbide nanosheet synergistically reinforced epoxy composites as high-performance microwave absorbers. 2017 , 7, 27755-27761	60
894	Tunable Type-I and Type-II Dirac Fermions in Graphene with Nitrogen Line Defects. 2017 , 121, 12476-12482	6
893	Doping and reduction of graphene oxide using chitosan-derived volatile N-heterocyclic compounds for metal-free oxygen reduction reaction. 2017 , 120, 419-426	34
892	3D N-doped graphene nanomesh foam for long cycle life lithium-sulfur battery. 2017 , 326, 265-272	38
891	Nitrogen doping for facile and effective modification of graphene surfaces. 2017 , 7, 28383-28392	35
890	Ferromagnetism of p-doped BN nanosheets prepared by red phosphorus assisted ball-milling exfoliated technique. 2017 , 28, 13149-13156	9
889	Nitrogen-carbon graphite-like semiconductor synthesized from uric acid. 2017 , 121, 368-379	16
888	Mesoporous nitrogen-doped graphene aerogels with enhanced rate capability towards high performance supercapacitors. 2017 , 43, 11563-11568	14
887	Cobalt super-microparticles anchored on nitrogen-doped graphene for aniline oxidation based on sulfate radicals. 2017 , 601-602, 99-108	27
886	Synthesis, characterization and prospective applications of nitrogen-doped graphene: A short review. 2017 , 2, 141-149	95

- 885 P-232L: Late-News Poster: Workfunction Engineering of Graphene Anode by Solution Processible MoO_x-doping for Efficient Polymer Light-Emitting Diodes. **2017**, 48, 2028-2030
- 884 Synthesis of nitrogen-doped mesoporous carbon from polyaniline with an F127 template for high-performance supercapacitors. **2017**, 422, 654-660 26
- 883 Evolution of the Raman spectra of electron beam irradiated graphene exposed in air. **2017**, 1
- 882 Boron-Doped Polygonal Carbon Nano-Onions: Synthesis and Applications in Electrochemical Energy Storage. **2017**, 23, 7132-7141 27
- 881 Intercalation-etching of graphene on Pt(111) in H₂ and O₂ observed by in-situ low energy electron microscopy. **2017**, 60, 656-662 6
- 880 Growth and accelerated differentiation of mesenchymal stem cells on graphene-oxide-coated titanate with dexamethasone on surface of titanium implants. **2017**, 33, 525-535 33
- 879 Simultaneous co-doping of N and S by a facile in-situ polymerization of 6-N,N-dibutylamine-1,3,5-triazine-2,4-dithiol on graphene framework: An efficient and durable oxygen reduction catalyst in alkaline medium. **2017**, 118, 531-544 28
- 878 Polymer-confined growth of perforated MoSe single-crystals on N-doped graphene toward enhanced hydrogen evolution. **2017**, 9, 4652-4659 24
- 877 Two-dimensional nanosheets for electrocatalysis in energy generation and conversion. **2017**, 5, 7257-7284 186
- 876 Graphene-Based Nanomaterials for Catalysis. **2017**, 56, 3477-3502 175
- 875 3D Hierarchically Porous Graphitic Carbon Nitride Modified Graphene-Pt Hybrid as Efficient Methanol Oxidation Catalysts. **2017**, 4, 1601219 17
- 874 A computational study on the usability of amino acid-functionalised nitrogen-doped graphene oxides as temperature-responsive drug delivery systems. **2017**, 33, 785-795 3
- 873 Anchoring Nitrogen-Doped TiO Nanocrystals on Nitrogen-Doped 3D Graphene Frameworks for Enhanced Lithium Storage. **2017**, 23, 1757-1762 22
- 872 Nitrogen-doped graphene by all-solid-state ball-milling graphite with urea as a high-power lithium ion battery anode. **2017**, 342, 157-164 96
- 871 Highly Stable and Effective Doping of Graphene by Selective Atomic Layer Deposition of Ruthenium. **2017**, 9, 701-709 19
- 870 Activating Cobalt Nanoparticles via the Mott-Schottky Effect in Nitrogen-Rich Carbon Shells for Base-Free Aerobic Oxidation of Alcohols to Esters. **2017**, 139, 811-818 266
- 869 Band gap opening in stanene induced by patterned B-N doping. **2017**, 19, 3660-3669 41
- 868 Worm-Shape Pt Nanocrystals Grown on Nitrogen-Doped Low-Defect Graphene Sheets: Highly Efficient Electrocatalysts for Methanol Oxidation Reaction. **2017**, 13, 1603013 117

867	CuO nanoparticles supported on nitrogen and sulfur co-doped graphene nanocomposites for non-enzymatic glucose sensing. 2017 , 19, 1	13
866	New catalyst supports prepared by surface modification of graphene- and carbon nanotube structures with nitrogen containing carbon coatings. 2017 , 341, 240-249	25
865	Facile Doping and Work-Function Modification of Few-Layer Graphene Using Molecular Oxidants and Reductants. 2017 , 27, 1602004	22
864	Engineered Graphene Materials: Synthesis and Applications for Polymer Electrolyte Membrane Fuel Cells. 2017 , 29, 1601741	118
863	Sol-gel Based Nanoceramic Materials: Preparation, Properties and Applications. 2017 ,	4
862	Enhanced electrochemical performance of a LTO/N-doped graphene composite as an anode material for Li-ion batteries. 2017 , 311, 98-104	22
861	Low friction of graphene nanocrystallite embedded carbon nitride coatings prepared with MCECR plasma sputtering. 2017 , 332, 153-160	11
860	NanoVelcro: Theory of Guided Folding in Atomically Thin Sheets with Regions of Complementary Doping. <i>Nano Letters</i> , 2017 , 17, 6708-6714	11.5 5
859	Cocoon derived nitrogen enriched activated carbon fiber networks for capacitive deionization. 2017 , 804, 179-184	33
858	Significantly enhanced electrocatalytic properties of three-dimensional graphene foam via Ar plasma pretreatment and N, S co-doping. 2017 , 42, 27004-27012	24
857	Smart Combination of Cyclodextrin Polymer Host-Guest Recognition and Mg-Assistant Cyclic Cleavage Reaction for Sensitive Electrochemical Assay of Nucleic Acids. 2017 , 9, 36688-36694	39
856	Synthesis of Few-Layer Graphene by Peeling Graphite Flakes via Electron Exchange in Solution Plasma. 2017 , 121, 23793-23802	7
855	Tailoring platelet carbon nanofibers for high-purity Pyridinic-N doping: A novel method for synthesizing oxygen reduction reaction catalysts. 2017 , 125, 401-408	38
854	Synthesis of dimethyl carbonate on single Cu atom embedded in N-doped graphene: Effect of nitrogen species. 2017 , 443, 1-13	11
853	N-doped carbon-coated TiN exhibiting excellent electrochemical performance for supercapacitors. 2017 , 257, 56-63	32
852	A Honeycomb-like Co@N-C Composite for Ultrahigh Sulfur Loading Li-S Batteries. 2017 , 11, 11417-11424	168
851	Interconnected binary carbon hybrids for supercapacitor electrode. 2017 , 251, 293-300	7
850	Solution-processed nitrogen-rich graphene-like holey conjugated polymer for efficient lithium ion storage. 2017 , 41, 117-127	128

849	Nitrogen and oxygen-codoped carbon nanospheres for excellent specific capacitance and cyclic stability supercapacitor electrodes. 2017 , 330, 1166-1173	80
848	Solvent-free synthesis of N-doped carbon coated ZnO nanorods composite anode via a ZnO support-induced ZIF-8 in-situ growth strategy. 2017 , 250, 292-301	34
847	Changes in physical properties of graphene oxide with thermal reduction. 2017 , 71, 156-160	10
846	Synthesis of boron and nitrogen-doped expanded graphite as efficient reinforcement for Al ₂ O ₃ -C refractories. 2017 , 43, 16710-16721	14
845	Electronic structure tuning and band gap opening of nitrogen and boron doped holey graphene flake: The role of single/dual doping. 2017 , 202, 258-265	35
844	Transport in polymer-supported chemically-doped CVD graphene. 2017 , 5, 9886-9897	6
843	Nitrogen doped multilayer photo catalytically reduced graphene oxide floating gate: Al/PMMA/NrGO/SiO ₂ /pBi/Au based hybrid gate stack for non volatile memory applications. 2017 , 51, 48-53	9
842	Metal-Free Carbon Materials for CO Electrochemical Reduction. 2017 , 29, 1701784	385
841	The influence of aqueous sodium dodecyl sulphate solution in the photoresponsivity of nitrogen doped graphene oxide photodetector. 2017 , 73, 441-448	10
840	A novel CuO _x -doped graphene nanocomposite-based hybrid electrode for the electrochemical detection of glucose. 2017 , 123, 1	16
839	Impact of geometry on transport properties of armchair graphene nanoribbon heterojunction. 2017 , 124, 422-428	16
838	Electronic structure, carrier mobility and device properties for mixed-edge phagraphene nanoribbon by hetero-atom doping. 2017 , 51, 277-286	25
837	Robust Catalysis on 2D Materials Encapsulating Metals: Concept, Application, and Perspective. 2017 , 29, 1606967	240
836	Unit Cell Level Thickness Control of Single-Crystalline Zinc Oxide Nanosheets Enabled by Electrical Double-Layer Confinement. 2017 , 33, 7708-7714	15
835	S, N Dual-Doped Graphene Fibers: A High-Performance Electrode Material for Supercapacitors. 2017 , 4, 2677-2682	6
834	Transition metal-nitrogen co-doped carbide-derived carbon catalysts for oxygen reduction reaction in alkaline direct methanol fuel cell. 2017 , 219, 276-286	57
833	Synthesis of nitrogen-doped graphene via pentachloropyridine as the sole solid source. 2017 , 111, 033106	5
832	2D material liquid crystals for optoelectronics and photonics. 2017 , 5, 11185-11195	39

831	Recent advanced in energy harvesting and storage applications with two-dimensional layered materials. 2017 , 6, 37-47	15
830	Phosphorus-Doped and Lattice-Defective Carbon as Metal-like Catalyst for the Selective Hydrogenation of Nitroarenes. 2017 , 9, 4287-4294	38
829	Facile preparation of nitrogen-doped graphene as an efficient oxygen reduction electrocatalyst. 2017 , 4, 1582-1590	20
828	An atomic carbon source for high temperature molecular beam epitaxy of graphene. 2017 , 7, 6598	12
827	Temperature-directed growth of highly pyridinic nitrogen doped, graphitized, ultra-hollow carbon frameworks as an efficient electrocatalyst for the oxygen reduction reaction. 2017 , 5, 18064-18070	35
826	CoS nanoparticles anchored on nitrogen and sulfur dual-doped carbon nanosheets as highly efficient bifunctional electrocatalyst for oxygen evolution and reduction reactions. 2017 , 9, 12432-12440	110
825	Effects of the nitrogen doping configuration and site on the thermal conductivity of defective armchair graphene nanoribbons. 2017 , 23, 247	7
824	Collaborative design of LiB batteries using 3D N-doped graphene aerogel as a sulfur host and graphitic carbon nitride paper as an interlayer. 2017 , 1, 1759-1765	28
823	3D nitrogen-doped graphene aerogel nanomesh: Facile synthesis and electrochemical properties as the electrode materials for supercapacitors. 2017 , 426, 924-932	34
822	Improvement of modulus, strength and fracture toughness of CNT/Epoxy nanocomposites through the functionalization of carbon nanotubes. 2017 , 129, 169-179	136
821	Adsorption of Various Monoterpenoids on the Surface of Graphene and Nitrogen-Doped Graphene: A DFT Based Study. 2017 , 2, 5248-5258	7
820	Dimensional Confinement in Carbon-based Structures [From 3D to 1D. 2017 , 529, 1700051	6
819	Graphene-based composite electrodes for electrochemical energy storage devices: Recent progress and challenges. 2017 , 6, 48-76	22
818	Compact carbon nitride based copolymer films with controllable thickness for photoelectrochemical water splitting. 2017 , 5, 19062-19071	34
817	Mass diffusion cloaking and focusing with metamaterials. 2017 , 111, 071903	12
816	Efficient flexible polymer solar cells based on solution-processed reduced graphene oxide-Assisted silver nanowire transparent electrode. 2017 , 50, 255-263	18
815	An in situ iodine-doped graphene/silicon composite paper as a highly conductive and self-supporting electrode for lithium-ion batteries. 2017 , 7, 38639-38646	9
814	N-Doped carbon dots: green and efficient synthesis on a large-scale and their application in fluorescent pH sensing. 2017 , 41, 10607-10612	45

813	Effects of shape, size, and pyrene doping on electronic properties of graphene nanoflakes. 2017 , 23, 355	7
812	Generalized Synthesis of a Family of Highly Heteroatom-Doped Ordered Mesoporous Carbons. 2017 , 29, 10178-10186	46
811	Inner porous carbon nanofibers as binder-free electrodes for high-rate supercapacitors. 2017 , 258, 1064-1071	17
810	Effect of nitrogen atom positioning on the trade-off between emissive and photocatalytic properties of carbon dots. 2017 , 8, 1401	152
809	Pure spin current injection in hydrogenated graphene structures. 2017 , 96,	3
808	Graphene plasmonic nanogratings for biomolecular sensing in liquid. 2017 , 123, 1	4
807	Characterization of graphene oxide/silicon dioxide/p-type silicon heterojunction photodetector towards infrared 974 nm illumination. 2017 , 49, 1	4
806	A light-driven modulation of electric conductance through the adsorption of azobenzene onto silicon-doped- and pyridine-like N-vacancy graphene. 2017 , 9, 19017-19025	5
805	NiCoS nanosheet-decorated 3D, porous Ni film@Ni wire electrode materials for all solid-state asymmetric supercapacitor applications. 2017 , 9, 18819-18834	84
804	Stanene based gas sensors: effect of spin-orbit coupling. 2017 , 19, 31325-31334	37
803	Unprecedented carbon sub-microspheres with a porous hierarchy for highly efficient oxygen electrochemistry. 2017 , 9, 18731-18736	13
802	Computational study of precision nitrogen doping on graphene nanoribbon edges. 2017 , 28, 505602	10
801	Overview of Synthesis of Magnetic Nanomaterials. 2017 , 81-120	
800	Electropolymerization fabrication of three-dimensional N, P-co-doped carbon network as a flexible electrochemical dopamine sensor. 2017 , 253, 1113-1119	20
799	Carrier injection in nonbonding π states of N-doped graphene by an external electric field. 2017 , 56, 075101	1
798	Charge transfer doping of graphene without degrading carrier mobility. 2017 , 121, 224304	9
797	Hierarchical NiO Cube/Nitrogen-Doped Reduced Graphene Oxide Composite with Enhanced HS Sensing Properties at Low Temperature. 2017 , 9, 26293-26303	80
796	Growth and properties of large-area sulfur-doped graphene films. 2017 , 5, 7944-7949	15

795	Nitrogen plasma-treated multilayer graphene-based field effect transistor fabrication and electronic characteristics. 2017 , 92, 41-46	2
794	A facile approach to tailoring electrocatalytic activities of imine-rich nitrogen-doped graphene for oxygen reduction reaction. 2017 , 122, 515-523	22
793	Preparation of nitrogen-doped graphene by high-gravity technology and its application in oxygen reduction. 2017 , 34, 110-117	9
792	Nitrogen-doped graphene hydrogels as potential adsorbents and photocatalysts for environmental remediation. 2017 , 327, 751-763	56
791	Solid ion transition route to 3D Sn -codoped hollow carbon nanosphere/graphene aerogel as a metal-free handheld nanocatalyst for organic reactions. 2017 , 10, 3486-3495	9
790	Uncoordinated Amine Groups of Metal-Organic Frameworks to Anchor Single Ru Sites as Chemoselective Catalysts toward the Hydrogenation of Quinoline. 2017 , 139, 9419-9422	389
789	Metal-catalyst-free growth of graphene on insulating substrates by ammonia-assisted microwave plasma-enhanced chemical vapor deposition. 2017 , 7, 33185-33193	23
788	Adsorption of Ethene-1,2-Dione on Materials Based on Graphene. 2019 , 123, 6316-6325	1
787	Metal and Nonmetal Codoped 3D Nanoporous Graphene for Efficient Bifunctional Electrocatalysis and Rechargeable Zn-Air Batteries. 2019 , 31, e1900843	170
786	Mesh-Like Carbon Nanosheets with High-Level Nitrogen Doping for High-Energy Dual-Carbon Lithium-Ion Capacitors. 2019 , 15, e1805173	44
785	Nitrogen-doped graphene fiber webs for multi-battery energy storage. 2019 , 11, 6334-6342	28
784	Electrostatic Doping-Based All GNR Tunnel FET: An Energy-Efficient Design for Power Electronics. 2019 , 66, 1971-1978	7
783	Current Review on Synthesis, Composites and Multifunctional Properties of Graphene. 2019 , 377, 10	49
782	Molecular-Reductant-Induced Control of a Graphene/Organic Interface for Electron Injection. 2019 , 31, 6624-6632	8
781	Light-Induced Tunable n-Doping of Ag-Embedded GO/RGO Sheets in Polymer Matrix. 2019 , 123, 10557-10563	4
780	Wearable, Flexible, Disposable Plasma-Reduced Graphene Oxide Stress Sensors for Monitoring Activities in Austere Environments. 2019 , 11, 15122-15132	32
779	Controlling Nitrogen Doping in Graphene with Atomic Precision: Synthesis and Characterization. 2019 , 9,	47
778	Microwave growth and tunable photoluminescence of nitrogen-doped graphene and carbon nitride quantum dots. 2019 , 7, 5468-5476	47

777	Maximization of sodium storage capacity of pure carbon material used in sodium-ion batteries. 2019 , 7, 16149-16160	26
776	Recent Advances in Graphene Homogeneous p-n Junction for Optoelectronics. 2019 , 4, 1900007	11
775	Self-assembled composite thin film counter electrode of cobalt sulfide/functionalized graphene for dye-sensitized solar cells. 2019 , 679, 8-14	6
774	Bio-molecule adenine building block effectively enhances electromagnetic interference shielding performance of polyimide-derived carbon foam. 2019 , 149, 190-202	38
773	Conventional and Microwave Hydrothermal Synthesis and Application of Functional Materials: A Review. 2019 , 12,	117
772	Defect engineering in earth-abundant electrocatalysts for CO ₂ and N ₂ reduction. 2019 , 12, 1730-1750	293
771	Simultaneous Polymerization Enabled the Confinement of Size-Adjustable TiO ₂ Nanocrystals in S-Doped Carbons for High-Rate Anode Materials. 2019 , 7, 1900247	11
770	An electrochemical immunosensor for prostate specific antigen using nitrogen-doped graphene as a sensing platform. 2019 , 11, 2183-2189	14
769	2D MOF induced accessible and exclusive Co single sites for an efficient O-silylation of alcohols with silanes. 2019 , 55, 6563-6566	25
768	Twinning in two-dimensional materials and its application to electronic properties. 2019 , 1, 025001	5
767	Fe@Graphite nanocapsules with atomic-scale substitutional oxygen in graphitic shells for improving gigahertz dielectric losses and microwave absorption properties. 2019 , 792, 291-296	2
766	Tunable nitrogen-doped graphene sheets produced with in situ electrochemical cathodic plasma at room temperature for lithium-ion batteries. 2019 , 12, 336-347	14
765	sp ² /sp ³ bonding ratio dependence of the band-gap in graphene oxide. 2019 , 92, 1	3
764	Selective liquid phase oxidation of ethyl benzene to acetophenone by palladium nanoparticles immobilized on a g-C ₃ N ₄ /rGO composite as a recyclable catalyst. 2019 , 43, 6921-6931	18
763	Potassium-doped n-type stacked graphene layers. 2019 , 6, 055009	2
762	N-Doped CMK-3 Carbons Supporting Palladium Nanoparticles as Catalysts for Hydrodechlorination. 2019 , 58, 4355-4363	17
761	Surface modification of graphite by ion implantation for promoting the electrochemical property in Li-ion batteries. 2019 , 484, 726-731	7
760	Synthesis of nitrogen-doped graphene wrapped SnO hollow spheres as high-performance microwave absorbers.. 2019 , 9, 10745-10753	9

759	Highly Durable Non-Platinum Catalyst for Protic Ionic Liquid Based Intermediate Temperature PEFCs. 2019 , 87, 35-46	4
758	Self-Assembly of Hierarchical Silicon Suboxide Nanoparticles Encapsulated in Nitrogen-Doped Carbon as High Performance Anode Material for Lithium-Ion Batteries. 2019 , 166, A574-A581	13
757	Multiscale Graphene-Based Materials for Applications in Sodium Ion Batteries. 2019 , 9, 1803342	146
756	One-Step Construction of Ni/Co-Doped CN Nanotube Composites as Excellent Cathode Catalysts for Neutral Zinc Air Battery. 2019 , 14, 1950028	8
755	Progress in Nonmetal-Doped Graphene Electrocatalysts for the Oxygen Reduction Reaction. 2019 , 12, 2133-2146	45
754	Barrier mechanism of nitrogen-doped graphene against atomic oxygen irradiation. 2019 , 479, 669-678	8
753	Modulation of ferromagnetism and transport in BxCyNz thin films via nitrogen doping and defects. 2019 , 479, 67-73	3
752	Functionalized Graphene Nanocomposites in Air Filtration Applications. 2019 , 65-89	2
751	Oxygen-vacancy Bi ₂ O ₃ nanosheet arrays with excellent rate capability and CoNi ₂ S ₄ nanoparticles immobilized on N-doped graphene nanotubes as robust electrode materials for high-energy asymmetric supercapacitors. 2019 , 7, 7918-7931	66
750	Modifying MgO with Carbon for Valorization of Lignin to Aromatics. 2019 , 7, 5751-5763	13
749	Enhancing thermal oxidation and fire resistance of reduced graphene oxide by phosphorus and nitrogen co-doping: Mechanism and kinetic analysis. 2019 , 146, 650-659	60
748	Sulfur-regulated the binding configurations of nitrogen in three-dimensional graphene to improve lithium storage kinetics. 2019 , 786, 1013-1020	12
747	p-Type Doping of Graphene with Cationic Nitrogen. 2019 , 2, 1350-1355	27
746	Impact of plasma treatment in CH ₄ /N ₂ on the properties of reduced graphene oxide. 2019 , 693, 012043	2
745	Rational synthesis of graphitic porous carbon with high content nitrogen doping via ultra-fast pyrolysis of ZIF-8 for electrochemical capacitor with enhanced performance. 2019 , 12, 1951004	1
744	Electrosynthesis of thin films of polythiophenes containing pyrene groups and flexible spacers, useful in the preparation of graphene polymer composites. 2019 , 4, 3233-3242	
743	Van der Waals hetero-structures of 1H-MoS ₂ and N-substituted graphene for catalysis of hydrogen evolution reaction. 2019 , 6, 124006	3
742	Nitrogen-doped carbon fiber sponges by using different nitrogen precursors: synthesis, characterization, and electrochemical activity. 2019 , 14, 100200	1

741	Low-Power Complementary Logic Circuit Using Polymer-Electrolyte-Gated Graphene Switching Devices. 2019 , 11, 47247-47252	3
740	Adsorption of Phosgene on Titanium Doped Graphene Nanoribbons: A DFT Study. 2019 , 18, 1174-1180	3
739	Enriched Pyridinic Nitrogen Atoms at Nanoholes of Carbon Nanohorns for Efficient Oxygen Reduction. 2019 , 9, 20170	16
738	Arc-discharge synthesis of nitrogen-doped C embedded TiCN nanocubes with tunable dielectric/magnetic properties for electromagnetic absorbing applications. 2019 , 11, 19994-20005	25
737	2D and 3D nanostructuring strategies for thermoelectric materials. 2019 , 11, 19684-19699	32
736	Spectroscopic and Electrical Characterizations of Low-Damage Phosphorous-Doped Graphene via Ion Implantation. 2019 , 11, 47289-47298	12
735	Designing of Ultrafine PdNPs Immobilized Pyridinic-N Doped Carbon and Evaluation of its Catalytic Potential for Konevenagel Condensation, Synthesis of 4H-pyran Derivatives and Nitroreduction. 2019 , 4, 12689-12700	5
734	Electrical Properties of Silver-Attached Amine Functionalized Carbon Black/Polyethylene Terephthalate Fibers Prepared by Melt-Spinning. 2019 , 11,	2
733	Inherent mechanical properties of bilayer germanene coupled by covalent bonding.. 2019 , 9, 34437-34450	9
732	An advanced cathode material for high-power Li-ion storage full cells with a long lifespan. 2019 , 7, 22444-22452	
731	Surface charge induced tuning of electrical properties of CVD assisted graphene and functionalized graphene sheets. 2019 , 35, 151-158	13
730	Novel Z-scheme composite Ag ₂ CrO ₄ /NG/polyimide as high performance nano catalyst for photoreduction of CO ₂ : Design, fabrication, characterization and mechanism. 2019 , 368, 30-40	20
729	Dechlorination of triclosan by enhanced atomic hydrogen-mediated electrochemical reduction: Kinetics, mechanism, and toxicity assessment. 2019 , 241, 120-129	60
728	The Role of Graphene and Other 2D Materials in Solar Photovoltaics. 2019 , 31, e1802722	163
727	Heteroatom-doped graphene and its application as a counter electrode in dye-sensitized solar cells. 2019 , 43, 1702-1734	15
726	DFT study of the effects of Al P pair doping on the structural and electronic properties of stanene nanosheets. 2019 , 108, 34-43	27
725	Facile and Green Synthesis of Graphene-Based Conductive Adhesives via Liquid Exfoliation Process. 2018 , 9,	4
724	Emerging Carbon-Based Heterogeneous Catalysts for Electrochemical Reduction of Carbon Dioxide into Value-Added Chemicals. 2019 , 31, e1804257	134

723	Sodium storage via single epoxy group on graphene □The role of surface doping. 2019 , 297, 523-528	9
722	Surface N-doped graphene sheets induced high electrocatalytic activity for selective ascorbic acid sensing. 2019 , 283, 556-562	12
721	Nitrogen-Doping Chemical Behavior of Graphene Materials with Assistance of Defluorination. 2019 , 123, 584-592	9
720	Graphene/pyrrolic-structured nitrogen-doped CNT nanocomposite supports for Pd-catalysed Heck coupling and chemoselective hydrogenation of nitroarenes. 2019 , 1, 1	3
719	Direct patterned growth of intrinsic/doped vertical graphene nanosheets on stainless steel via heating solid precursor films for field emission application. 2019 , 162, 293-299	12
718	Laser-derived graphene: A three-dimensional printed graphene electrode and its emerging applications. 2019 , 24, 81-102	86
717	Doping effect and fluorescence quenching mechanism of N-doped graphene quantum dots in the detection of dopamine. 2019 , 196, 563-571	56
716	Catalysis with Two-Dimensional Materials Confining Single Atoms: Concept, Design, and Applications. 2019 , 119, 1806-1854	442
715	Comparison to mechanical properties of epoxy nanocomposites reinforced by functionalized carbon nanotubes and graphene nanoplatelets. 2019 , 162, 283-288	108
714	Nitrogen-doped single walled carbon nanohorns enabling effective utilization of Ge nanocrystals for next generation lithium ion batteries. 2019 , 298, 89-96	13
713	Synthesis of high-quality monolayer graphene by low-power plasma. 2019 , 19, 44-49	4
712	Triple-Shelled Manganese-Cobalt Oxide Hollow Dodecahedra with Highly Enhanced Performance for Rechargeable Alkaline Batteries. 2019 , 58, 996-1001	76
711	Triple-Shelled ManganeseCobalt Oxide Hollow Dodecahedra with Highly Enhanced Performance for Rechargeable Alkaline Batteries. 2019 , 131, 1008-1013	16
710	Production of S-doped porous graphene via post-treatment with MgSO4 as sulphur source. 2019 , 359, 801-809	15
709	One-pot co-precipitation synthesis of Fe3O4 nanoparticles embedded in 3D carbonaceous matrix as anode for lithium ion batteries. 2019 , 54, 4212-4224	28
708	Well-dispersed Pt nanoparticles on borane-modified graphene oxide and their electrocatalytic performance for oxygen reduction reaction. 2019 , 271, 168-174	4
707	Highly-flexible and -stable deep-ultraviolet photodiodes made of graphene quantum dots sandwiched between graphene layers. 2019 , 163, 238-242	16
706	Three-dimensional monolithic corrugated graphene/Ni foam for highly stable and efficient Li metal electrode. 2019 , 413, 467-475	21

705	Purified nitrogen-doped reduced graphene oxide hydrogels for high-performance supercapacitors. 2019 , 834, 206-215	16
704	Nitrogen-doped graphene in-situ modifying MnO nanoparticles for highly improved lithium storage. 2019 , 473, 893-901	13
703	Rapid synthesis of graphene by chemical vapor deposition using liquefied petroleum gas as precursor. 2019 , 145, 462-469	21
702	Chiral-selective etching effects on carbon nanotube growth at edge carbon atoms. 2019 , 40, 375-380	4
701	Graphene-SiO ₂ Interaction from Composites to Doping. 2019 , 216, 1800540	4
700	Recent Development on the Synthesis Techniques and Properties of Graphene Derivatives. 2019 , 77-107	1
699	Doped-Graphene Modified Electrochemical Sensors. 2019 , 67-87	2
698	Complementary Schottky diode formation with carbon buffer and p-doped single layer graphene on intrinsic SiC via fluorine intercalation. 2019 , 142, 254-260	2
697	Bi-functional iron embedded carbon nanostructures from collagen waste for photocatalysis and Li-ion battery applications: A waste to wealth approach. 2019 , 210, 190-199	12
696	Vertical GaN nanocolumns grown on graphene intermediated with a thin AlN buffer layer. 2019 , 30, 015604	16
695	Carbon-Based Materials in Microbial Fuel Cells. 2019 , 49-74	5
694	N- and Fe-containing Carbon Films Prepared by Calcination of Polydopamine Composites Self-assembled at Air/Water Interface for Oxygen Reduction Reaction. 2019 , 48, 102-105	10
693	Facile in Situ Synthesis of Multiple-Heteroatom-Doped Carbons Derived from Polyimide Precursors for Flexible All-Solid-State Supercapacitors. 2019 , 11, 1996-2005	23
692	Cobalt sulfide/N,S-codoped defect-rich carbon nanotubes hybrid as an excellent bi-functional oxygen electrocatalyst. 2019 , 30, 075402	10
691	Sphere-and-Flake-Structured Cu, N Co-Doped Carbon Catalyst Designed by a Template-Free Method for Robust Oxygen Reduction Reaction. 2019 , 6, 1078-1087	12
690	Synthesis and Surface Modification. 2019 , 27, 67-108	1
689	Polarimetric Vis-NIR photodetector based on self-aligned single-walled carbon nanotubes. 2019 , 143, 844-850	8
688	Structure and functionality design of novel carbon and faradaic electrode materials for high-performance capacitive deionization. 2019 , 360, 364-384	71

687	Nitrogen-doped carbon materials as a promising platform toward the efficient catalysis for hydrogen generation. 2019 , 571, 25-41	41
686	Monodisperse nitrogen-doped carbon spheres with superior rate capacities for lithium/sodium ion storage. 2019 , 297, 365-371	32
685	Effective GQD/AuNPs nanosensors for selectively bifunctional detection of lysine and cysteine under different photophysical properties. 2019 , 282, 936-944	25
684	Organic Conjugated Polymer-Based Functional Nanohybrids. 2019 , 357-379	23
683	Fe ₂ O ₃ loaded rGO nanosheets based fast response/recovery CO gas sensor at room temperature. 2019 , 465, 56-66	59
682	Tunable terahertz broadband absorber based on a composite structure of graphene multilayer and silicon strip array. 2019 , 431, 199-202	17
681	Functional Nanomaterials and Nanostructures Enhancing Electrochemical Biosensors and Lab-on-a-Chip Performances: Recent Progress, Applications, and Future Perspective. 2019 , 119, 120-194	271
680	Nitrogen-doped porous carbon coated on graphene sheets as anode materials for Li-ion batteries. 2019 , 25, 1541-1549	8
679	Large-scale template-free synthesis of nitrogen-doped 3D carbon frameworks as low-cost ultra-long-life anodes for lithium-ion batteries. 2019 , 357, 376-383	18
678	Highly reversible ZnO@ZIF8-derived nitrogen-doped carbon in the presence of fluoroethylene carbonate for high-performance lithium-ion battery anode. 2019 , 773, 960-969	31
677	Preparation of nitrogen-doped graphitic porous carbon towards capacitive deionization with high adsorption capacity and rate capability. 2019 , 211, 233-241	35
676	Activation of persulfate with metal-organic framework-derived nitrogen-doped porous Co@C nanoboxes for highly efficient p-Chloroaniline removal. 2019 , 358, 408-418	98
675	Decorating platinum on nitrogen-doped graphene sheets: Control of the platinum particle size distribution for improved photocatalytic H ₂ generation. 2019 , 194, 85-93	24
674	Conductivity modulation of interstitially chemisorbed Manganese atom on Graphene for nanoelectronic application. 2020 , 26, 3229-3242	0
673	Giant piezoelectricity in B/N doped 4,12,2-graphyne. 2020 , 499, 143800	6
672	Graphene for Si-based solar cells. 2020 , 1200, 127055	11
671	Boron-, sulfur-, and phosphorus-doped graphene for environmental applications. 2020 , 698, 134239	44
670	A Theory/Experience Description of Support Effects in Carbon-Supported Catalysts. 2020 , 120, 1250-1349	215

669	Thermal, electrical, and sensing properties of rubber nanocomposites. 2020 , 149-175	7
668	Metal-organic framework derived carbon materials for electrocatalytic oxygen reactions: Recent progress and future perspectives. 2020 , 156, 77-92	102
667	Nitrogen doping of graphene by CVD. 2020 , 1199, 127026	15
666	Graphene and graphene oxide-reinforced 3D and 4D printable composites. 2020 , 259-296	2
665	A first-principles study of the effects of atom impurities, defects, strain, electric field and layer thickness on the electronic and magnetic properties of the C ₂ N nanosheet. 2020 , 157, 371-384	81
664	Experimental measurements on the thermal conductivity of strained monolayer graphene. 2020 , 157, 185-190	18
663	Revealing the role of the amorphous phase in Na _{0.74} CoO ₂ /C/N composite cathode. 2020 , 815, 152616	6
662	Nitrogen-doped carbon nanotubes as a highly active metal-free catalyst for nitrobenzene hydrogenation. 2020 , 260, 118105	64
661	Theoretical study on the catalytic properties of single-atom catalyst stabilised on silicon-doped graphene sheets. 2020 , 118, e1652368	5
660	Recent advances in graphene based materials as anode materials in sodium-ion batteries. 2020 , 42, 91-107	59
659	Nitrogen-doped reduced graphene oxide as a sensing platform for detection of guanine and application in cell necrosis. 2020 , 74, 89-98	0
658	Synthesis of yolk-shell structured carbonyl iron@void@nitrogen doped carbon for enhanced microwave absorption performance. 2020 , 812, 152083	52
657	Nitrogen-Doped Carbon Nanomaterials: Synthesis, Characteristics and Applications. 2020 , 15, 2282-2293	38
656	Non-destructive, uniform, and scalable electrochemical functionalization and exfoliation of graphite. 2020 , 158, 356-363	20
655	Metal-enhanced fluorescence detection and degradation of tetracycline by silver nanoparticle-encapsulated halloysite nano-lumen. 2020 , 386, 121630	37
654	Superior durability and stability of Pt electrocatalyst on N-doped graphene-TiO ₂ hybrid material for oxygen reduction reaction and polymer electrolyte membrane fuel cells. 2020 , 268, 118414	45
653	Functionalized graphene materials for hydrogen storage. 2020 , 55, 1865-1903	63
652	Tandem Condensation-Hydrogenation to Produce Alkylated Nitriles Using Bifunctional Catalysts: Platinum Nanoparticles Supported on MOF-Derived Carbon. 2020 , 12, 602-608	6

651	Scalable synthesis of fluorescent organic nanodots by block copolymer templating. 2020 , 58, 30-34	1
650	First principles study on the functionalization of graphene with Fe catalyst for the detection of CO ₂ : Effect of catalyst clustering. 2020 , 502, 144153	10
649	Co-modulation of graphene by N hetero-doping & vacancy defects and the effect on NO ₂ adsorption and sensing: First-principles study. 2020 , 116, 113737	11
648	A monitorable and renewable pollution filter based on graphene nanoplatelets. 2020 , 31, 075701	5
647	Mechanical and Thermal Properties of Waterborne Polyurethane Coating Modified through One-Step Cellulose Nanocrystals/Graphene Materials Sols Method. 2020 , 10, 40	16
646	Nanocarbon Catalysts: Recent Understanding Regarding the Active Sites. 2020 , 7, 1902126	54
645	Near-infrared absorbing 2D/3D ZnIn ₂ S ₄ /N-doped graphene photocatalyst for highly efficient CO ₂ capture and photocatalytic reduction. 2020 , 63, 552-565	102
644	High-quality nitrogen-doped graphene films synthesized from pyridine via two-step chemical vapor deposition. 2020 , 159, 579-585	23
643	Asymptotic behavior of the energetics and electronic structures of graphene with pyridinic defects. 2020 , 739, 136966	1
642	Boron-doped few-layer graphene nanosheet gas sensor for enhanced ammonia sensing at room temperature.. 2020 , 10, 1007-1014	19
641	Amino-functionalization on graphene oxide sheets using an atomic layer amidation technique. 2020 , 8, 700-705	5
640	Identification of optical orbital angular momentum modes with the Kerr nonlinearity of few-layer WS ₂ . 2020 , 7, 025012	2
639	Magneto-transport properties of B-, Si- and N-doped graphene. 2020 , 160, 211-218	4
638	p-Type conductivity mechanism and defect structure of nitrogen-doped LiNbO ₃ from first-principles calculations. 2019 , 22, 20-27	5
637	Graphene quantum dots for energy storage and conversion: from fabrication to applications. 2020 , 4, 421-436	46
636	Nitrogen-doped hierarchical porous carbon derived from ZIF-8 supported on carbon aerogels with advanced performance for supercapacitor. 2020 , 507, 145166	24
635	Peroxymonosulfate activation by Co ₉ S ₈ @ S and N co-doped biochar for sulfamethoxazole degradation. 2020 , 385, 123933	56
634	Three-dimensional hybrid of iron-titanium mixed oxide/nitrogen-doped graphene on Ni foam as a superior electrocatalyst for oxygen evolution reaction. 2020 , 563, 241-251	9

633	Mini-Review on Char Catalysts for Tar Reforming during Biomass Gasification: The Importance of Char Structure. 2020 , 34, 1219-1229	50
632	N/P-Dual-Doped Carbon-Coated NaV(PO) ₄ OF Microspheres as a High-Performance Cathode Material for Sodium-Ion Batteries. 2020 , 12, 3670-3680	30
631	Graphene Quantum Dots Promoted the Synthesis of Heavily n-Type Graphene for Near-Infrared Photodetectors. 2020 , 124, 1674-1680	2
630	Sodium battery nanomaterials. 2020 , 115-160	
629	Hydrothermal Synthesis of N-Doped Graphene for Supercapacitor Electrodes. 2020 , 20, 3258-3264	11
628	Electrocatalysis at Nanocarbons: Model Systems and Applications in Energy Conversion. 2020 , 201-249	3
627	Graphene-dendritic polymer hybrids: synthesis, properties, and applications. 2020 , 17, 735-764	6
626	Graphene-like BC ₆ N single-layer: Tunable electronic and magnetic properties via thickness, gating, topological defects, and adatom/molecule. 2020 , 118, 113850	47
625	Characteristics of pn junction diode made of multi-layer graphene. 2020 , 59, 015003	0
624	Pd Nanoalloys for H ₂ Generation from Formic Acid. 2020 , 3, 22-43	36
623	Promoting electrochemical performances of vanadium carbide nanodots via N and P co-doped carbon nanosheets wrapping. 2020 , 393, 123596	10
622	Mesoporous N-doped carbon derived from tea waste for high-performance CO ₂ capture and conversion. 2020 , 22, 100849	5
621	Pulsed laser ablation based synthetic route for nitrogen-doped graphene quantum dots using graphite flakes. 2020 , 506, 144998	33
620	Synthesis of three-dimensional nitrogen doped meso/macroporous carbon beads for heterogeneous catalytic solvent-free oxidation of ethylbenzene. 2020 , 158, 226-237	14
619	N ₈ P Polynitrogen Stabilized on Boron-Doped Graphene as Metal-Free Electrocatalysts for Oxygen Reduction Reaction. 2020 , 10, 160-167	25
618	A Triazine-Based Analogue of Graphyne: Scalable Synthesis and Applications in Photocatalytic Dye Degradation and Bacterial Inactivation. 2020 , 26, 2269-2275	11
617	First-principles Modeling of Thermal Transport in Materials: Achievements, Opportunities, and Challenges. 2020 , 41, 1	21
616	Theoretical studies on electronic properties of a new carbon allotrope with pairing of pentagonal and heptagonal rings. 2020 , 135, 1	1

615	Catalytic performance of benzoxazine derived ordered mesoporous carbon materials for the selective oxidation of 2-methylnaphthalene. 2020 , 44, 17422-17430	1
614	Polymer Nanocomposite-based Coatings for Corrosion Protection. 2020 , 15, 3915-3941	17
613	Spin-gapless semiconductors for future spintronics and electronics. 2020 , 888, 1-57	27
612	Synthesis of dopamine-derived N-doped carbon nanotubes/FeO composites as enhanced electrochemical sensing platforms for hydrogen peroxide detection. 2020 , 187, 605	7
611	Biomass-derived carbon for ORR: pine needles as a single source for efficient carbon electrocatalyst. 2020 , 50, 1257-1267	8
610	Synthesis and testing of defected g-C3N4 with improved photocatalytic activity. 2020 , 770, 012027	
609	Enabling the ability of Li storage at high rate as anodes by utilizing natural rice husks-based hierarchically porous SiO2/N-doped carbon composites. 2020 , 359, 136933	16
608	Enhancing polysulfide confinement and redox kinetics by electrocatalytic interlayer for highly stable lithium-sulfur batteries. 2020 , 362, 137035	9
607	Electrocatalytic Properties of 3D Hierarchical Graphitic Carbon-Cobalt Nanoparticles for Urea Oxidation. 2020 , 5, 26038-26048	5
606	Cutting edge development on graphene derivatives modified by liquid crystal and CdS/TiO2 hybrid matrix: optoelectronics and biotechnological aspects. 2020 , 1-65	37
605	Metal-free carbon materials for persulfate-based advanced oxidation process: Microstructure, property and tailoring. 2020 , 111, 100654	117
604	NrGO Floating Gate/SiOXNY Tunneling Layer Stack for Nonvolatile Flash Memory Applications. 2020 , 20, 570-575	2
603	Boron and nitrogen dopants in graphene have opposite effects on the electrochemical detection of explosive nitroaromatic compounds. 2020 , 112, 106660	9
602	Enhanced thermoelectric properties in anthracene molecular device with graphene electrodes: the role of phononic thermal conductance. 2020 , 10, 10922	5
601	Metal-Free Carbon-Based SupercapacitorsA Comprehensive Review. 2020 , 1, 410-438	11
600	A Review of Strategies for the Synthesis of N-Doped Graphene-Like Materials. 2020 , 10,	15
599	Opening the internal structure for transport of ions: improvement of the structural and chemical properties of single-walled carbon nanohorns for supercapacitor electrodes.. 2020 , 10, 38357-38368	5
598	Application of Two-Dimensional Monoelements-Based Material in Field-Effect Transistor for Sensing and Biosensing. 2020 , 119-148	

597	Novel cobalt-carbon@silica adsorbent. 2020 , 10, 18652	5
596	Recent advances in chemical functionalisation of graphene and sensing applications. 2020 , 4, 1	1
595	MoS ₂ /graphene composites: Fabrication and electrochemical energy storage. 2020 , 33, 470-502	36
594	Nanometer-thick films of antimony oxide nanoparticles grafted on defective graphenes as heterogeneous base catalysts for coupling reactions. 2020 , 390, 135-149	3
593	Human virus detection with graphene-based materials. 2020 , 166, 112436	74
592	Bottom-up synthesis of nitrogen-containing graphene nanoribbons from the tetrabenzopentacene molecular motif. 2020 , 170, 677-684	5
591	Surface coordination chemistry of graphene: Understanding the coordination of single transition metal atoms. 2020 , 422, 213469	15
590	Recent advances in graphene monolayers growth and their biological applications: A review. 2020 , 283, 102225	11
589	An overview of the detection of serotonin and dopamine with graphene-based sensors. 2020 , 136, 107620	22
588	Advances and Trends in Chemically Doped Graphene. 2020 , 7, 2000999	19
587	Understanding activity origin for the oxygen reduction reaction on bi-atom catalysts by DFT studies and machine-learning. 2020 , 8, 24563-24571	22
586	Methylamine terminated molecules on Ni(1 1 1): A path to low temperature synthesis of nitrogen-doped graphene. 2020 , 24, 100205	1
585	Electronic properties of substitutional impurities in graphenelike C ₂ N, tgC ₃ N ₄ , and hgC ₃ N ₄ . 2020 , 102,	3
584	Conversion of CO ₂ to chemical feedstocks over bismuth nanosheets in situ grown on nitrogen-doped carbon. 2020 , 8, 19938-19945	6
583	Ultrahigh Doping of Graphene Using Flame-Deposited MoO ₃ . 2020 , 41, 1592-1595	7
582	Two-dimensional nonlayered materials for electrocatalysis. 2020 , 13, 3993-4016	31
581	Design of two-dimensional carbon-nitride structures by tuning the nitrogen concentration. 2020 , 6,	9
580	Tuning the Nature of N-Based Groups From N-Containing Reduced Graphene Oxide: Enhanced Thermal Stability Using Post-Synthesis Treatments. 2020 , 10,	6

579	Nanostructured Sulfur and Sulfides for Advanced Lithium/Sulfur Cells. 2020 , 7, 3927-3942	4
578	Tuning Ultrafast Charge Carrier Dynamics of Monolayer Graphene using Substrates. 2020 , 124, 21147-21154	0
577	Crowd-Sourced Data and Analysis Tools for Advancing the Chemical Vapor Deposition of Graphene: Implications for Manufacturing. 2020 , 3, 10144-10155	3
576	Atomic-Level Functionalized Graphdiyne for Electrocatalysis Applications. 2020 , 10, 929	4
575	Ultrafine Pd Nanoparticles Supported on Soft Nitriding Porous Carbon for Hydrogen Production from Hydrolytic Dehydrogenation of Dimethyl Amine-Borane. 2020 , 10,	13
574	On-Surface Synthesis of Nitrogen-Substituted Gold-Phosphorus Porous Network. 2020 , 32, 8561-8566	3
573	Thermodynamically Metal Atom Trapping in Van der Waals Layers Enabling Multifunctional 3D Carbon Network. 2020 , 30, 2002626	8
572	. 2020 ,	0
571	growth of large-area and self-aligned graphene nanoribbon arrays on liquid metal.. 2021 , 8, nwa298	3
570	Reactive Plasma N-Doping of Amorphous Carbon Electrodes: Decoupling Disorder and Chemical Effects on Capacitive and Electrocatalytic Performance. 2020 , 8, 593932	1
569	Stacking and curvature-dependent behaviors of electronic transport and molecular adsorptions of graphene: A comparative study of bilayer graphene and carbon nanotube. 2020 , 1, 100028	4
568	Study on the transport properties of borophene/phosphorene heterojunctions. 2020 , 9, 985-990	1
567	Plasmonic nitriding of graphene on a graphite substrate via gold nanoparticles and NH ₃ /Ar plasma. 2020 , 38, 063001	
566	Structural Analysis of Boron- and Nitrogen-Doped Amorphous Carbon Films from Bio-Product. 2020 , 860, 190-195	
565	Electrochemical Aspects of a Nitrogen-Doped Pseudo-Graphitic Carbon Material: Resistance to Electrode Fouling by Air-Aging and Dopamine Electro-Oxidation. 2020 , 6, 68	1
564	Au-Nitrogen-Doped Graphene Quantum Dot Composites as "On-Off" Nanosensors for Sensitive Photo-Electrochemical Detection of Caffeic Acid. 2020 , 10,	3
563	2D Materials and Heterostructures at Extreme Pressure. 2020 , 7, 2002697	23
562	Low-dimensional catalysts for oxygen reduction reaction. 2020 , 30, 787-795	7

561	Improved bio-electricity production in bio-electrochemical reactor for wastewater treatment using biomass carbon derived from sludge supported carbon felt anode. 2020 , 726, 138573	17
560	Study on the voltage drop of vanadium nitride/carbon composites derived from the pectin/VCl ₃ membrane as a supercapacitor anode material. 2020 , 44, 6791-6798	3
559	Nitrogen bonding, work function and thermal stability of nitrated graphite surface: An in situ XPS, UPS and HREELS study. 2020 , 525, 146562	6
558	Nitrogen and oxygen dual-doping on carbon electrodes by urea thermolysis and its electrocatalytic significance for vanadium redox flow battery. 2020 , 348, 136286	7
557	Heteroatom doped graphene engineering for energy storage and conversion. 2020 , 39, 47-65	214
556	Advancement of Platinum (Pt)-Free (Non-Pt Precious Metals) and/or Metal-Free (Non-Precious-Metals) Electrocatalysts in Energy Applications: A Review and Perspectives. 2020 , 34, 6634-6695	53
555	Edge-NFx (x=1 or 2) Protected Graphitic Nanoplatelets as a Stable Lithium Storage Material. 2020 , 3, 928-935	1
554	Recent advances in Co-based electrocatalysts for the oxygen reduction reaction. 2020 , 4, 3848-3870	20
553	Piezopotential-driven simulated electrocatalytic nanosystem of ultrasmall MoC quantum dots encapsulated in ultrathin N-doped graphene vesicles for superhigh H ₂ production from pure water. 2020 , 75, 104990	21
552	RETRACTED: Efficient band gap opening in single-layer stanene via patterned Ga-As codoping: Towards semiconducting nanoelectronic devices. 2020 , 264, 116388	2
551	High-performance transparent conductive pyrolyzed carbon (Py-C) ultrathin film. 2020 , 8, 9243-9251	3
550	Recent advancements of metal oxides/Nitrogen-doped graphene nanocomposites for supercapacitor electrode materials. 2020 , 30, 101486	34
549	Unveiling a facile approach for large-scale synthesis of N-doped graphene with tuned electrical properties. 2020 , 7, 045001	13
548	Defect Engineering of 2D Materials for Electrochemical Energy Storage. 2020 , 7, 2000494	10
547	Hierarchically porous nitrogen, oxygen-rich carbons derived from filter paper for high-performance lithium ion battery anodes. 2020 , 371, 64-73	6
546	Hybrid nanocomposite of functionalized multiwall carbon nanotube, nitrogen doped graphene and chitosan with electrodeposited copper for the detection of anticancer drug nilutamide in tablet and biological samples. 2020 , 253, 123393	7
545	State of the art two-dimensional materials-based photodetectors: Prospects, challenges and future outlook. 2020 , 89, 28-46	5
544	Carbonized polyaniline bridging nanodiamond-graphene hybrids for enhanced microwave absorptions with ultrathin thickness. 2020 , 31, 415701	6

543	Cobalt-carbon/silica nanocomposites prepared by pyrolysis of a cobalt 2,2'-bipyridine terephthalate complex for remediation of cationic dyes.. 2020 , 10, 17660-17672	15
542	Heteroatom Doping: An Effective Way to Boost Sodium Ion Storage. 2020 , 10, 2000927	134
541	InGaN islands and thin films grown on epitaxial graphene. 2020 , 31, 405601	3
540	Electrochemical sensors based on nitrogen-doped reduced graphene oxide for the simultaneous detection of ascorbic acid, dopamine and uric acid. 2020 , 842, 155873	49
539	SiO ₂ /N-doped graphene aerogel composite anode for lithium-ion batteries. 2020 , 55, 13023-13035	17
538	Microstructures and electrothermal characterization of aromatic poly(azomethine ether)-derived carbon films. 2020 , 137, 49345	2
537	N-doped Co ₆ Mo ₆ C nanorods as highly active and durable bifunctional electrocatalysts for water splitting. 2020 , 871, 114271	4
536	Atomic Layer Deposition-Assisted Fabrication of Co-Nanoparticle/N-Doped Carbon Nanotube Hybrids as Efficient Electrocatalysts for the Oxygen Evolution Reaction. 2020 , 16, e2002427	29
535	Preparation of graphene. 2020 , 39-171	0
534	Stretchable, self-healing and biodegradable water-based heater produced by 3D printing. 2020 , 133, 105863	8
533	Graphitic N in nitrogen-Doped carbon promotes hydrogen peroxide synthesis from electrocatalytic oxygen reduction. 2020 , 163, 154-161	54
532	Chitosan-Based N-Doped Carbon Materials for Electrocatalytic and Photocatalytic Applications. 2020 , 8, 4708-4727	48
531	Low-Voltage Operating Complementary-Type Graphene Inverters With an Interacting Layer of Solution-Processed Fluorocarbon Copolymers. 2020 , 41, 429-432	0
530	Pulsed Plasma Assisted Cl-Doped Graphene Nano Dots with Semiconducting Property. 2020 , 49, 648-651	1
529	The Chemistry and Promising Applications of Graphene and Porous Graphene Materials. 2020 , 30, 1909035	79
528	Analytical Approach to Study Sensing Properties of Graphene Based Gas Sensor. 2020 , 20,	8
527	Tuning the Catalytic Activity of a Quantum Nutcracker for Hydrogen Dissociation. 2020 , 3, 40-47	2
526	Atomic structures and scanning tunnelling microscopy of nitrogen-doped carbon nanotubes. 2020 , 744, 012032	

525	Direct oxidation of methane to methanol on Co embedded N-doped graphene: Comparing the role of N ₂ O and O ₂ as oxidants. 2020 , 602, 117716	3
524	Synthesis of carbon nanoparticles in a non-thermal plasma process. 2020 , 227, 115921	14
523	Thermal synthesis of rGO and rGO-Co ₃ O ₄ and their application as adsorbents for anionic dye removal. 2020 , 599, 124837	3
522	Catalyst-free solvothermal synthesis of ultrapure elemental N- and B-doped graphene for energy storage application. 2020 , 353, 115371	6
521	Graphene-based nanocomposites and their fabrication, mechanical properties and applications. 2020 , 12, 100815	27
520	Preparation and characterization of colorful graphene oxide papers and flexible N-doping graphene papers for supercapacitor and capacitive deionization. 2020 , 2, 656-674	10
519	Improved electrochemical performance of anode materials for high energy density lithium-ion batteries through Sn(SnO ₂) ₂ /BiO ₂ /graphene-based nanocomposites prepared by a facile and low-cost approach. 2020 , 4, 4625-4636	15
518	Rational Design of Photo-Electrochemical Hybrid Devices Based on Graphene and Chlamydomonas reinhardtii Light-Harvesting Proteins. 2020 , 10, 3376	6
517	A general method to construct single-atom catalysts supported on N-doped graphene for energy applications. 2020 , 8, 6190-6195	24
516	Yellow emissive nitrogen-doped graphene quantum dots as a label-free fluorescent probe for Fe ³⁺ sensing and bioimaging. 2020 , 104, 107749	16
515	Nitrogen and sulfur dual-doped hollow mesoporous carbon spheres as efficient metal-free catalyst for oxygen reduction reaction. 2020 , 114, 107848	10
514	Superresilient Hard Carbon Nanofabrics for Sodium-Ion Batteries. 2020 , 16, e1906883	27
513	Nitrogen-doped graphene layer-encapsulated NiFe bimetallic nanoparticles synthesized by an arc discharge method for a highly efficient microwave absorber. 2020 , 7, 1148-1160	23
512	High yield growth and doping of black phosphorus with tunable electronic properties. 2020 , 36, 91-101	33
511	Bandgap tuning of two-dimensional materials by sphere diameter engineering. 2020 , 19, 528-533	40
510	Insight into efficient bifunctional catalysis: Oxygen reduction and oxygen evolution reactions using MWCNTs based composites with 5,10,15,20-tetrakis(3,5-dimethoxyphenyl)porphyrinato cobalt(II) and 5,10,15,20-tetrakis(3,5-dihydroxyphenyl)porphyrinato cobalt(II). 2020 , 45, 9710-9722	8
509	SiO ₂ stabilizes electrochemically active nitrogen in few-layer carbon electrodes of extraordinary capacitance. 2020 , 49, 179-188	5
508	Elastic, electronic and optical properties of boron- and nitrogen-doped 4,12,4-graphyne nanosheet. 2020 , 121, 114053	4

507	Effects of Buffer Gases on Graphene Flakes Synthesis in Thermal Plasma Process at Atmospheric Pressure. 2020 , 10,	10
506	Band-gap engineering of graphene by Al doping and adsorption of Be and Br on impurity: A computational study. 2020 , 23, e00463	3
505	Recent Advances of Two-Dimensional Nanomaterials for Electrochemical Capacitors. 2020 , 13, 1093-1113	17
504	Hydrogen-dominated metal-free growth of graphitic-nitrogen doped graphene with n-type transport behaviors. 2020 , 161, 123-131	6
503	Sulfur doped-graphene for enhanced acetaminophen degradation via electro-catalytic activation: Efficiency and mechanism. 2020 , 715, 136730	10
502	Electrode and symmetric supercapacitor device performance of boron-incorporated reduced graphene oxide synthesized by electrochemical exfoliation. 2020 , 2, e134	10
501	Heteroatom doping of two-dimensional materials: From graphene to chalcogenides. 2020 , 30, 100829	45
500	Thermochemistry of nitrogen-doped reduced graphene oxides. 2020 , 40, 6322-6327	3
499	Scalable synthesis of fluorescent organic nanodots by block copolymer templating. 2020 , 58, 30-34	2
498	Two-Dimensional Membranes: New Paradigms for High-Performance Separation Membranes. 2020 , 15, 2241-2270	17
497	Synthesis of Multiple-Twinned Pd Nanoparticles Anchored on Graphitic Carbon Nanosheets for Use as Highly-Active Multifunctional Electrocatalyst in Formic Acid and Methanol Oxidation Reactions. 2020 , 7, 2000142	12
496	Nitrogen-doped carbide-derived carbon/carbon nanotube composites as cathode catalysts for anion exchange membrane fuel cell application. 2020 , 272, 119012	44
495	ELECTRIMACS 2019. 2020 ,	1
494	Theoretical Comparison between the Flicker Noise Behavior of Graphene and of Ordinary Semiconductors. 2020 , 2020, 1-11	3
493	Laser-Induced Graphene Electrochemical Immunosensors for Rapid and Label-Free Monitoring of in Chicken Broth. 2020 , 5, 1900-1911	62
492	. 2020 ,	2
491	Batch synthesis of transfer-free graphene with wafer-scale uniformity. 2020 , 13, 1564-1570	13
490	Band-gap tuning of graphene by Mg doping and adsorption of Br and Be on impurity: A DFT study. 2020 , 23, e00469	4

489	Stripping voltammetric analysis of mercury ions at nitrogen-doped reduced graphene oxide modified electrode. 2020 , 865, 114121	8
488	Bio-inspired heteroatom-doped hollow aurilave-like structured carbon for high-performance sodium-ion batteries and supercapacitors. 2020 , 461, 228128	16
487	Study on Nitrogen-Doped Graphene Ink and Its Effects on the Heat Dissipation for the LED Lamps. 2020 , 10, 2738	1
486	Tailoring of electrical properties of TiO ₂ decorated CVD grown single-layer graphene by HNO ₃ molecular doping. 2020 , 264, 116389	4
485	Progress in the functional modification of graphene/graphene oxide: a review.. 2020 , 10, 15328-15345	233
484	Retracting interphasial stored Li ions by transition metal/metal carbide nanoparticles for enhanced Li ion storage capacity. 2021 , 582, 1213-1222	3
483	Metal organic framework (ZIF-67)-derived Co nanoparticles/N-doped carbon nanotubes composites for electrochemical detecting of tert-butyl hydroquinone. 2021 , 40, 478-488	14
482	Hydrogen storage on pristine and Li-decorated BC ₆ N monolayer from first-principles insights. 2021 , 119, e1827177	11
481	In-situ observations of novel single-atom thick 2D tin membranes embedded in graphene. 2021 , 14, 747-753	6
480	Ru on N-doped carbon supports for the direct hydrogenation of cellobiose into sorbitol. 2021 , 282, 119515	13
479	Preparation of nanocomposite with different component ratios of CuWO ₄ nanoparticles and nitrogen-doped reduced graphene oxide to compare their supercapacitive properties. 2021 , 856, 157302	2
478	Carbon Related Materials. 2021 ,	2
477	Boron and nitrogen edges modify the thermal conductivity of phagraphene nanoribbons: Molecular dynamics simulations. 2021 , 187, 110084	1
476	Si-doped graphene nanosheets for NO _x gas sensing. 2021 , 328, 129005	17
475	Nitrogen-rich mesoporous carbon for high temperature reversible CO ₂ capture. 2021 , 43, 101375	2
474	Permanent Boron Doped Graphene with high Homogeneity using Phenylboronic Acid. 2021 , 1230, 129629	4
473	Carbon-based metal-free catalysts for electrochemical CO ₂ reduction: Activity, selectivity, and stability. 2021 , 3, 24-49	14
472	Combined DFT and experiment: Stabilizing the electrochemical interfaces via boron Lewis acids. 2021 , 59, 100-107	2

471	Green energy application technology of litchi pericarp-derived carbon material with high performance. 2021 , 286, 124960	9
470	The mechanism of hydrogen donation by bio-acids over metal supported on nitrogen-doped carbon nanotubes. 2021 , 499, 111289	
469	Sequential doping of nitrogen and oxygen in single-walled carbon nanohorns for use as supercapacitor electrodes. 2021 , 310, 110595	2
468	Cold-Resistant Nitrogen/Sulfur Dual-Doped Graphene Fiber Supercapacitors with Solar-Thermal Energy Conversion Effect. 2021 , 27, 3473-3482	4
467	Holey nitrogen-doped graphene aerogel for simultaneously electrochemical determination of ascorbic acid, dopamine and uric acid. 2021 , 224, 121851	21
466	Effect of nitrogen-doping content on microwave absorption performances of Ni@NC nanocapsules. 2021 , 32, 1007-1021	4
465	Coaxial spinning fabricated high nitrogen-doped porous carbon walnut anchored on carbon fibers as anodic material with boosted lithium storage performance. 2021 , 586, 371-380	4
464	Novel two-dimensional crystalline carbon nitrides beyond g-C ₃ N ₄ : structure and applications. 2021 , 9, 17-33	29
463	Biosensors based on two-dimensional materials. 2021 , 245-312	
462	Doping mechanism directed graphene applications for energy conversion and storage. 2021 , 9, 7366-7395	6
461	Periodic DFT insights into hydrogen storage of a B ₄ CN ₃ nanosheet. 2021 , 45, 2463-2469	8
460	Room-Temperature NH ₃ Sensors Based on Boron-Doped Graphene Oxide: Enhanced Sensing Performance by B-N Covalent Interaction. 2021 , 1-1	2
459	Graphene-coated nanoporous nickel towards a metal-catalyzed oxygen evolution reaction. 2021 , 13, 10916-10924	7
458	Levulinic acid hydrogenation to γ -valerolactone over single Ru atoms on a TiO ₂ @nitrogen doped carbon support. 2021 , 23, 1621-1627	14
457	Application of graphene in energy storage device [A review]. 2021 , 135, 110026	171
456	Recent advances in graphene nanoribbons for biosensing and biomedicine. 2021 , 9, 6129-6143	4
455	Self-Limiting Growth of Single-Layer N-Doped Graphene Encapsulating Nickel Nanoparticles for Efficient Hydrogen Production. 2021 , 13, 4294-4304	5
454	Review of Graphene Supercapacitors and Different Modified Graphene Electrodes. 2021 , 12, 1-15	2

- 453 Graphene modification based on plasma technologies. **2021**, 70, 095208-095208 0
- 452 Practical strategies for enhanced performance of anode materials in Na⁺/K⁺-ion batteries. **2021**, 9, 7317-7335 19
- 451 N-doped graphene foam obtained by microwave-assisted exfoliation of graphite. **2021**, 11, 2044 9
- 450 Effect of the number of nitrogen dopants on the electronic and magnetic properties of graphitic and pyridinic N-doped graphene - a density-functional study.. **2021**, 11, 18371-18380 9
- 449 Nano-Porous Graphene as Free-Standing Membranes. **2021**, 43-86 2
- 448 Investigation of L-Tryptophan Electrochemical Oxidation with a Graphene-Modified Electrode. **2021**, 11, 2 2
- 447 Graphene Nanocomposites. **2021**, 1223-1241
- 446 Room Temperature Gas Sensor Based on Reduced Graphene Oxide for Environmental Monitoring. **2021**, 3243-3261
- 445 Recent advances in metal-free heteroatom-doped carbon heterogonous catalyts.. **2021**, 11, 23725-23778 3
- 444 Design, Fabrication, and Mechanism of Nitrogen-Doped Graphene-Based Photocatalyst. **2021**, 33, e2003521 114
- 443 Graphene Nanocomposites. **2021**, 1-19
- 442 A reverse-design-strategy for C@Li3VO4 nanoflakes toward superb high-rate Li-ion storage. **2021**, 9, 17270-17280 4
- 441 Catalyst Materials for Oxygen Reduction Reaction. **2021**, 85-182
- 440 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. **2021**, 45, 12408-12425 2
- 439 Graphene-based metal matrix nanocomposites: Recent development and challenges. **2021**, 55, 2369-2413 7
- 438 Crystalline-silicon heterojunction solar cells with graphene incorporation. **2021**, 229-257
- 437 In Situ Synthesis of Graphene Nitride Nanolayers on Glycerol-Lubricated Si3N4 for Superlubricity Applications. **2021**, 4, 2721-2732 5
- 436 Lithiated Graphene Quantum Dot and its Nonlinear Optical Properties Modulated by a Single Alkali Atom: A Theoretical Perspective. **2021**, 60, 3131-3138 5

435	Fruit wastes to N-containing graphene: chemistry and mechanism. 2021 , 29, 739-745	3
434	Stitching Graphene Sheets with Graphitic Carbon Nitride: Constructing a Highly Thermally Conductive rGO/g-CN Film with Excellent Heating Capability. 2021 , 13, 6699-6709	7
433	Nanohybridization of Keggin polyoxometalate clusters and reduced graphene oxide for lithium-ion batteries. 2020 , 23, 41	2
432	Introducing ferromagnetism and anisotropic magnetoresistance in monolayer CVD graphene by nitrogen doping. 2021 , 32, 205704	3
431	Lignocellulose based Bio-waste Materials derived Activated Porous Carbon as Superior Electrode Materials for High-Performance Supercapacitor. 2021 , 34, 102229	19
430	Plasma-Enhanced Chemical Vapor Deposition of Two-Dimensional Materials for Applications. 2021 , 54, 1011-1022	22
429	Recent trends in Nitrogen doped polymer composites: a review. 2021 , 28, 1	2
428	3D printing of high-performance micro-supercapacitors with patterned exfoliated graphene/carbon nanotube/silver nanowire electrodes. 2021 , 64, 1065-1073	9
427	Nanoengineering Metal-Organic Framework-Based Materials for Use in Electrochemical CO Reduction Reactions. 2021 , 17, e2006590	37
426	One-Step Plasma Synthesis of Nitrogen-Doped Carbon Nanomesh. 2021 , 11,	1
425	Selective construction of fused heterocycles by mild oxidative C-H functionalization using non-metallic catalysis. 2021 , 2, 100383	1
424	Sodium-storage behavior of electron-rich element-doped amorphous carbon. 2021 , 8, 011402	8
423	Polymer nanocomposites with aligned two-dimensional materials. 2021 , 114, 101360	14
422	Research on Graphene as Transparent Electrode of VCSEL Arrays. 2021 ,	
421	Pristine B3CN4 monolayer for hydrogen storage: A first-principles approach. 2021 , 391, 127116	10
420	Occurrence of nonohmic trend in the ballistic transport mode of a modelled low dimensional device capable of performing electronic functions. 2021 , 151, 106808	0
419	EGraphyne rectifier and NDR tunable by doping, line edge roughness and twist. 2021 , 190, 110303	0
418	Bifunctional electrocatalysts derived from cluster-based ternary sulfides for oxygen electrode reactions. 2021 , 376, 138048	2

417	Study on the microwave absorbing properties of Fe nanoparticles prepared by the HEIBE method in expanded graphite matrix composites. 2021 , 860, 158434	2
416	Lanthanum sulfide-manganese sulfide/graphene oxide (La ₂ S ₃ -MnS/GO) composite thin film as an electrocatalyst for oxygen evolution reactions. 2021 , 25, 1775-1788	0
415	Self-assembly of graphene nano-particles on biocompatible polymer through dewetting. 2021 , 23, 101009	2
414	Study on the mechanism of water transport near the surface of pristine and nitrogen-doped Graphyne. 2021 , 35, 2150152	1
413	A review of biomass-derived graphene and graphene-like carbons for electrochemical energy storage and conversion. 2021 , 36, 350-372	11
412	Preparation of sponge-cake-like N-doped porous carbon materials derived from silk fibroin by chemical activation. 2021 , 317, 110998	5
411	Controllable Design and Preparation of Hollow Carbon-Based Nanotubes for Asymmetric Supercapacitors and Capacitive Deionization. 2021 , 13, 21217-21230	8
410	Two-dimensional nanomaterials with engineered bandgap: Synthesis, properties, applications. 2021 , 37, 101059	24
409	One-step synthesis and performances of Ni@CN nanocapsules with superior dual-function as electrocatalyst and microwave absorbent. 2021 , 615, 126162	1
408	Effects of mass and interaction mismatches on in-plane and cross-plane thermal transport of Si-doped graphene. 2021 , 169, 120979	3
407	Facile d-band tailoring in Sub-10 nm Pd cubes by in-situ grafting on nitrogen-doped graphene for highly efficient organic transformations. 2021 , 590, 175-185	5
406	Bce Film Etiminde Kimyasal Buhar Biriktirme Yöntemi ve Etkileri.	
405	Graphene family for hydrogen peroxide production in electrochemical system. 2021 , 769, 144491	5
404	Synthesis and characterization of a novel nickel pillared clay catalyst: In-situ carbon nanotube clay hybrid nanofiller from Ni-PILC. 2021 , 205, 106064	5
403	Electrical magnetotransport properties of chlorinated CVD graphene. 2021 , 609, 412893	
402	Functionalization of electronic, spin and optical properties of GeSe monolayer by substitutional doping: a first-principles study. 2021 , 32,	0
401	Carbonaceous Oxygen Evolution Reaction Catalysts: From Defect and Doping-Induced Activity over Hybrid Compounds to Ordered Framework Structures. 2021 , 17, e2007484	7
400	Facilely synthesized N-doped graphene sheets and its ferromagnetic origin. 2021 , 32, 3841-3841	3

399	Strategies, Status, and Challenges in Wafer Scale Single Crystalline Two-Dimensional Materials Synthesis. 2021 , 121, 6321-6372	28
398	One-step synthesis of MOF-derived Cu@N-doped carbon composites as counter electrode catalysts for quantum dot-sensitized solar cells. 2021 , 380, 138228	3
397	Heteroatom-doped graphene-based materials for sustainable energy applications: A review. 2021 , 143, 110849	52
396	In situ synthesis of nitrogen-doped graphene nanoflakes using non-thermal arc plasma. 2021 , 129, 213304	1
395	A novel in situ synthesis of nitrogen-doped graphene with excellent electrocatalytic performance for oxygen reduction reaction. 2021 , 380, 138256	5
394	Structural Design Strategy and Active Site Regulation of High-Efficient Bifunctional Oxygen Reaction Electrocatalysts for Zn-Air Battery. 2021 , 17, e2006766	24
393	Bandgap engineering of two-dimensional C ₃ N bilayers. 2021 , 4, 486-494	6
392	Stability and Catalytic Performance of Single-Atom Catalysts Supported on Doped and Defective Graphene for CO ₂ Hydrogenation to Formic Acid: A First-Principles Study. 2021 , 4, 6893-6902	6
391	Modeling of H ₂ O, H ₂ O ₂ , and H ₂ O ₃ formation mechanisms on graphene oxide (GO) surfaces. 2021 , 177, 252-259	
390	Synthesis of Phosphorus Doped Graphenes via the Yucel Method as the Positive Electrode of a Vanadium Redox Flow Battery. 2021 , 168, 060504	3
389	Progress and perspectives of 2D materials as anodes for potassium-ion batteries. 2021 , 38, 354-378	11
388	In situ grown monolayer N-doped graphene and ZnO on ZnFe ₂ O ₄ hollow spheres for efficient photocatalytic tetracycline degradation. 2021 , 618, 126362	4
387	High-efficient Schottky-junction silicon solar cell using silver nanowires covering nitrogen-doped amorphous carbon. 2021 , 26, 1-8	0
386	N, P-Codoped Carbon Film Derived from Phosphazenes and Its Printing Integration with a Polymer Carpet "Molecular Welding" for Flexible Electronics. 2021 , 13, 29894-29905	1
385	High-performance desalination of three-dimensional nitrogen-doped carbon framework reinforced Prussian blue in capacitive deionization. 2021 , 505, 114997	15
384	Opening the germanene monolayer band gap using halogen atoms: An efficient approach studied by first-principles calculations. 2021 , 551, 149318	4
383	Investigation of the Magnetic and Electronic Properties of Pyrrolic N-doped Graphene Using Density Functional Theory. 2021 , 1951, 012016	
382	A facile synthesis of core-shell Fe ₃ O ₄ @C(N) composites and their microwave absorption properties. 2021 , 32, 19020-19030	0

381	Dual Metal-Loaded Porous Carbon Materials Derived from Silk Fibroin as Bifunctional Electrocatalysts for Hydrogen Evolution Reaction and Oxygen Evolution Reaction. 2021 , 13, 30678-30692	4
380	An investigation of Li-decorated N-doped penta-graphene for hydrogen storage. 2021 , 46, 25533-25542	8
379	Controllable synthesis of Li ₃ VO ₄ /N doped C nanofibers toward high-capacity and high-rate Li-ion storage. 2021 , 384, 138386	6
378	Synthesis and characterization of potassium-doped multilayer graphene prepared by wet process using potassium hydroxide.	0
377	Recent Studies on Dispersion of Graphene-Polymer Composites. 2021 , 13,	7
376	DFT investigations on electronic and optical properties of (In, N, In _N) doped graphene. 2150346	1
375	Recent Advances on Heteroatom-Doped Porous Carbon/Metal Materials: Fascinating Heterogeneous Catalysts for Organic Transformations. 2021 , 21, 1985-2073	7
374	Chemical Vapor Deposition of N-Doped Graphene through Pre-Implantation of Nitrogen Ions for Long-Term Protection of Copper. 2021 , 14,	0
373	CoBe Clusters Supported on N-Doped Graphitic Carbon as Highly Selective Catalysts for Reverse Water Gas Shift Reaction. 2021 , 9, 9264-9272	2
372	Graphene, Graphene-Derivatives and Composites: Fundamentals, Synthesis Approaches to Applications. 2021 , 5, 181	6
371	Facile Synthesis of Carbon Film with High Carrier Concentration Using Coal Tar and the Application in Joule Heating. 2021 , 3, 3271-3277	2
370	Carbon-enabled microwave chemistry: From interaction mechanisms to nanomaterial manufacturing. 2021 , 85, 106027	17
369	Synthesis of nitrogen and phosphorus co-doped graphene as efficient electrocatalyst for oxygen reduction reaction under strong alkaline media in advanced chlor-alkali cell. 2021 , 4, 100043	3
368	One-pot synthesis of 3D porous Bi ₇ O ₉ I ₃ /N-doped graphene aerogel with enhanced photocatalytic activity for organic dye degradation in wastewater. 2021 , 47, 19556-19566	3
367	Carbon Lattice Structures in Nitrogen-Doped Reduced Graphene Oxide: Implications for Carbon-Based Electrical Conductivity. 2021 , 4, 7897-7904	4
366	Theoretical and Experimental Research on Ammonia Sensing Properties of Sulfur-Doped Graphene Oxide. 2021 , 9, 220	2
365	2D Organic Radical Conjugated Skeletons with Paramagnetic Behaviors. 2021 , 8, 2100943	0
364	Computational Study on Adsorption Characteristics of Phenol and Guaiacol Over Single and Multiple Nitrogen-Doped Graphene. 2021 , 6, 7682-7690	1

363	Two-dimensional graphene oxide based membranes for ionic and molecular separation: Current status and challenges. 2021 , 9, 105605	16
362	Boron and Phosphorus Dual-Doped Carbon Coating Improves Electrochemical Performances of LiFe _{0.8} Mn _{0.2} PO ₄ Cathode Materials. 2021 , 4, 8003-8015	2
361	From coconut shell biomass to oxygen reduction reaction catalyst: Tuning porosity and nitrogen doping. 2021 , 147, 111173	12
360	Research progress of carbon nanofiber-based precious-metal-free oxygen reaction catalysts synthesized by electrospinning for Zn-Air batteries. 2021 , 507, 230280	7
359	Selectively Defect-Healed Graphene Electrodes for Tungsten Diselenide Thin-Film Transistors. 2100729	1
358	Synthesis and plasma treatment of nitrogen-doped graphene fibers for high-performance supercapacitors. 2021 , 48, 2058-2058	3
357	Low-Temperature Nitrogen Doping of Nanocrystalline Graphene Films with Tunable Pyridinic-N and Pyrrolic-N by Cold-Wall Plasma-Assisted Chemical Vapor Deposition. 2021 , 6, 23710-23722	2
356	Effects of buffer gas on N-doped graphene in a non-thermal plasma process. 2021 , 118, 108548	0
355	Competitive role of nitrogen functionalities of N doped GO and sensitizing effect of BiO QDs on TiO for water remediation. 2021 , 108, 107-119	8
354	Nitrogen-doped graphene on a curved nickel surface. 2021 , 183, 711-720	0
353	Controllable fabrication of abundant nickel-nitrogen doped CNT electrocatalyst for robust hydrogen evolution reaction. 2021 , 562, 150161	5
352	In situ fabrication of nitrogen doped graphitic carbon networks coating for high-performance extraction of pyrethroid pesticides. 2021 , 233, 122542	6
351	Metal-free Covalent Triazine Framework Prepared from 2,4,6-Tricyano-1,3,5-triazine through Open-system and Liquid-phase Synthesis. 2021 , 50, 1773-1777	1
350	Porous carbon layers wrapped CoFe alloy for ultrastable Zn-Air batteries exceeding 20,000 charging-discharging cycles. 2021 , 61, 327-335	6
349	Flexible asymmetric solid-state supercapacitor of boron doped reduced graphene for high energy density and power density in energy storage device. 2021 , 118, 108495	2
348	Controlling the thermal conductivity of multilayer graphene by strain. 2021 , 11, 19533	1
347	Graphene-polymer composite conductivity in air and water. 2021 , 567, 150843	0
346	Nitrogen-doped graphene nanomaterials for electrochemical catalysis/reactions: A review on chemical structures and stability. 2021 , 185, 198-214	12

345	Performance evaluation of functionalized carbon aerogel as oxygen reduction reaction electrocatalyst in zinc-air cell. 2021 , 511, 230458	3
344	Achieving ion accessibility within graphene films by carbon nanofiber intercalation for high mass loading electrodes in supercapacitors. 2021 , 513, 230559	2
343	Outstanding in-situ CNTs on Fe-pillared nanoclay for high-performance polymer nanocomposites. 2021 , 213, 106240	1
342	In-situ observation of graphene using an optical microscope. 2021 , 6, 100138	1
341	A potential application of a crystal triazine organic framework in energy: Photocatalytic decomposition of water. 2021 , 623, 413342	2
340	Advanced opportunities and insights on the influence of nitrogen incorporation on the physico-/electro-chemical properties of robust electrocatalysts for electrocatalytic energy conversion. 2021 , 449, 214209	7
339	Rapid growth of single-crystal graphene by acetonitrile and its nitrogen doping. 2021 , 194, 110609	1
338	Enhanced bifunctional catalytic activities of N-doped graphene by Ni in a 3D trimodal nanoporous nanotubular network and its ultralong cycling performance in Zn-air batteries. 2022 , 66, 466-473	5
337	Insights into co-removal of trichloroacetic acid and bromate by an electroreduction process: Competitive reaction mechanism and enhanced atomic H* stabilization. 2022 , 429, 132139	2
336	Heteroatom doping in metal-free carbonaceous materials for the enhancement of persulfate activation. 2022 , 427, 131655	19
335	Porous carbon with uniformly distributed cobalt nanoparticles derived from ZIF-67 for efficient removal of vapor elemental mercury: A combined experimental and DFT study. 2022 , 428, 132095	2
334	CoP-decorated N,P-doped necklace-like carbon for highly efficient oxygen reduction and Al-air batteries. 2022 , 428, 131326	1
333	Cycloaddition between nitrogen-doped graphene (6 π -component) and benzene (4 π -component): a theoretical approach using density functional theory with vdW-DF correction. 2021 , 23, 5870-5877	
332	Electrochemical reduction of CO and N to synthesize urea on metal-nitrogen-doped carbon catalysts: a theoretical study. 2021 , 50, 11158-11166	5
331	Fused Aromatic Network with Exceptionally High Carrier Mobility. 2021 , 33, e2004707	6
330	Tuning metal single atoms embedded in NxCy moieties toward high-performance electrocatalysis. 2021 , 14, 3455-3468	47
329	CHAPTER 6:3D GBM-supported Transition Metal Oxide Nanocatalysts and Heteroatom-doped 3D Graphene Electrocatalysts for Potential Application in Fuel Cells. 2021 , 139-178	1
328	Graphene transparent electrodes. 2021 , 487-516	

327	Engineering electrodes and metal halide perovskite materials for flexible/stretchable perovskite solar cells and light-emitting diodes. 2021 , 14, 2009-2035	16
326	First-principles materials design for graphene-based sensor applications. 2021 , 343-358	
325	Black phosphorus: device and application. 2021 , 139-163	0
324	Production of C, N Alternating 2D Materials Using Covalent Modification and Their Electroluminescence Performance. 2021 , 1, 2000042	4
323	Graphene: The magic material. 2021 , 517-549	1
322	Doping Carbon Nanomaterials with Heteroatoms. 133-161	7
321	Nanostructured Electrodes for Lithium Ion Batteries. 383-413	1
320	Room Temperature Gas Sensor Based on Reduce Graphene Oxide for Environmental Monitoring. 2020 , 1-19	1
319	Graphene and Its Modifications for Supercapacitor Applications. 2019 , 113-138	4
318	CNT Applications in Microelectronics, Nanoelectronics, and Nanobioelectronics 2018 , 65-72	1
317	CNT Applications in Displays and Transparent, Conductive Films/Substrates. 2018 , 73-75	1
316	Graphene Applications in Electronics, Electrical Conductors, and Related Uses. 2018 , 141-146	3
315	Characterization Methods. 2018 , 403-488	2
314	Microwave- and Conductivity-Based Technologies. 2018 , 655-669	1
313	CNT Applications in Sensors and Actuators. 2018 , 53-60	2
312	Functionalized Graphene and Cobalt Phthalocyanine Based Materials with Potential Use for Electrical Conduction. 2014 , 185-215	1
311	Shock induced conversion of carbon dioxide to few layer graphene. 2017 , 115, 471-476	13
310	Effects of Doping Methods and Kinetic Relevance of N and O Atomic Co-Functionalization on Carbon Electrode for V(IV)/V(V) Redox Reactions in Vanadium Redox Flow Battery. 2017 , 245, 724-733	23

309	Metal-free electrocatalysts for nitrogen reduction reaction. 2020 , 2, 100040	18
308	One-step synthesis of titanium nitride/nitrogen-doped graphene nanocomposite as separator modifying material for advanced lithium-sulfur batteries. 2020 , 845, 155543	22
307	The linear and non-linear optical absorption and asymmetrical electromagnetic interaction in chiral twisted bilayer graphene with hybrid edges. 2020 , 14, 100222	35
306	Silicon Few-Layer Graphene Nanocomposite as High-Capacity and High-Rate Anode in Lithium-Ion Batteries. 2019 , 2, 1793-1802	20
305	Alkalide-Assisted Direct Electron Injection for the Noninvasive n-Type Doping of Graphene. 2021 , 13, 1270-1276	3
304	Ultrafast-charging and long cycle-life anode materials of TiO-bronze/nitrogen-doped graphene nanocomposites for high-performance lithium-ion batteries.. 2020 , 10, 43811-43824	12
303	Graphene-diamond junction photoemission microscopy and electronic interactions. 2020 , 1, 020011	4
302	Tunable electromagnetically induced transparency based on graphene metamaterials. 2020 , 28, 4048-4057	33
301	Graphene Systems: Methods of Fabrication and Treatment, Structure Formation, and Functional Properties. 2010 , 11, 95-138	11
300	.	2
299	Stone-Wales kusuru iBrisindeki farklı tiplere azot atomu katkıları ile grafenin mekanik özellikleri üzerine etkisi. 2018 , 2018,	1
298	Controlling the Properties of Graphene using CVD Method: Pristine and N-doped Graphene. 2015 , 1, 169-174	2
297	Chemical vapor deposition growth of graphene on copper substrates: current trends. 2013 , 183, 1115-1122	1
296	Hierarchical Porous Carbon Cobalt Nanocomposites-Based Sensor for Fructose. 2021 , 9, 6	3
295	Facile Approach to Preparation of Nitrogen-doped Graphene and Its Superca-pacitive Performance. 2013 , 28, 677-682	5
294	The Prospective Two-Dimensional Graphene Nanosheets: Preparation, Functionalization and Applications. 2012 , 4, 1	11
293	A Two-Step Method for the Preparation of Highly Conductive Graphene Film and Its Gas-Sensing Property. 2015 , 06, 963-977	2
292	Synthesis and Fabrication of Graphene and Graphene Oxide: A Review. 2019 , 09, 207-229	34

291	Engineering of Bi-/Mono-layer Graphene Film Using Reactive Ion Etching. 2015 , 16, 169-172	6
290	Fabrication of Graphene p-n Junction Field Effect Transistors on Patterned Self-Assembled Monolayers/Substrate. 2015 , 24, 53-59	3
289	NO ₂ gas sensing based on graphene synthesized via chemical reduction process of exfoliated graphene oxide. 2012 , 22, 84-91	3
288	Optical and electronic properties of N/B doped graphene. 2016 , 65, 248103	10
287	Synthesis of Nitrogen-Doped Graphene by Plasma-Enhanced Chemical Vapor Deposition. 2012 , 51, 055101	16
286	Study and Application of Molecularly Imprinted Electrochemical Sensor Based on Aunps/N-Gr@Cs for Highly Selective Recognition of Trace Hyperoside.	
285	Doped graphene/carbon black hybrid catalyst giving enhanced oxygen reduction reaction activity with high resistance to corrosion in proton exchange membrane fuel cells. 2021 ,	1
284	Electrical, thermal and electrochemical properties of F ₂ -ray-reduced graphene oxide. 2021 , 28, 1726-1734	4
283	Morphology Controlled Synthesis of Heteroatom-Doped Spherical Porous Carbon Particles Retaining High Specific Capacitance at High Current Density. 2021 , 4, 10810-10825	1
282	Impact of nitrogen doping on the linear and nonlinear terahertz response of graphene. 2021 , 104,	0
281	Developing feature-rich electronic and magnetic properties in the FAs monolayer for spintronic and optoelectronic applications by C and Si doping: A first-principles study. 2021 , 27, 101534	0
280	Graphene: Under control.	
279	Nitrogenated Carbon Nanotubes: Methods of Fabrication, Properties, and Prospect of Application. 2010 , 11, 369-411	1
278	Effect of N-doping on band structure and transport property of zigzag graphene nanoribbons. 2011 , 60, 097103	8
277	Modification of zigzag graphene nanoribbons by patterning vacancies. 2012 , 61, 137101	0
276	Density Functional Theory Study of IB Metals Binding to Perfect and N-Doped Graphene. 2013 , 33, 1578-1585	1
275	Structural Defects on the Electronic Transport Properties of Carbon-Based Nanostructures. 2013 , 77-103	
274	The electronic transport properties affected by B/N doping in graphene-based molecular devices. 2013 , 62, 186102	1

273 Carbon-Based Nanostructures. **2014**, 3-31

272 Graphene and Quantum Dot Nanocomposites for Photovoltaic Devices. **2014**, 269-294

271 Surface Characterization of Graphene. **2013**, 73-90

270 Encyclopedia of Polymeric Nanomaterials. **2014**, 1-15

269 Device Architecture and Biosensing Applications for Attractive One- and Two-Dimensional Nanostructures. **2015**, 41-70

268 Preparation and electrochemical performance of nitrogen-doped graphene nanoplatelets. **2016**, 65, 178102 2

267 Zastosowania grafenu. **2016**,

266 Otrzymywanie grafenu .. **2016**,

265 Structure and properties of hexagonal carbon nanoclusters C₉₅N of graphene-like structure. **2016**, 7, 157-166 0

264 Structure, Stabilities, and Electronic Properties of Smart Ceramic Composites. **2017**, 113-131

263 The Influence of Porous Features on the Electrochemical Performance of Its Supported Platinum Catalyst in Porous Carbon Nanofibers. **2017**, 05, 10-18

262 Introduction. **2018**, 1-22

261 Basic Electrochemistry of CPs. **2018**, 283-309

260 Miscellaneous CNT Applications. **2018**, 89-90

259 CNT Applications in Specialized Materials. **2018**, 45-48

258 Structural Aspects and Morphology of CPs. **2018**, 389-402

257 Electronic Structure and Conduction Models of Graphene. **2018**, 101-106

256 Electrochromics. **2018**, 601-624

255 Classes of CPs: Part 1. **2018**, 489-507

254 Electro-Optic and Optical Devices. **2018**, 671-684

1

253 Conduction Models and Electronic Structure of CNTs. **2018**, 11-16

252 Miscellaneous Applications. **2018**, 695-715

251 CNT Applications in the Environment and in Materials Used in Separation Science. **2018**, 81-87

250 Graphene Applications in Displays and Transparent, Conductive Films/Substrates. **2018**, 147-148

249 Classes of CPs: Part 2. **2018**, 509-545

248 Introducing Conducting Polymers (CPs). **2018**, 159-174

247 Syntheses and Processing of CPs. **2018**, 311-388

246 Physical, Mechanical, and Thermal Properties of CNTs. **2018**, 33-36

245 CNT Applications in Electrical Conductors, Quantum Nanowires, and Potential Superconductors. **2018**, 77-79

244 Toxicology of CNTs. **2018**, 37-39

243 Synthesis, Purification, and Chemical Modification of CNTs. **2018**, 17-31

242 Introducing Graphene. **2018**, 93-99

241 Sensors. **2018**, 549-574

240 Conduction Models and Electronic Structure of CPs. **2018**, 175-249

1

239 Brief, General Overview of Applications. **2018**, 123-124

238 Electrochemomechanical, Chemomechanical, and Related Devices. **2018**, 685-693

- 237 Displays, Including Light-Emitting Diodes (LEDs) and Conductive Films. **2018**, 625-654
- 236 2D materials integrated in Si₃N₄ photonics platform. **2018**,
- 235 Synthesis of Nitrogen-Doped Graphene by Thermal Annealing of Graphene Oxide with Melamine Compounds. **2019**, 29, 677-683
- 234 Toxic Gas Sensors and Biosensors. **2020**, 49-67 0
- 233 Molecular adsorption of iminotriazine derivatives on graphene. **2020**, 3, 034011 3
- 232 Impurity Substitution Enhances Thermoelectric Figure of Merit in Zigzag Graphene Nanoribbons. **2021**, 2021, 1-10 0
- 231 Facile strategy for preparing the composite of MoS₂ microspheres and N/S dual-doped graphene stabilized by graphene quantum dots for all-solid-state asymmetric supercapacitor. **2021**, 162492 3
- 230 Tuning metal catalysts via nitrogen-doped nanocarbons for energy chemistry: From metal nanoparticles to single metal sites. **2021**, 3, 100066 3
- 229 Van der Waals Heterostructures in Photocatalytic Energy Conversion. **2022**, 225-274
- 228 Metal-free aerobic oxidation of benzyl alcohols over the selective N, P dual-doped hollow carbon sphere as the efficient and sustainable heterogeneous catalyst under mild reaction condition. **2021**, 329, 111514 3
- 227 Construction of heteroatom-doped and three-dimensional graphene materials for the applications in supercapacitors: A review. **2021**, 44, 103437 16
- 226 Research Progress of Fe/N/C Oxygen Reduction Reaction Catalyst for Fuel Cell in Past Decade. **2020**, 10, 766-785
- 225 Rich -type-doping phenomena in boron-substituted silicene systems. **2020**, 7, 200723 0
- 224 Silicon-Reduced Graphene Oxide Composite as Negative Electrode of Li-Ion Batteries. **2020**, 93, 1940-1946
- 223 Marked Electrocatalytic Effects of Two-Step Boron and Oxygen Atomic Doping of Carbon Electrodes for Vanadium Redox Flow Battery. **2021**, 4, 425-433 1
- 222 Electrocatalytic degradation of acetaminophen by fluorine-doped graphene oxide: Efficiency and mechanism under constant current and pulse current supply. **2022**, 161, 110443 2
- 221 Modular modification of the two-dimensional electronic properties of graphene by bio-inspired functionalization. **2022**, 574, 151642 1
- 220 An Impedance-Based Life-Monitoring Technique for a Graphene Water Filter. **2020**, 719-726 1

219	Theoretical study on Schottky regulation of WSe ₂ /graphene heterostructure doped with nonmetallic elements. 2020 , 69, 117101	2
218	Modulation of carbon induced persulfate activation by nitrogen dopants: recent advances and perspectives.	9
217	Reduced Graphene Oxide Screen Printed Thick Film as NO ₂ Gas Sensor at Low Temperature. 1167, 43-55	2
216	Synthesis of Graphene and fabrication of Aluminium-Grp nanocomposites: A review. 2021 ,	0
215	Porous carbon foam based on coassembled graphene and adenine-polyimide for electromagnetic interference shielding. 2021 , 236, 124328	2
214	Graphene/Fe@N-doped carbon hybrid derived from spent MOF adsorbent as efficient persulfate activator for degradation of tetracycline hydrochloride. 2021 , 133443	1
213	Nanostructured Carbon-Based Materials for Fuel Cell Applications. 2021 , 357-390	
212	Potential Applications of Graphene-Based Nanomaterials in Biomedical, Dental, and Implant Applications. 2021 , 77-105	1
211	In situ functionalization of graphene. 2021 , 8, 015022	4
210	Challenges and future prospects of graphene-based hybrids for solar fuel generation: moving towards next generation photocatalysts.	7
209	Design and analysis of a wideband microwave absorber based on graphene-assisted metamaterial. 2022 , 250, 168310	1
208	Strong anti-stacking structure formation in graphene materials obtained by chemical liquid deposition. 2022 , 187, 280-289	
207	One-Step Hydrothermal Synthesis of Nitrogen-Doped Reduced Graphene Oxide/Hausmannite Manganese Oxide for Symmetric and Asymmetric Pseudocapacitors. 2021 , 6, 31421-31434	2
206	Growth of high performance coal tar-based carbon film and its application in Joule heating. 2021 , 49, 1599-1607	0
205	Paracetamol Degradation and Disinfection Via Electrocatalytic Oxidation by Using N-doped Graphene as Anode. 1	0
204	Fabrication of high density and nitrogen-doped porous carbon for high volumetric performance supercapacitors. 2021 , 103657	1
203	Magnetic transitions in CO adsorption on graphene-based surfaces. 2021 , 425, 127883	0
202	Pd electrodeposition on a novel substrate of reduced graphene oxide/ poly(melem-formaldehyde) nanocomposite as an active and stable catalyst for ethanol electrooxidation in alkaline media. 2021	1

201	One-step functionalization of mildly and strongly reduced graphene oxide with maleimide: an experimental and theoretical investigation of the Diels-Alder [4+2] cycloaddition reaction.. 2022,	0
200	Mesoporous Carbon Promoting the Efficiency and Stability of Single Atomic Electrocatalysts for Oxygen Reduction Reaction.	
199	Marked importance of surface defects rather than oxygen functionalities of carbon electrodes for the intrinsic vanadium redox kinetics in flow batteries. 2022, 520, 230813	1
198	Functionalisation of graphene as a tool for developing nanomaterials with predefined properties. 2022, 348, 118368	3
197	rGO functionalized Fe ₂ O ₃ /Co ₃ O ₄ heterojunction for NO ₂ detection. 2022, 354, 131194	5
196	Fabrication of a Carbon Chain Based Nanosensor for Maximizing Spatial Resolution in DNA Sequencing. 2020,	
195	One-step synthesis of nitrogen-doped graphene powders and application of them as high-performance symmetrical coin cell supercapacitors in different aqueous electrolyte.	1
194	Smart electronic material GRAPHENE and its utilization as a photo-sensitive switchable device. 2022, 103-114	
193	Heteroatom-doped graphene-based electrocatalysts for ORR, OER, and HER. 2022, 145-168	0
192	Graphene for Antimicrobial and Coating Application.. 2022, 23,	4
191	High-Performance Photodetectors Based on the 2D SiAs/SnS Heterojunction.. 2022, 12,	1
190	Graphene quantum dots assisted synthesis of highconcentration nitrogen doped graphene for infrared photodetectors. 2022, 121, 108774	1
189	Boron and nitrogen co-doped carbon nanospheres for supercapacitor electrode with excellent specific capacitance.. 2022,	0
188	N-doped carbon nanotube encapsulated cobalt for efficient oxidative esterification of 5-hydroxymethylfurfural.	
187	Single-Step Synthesis of Nitrogen-Doped Graphene Oxide from Aniline at Ambient Conditions.. 2022,	1
186	Design and synthesis of ultrathin graphene: Fundamental applications in transparent electrodes and supercapacitors. 2022, 115-140	
185	Heteroatom-Doped Metal-Free Carbon Nanomaterials as Potential Electrocatalysts.. 2022, 27,	1
184	The oxygen reduction activity on platinum-decorated nitrogen-doped bilayer graphene. 2022, 57, 2794-2802	0

183	Tailoring conductive network Zn@NPC@MWCNTs nanocomposites derived from ZIF-8 as high-performance electromagnetic absorber for the whole X-Band. 2022,	
182	Mesoporous carbon promoting the efficiency and stability of single atomic electrocatalysts for oxygen reduction reaction. 2022, 191, 393-402	3
181	Stimulus response of HNT-CDs-Eu nano-sensor: Toward visual point-of-care monitoring of a bacterial spore biomarker with hypersensitive multi-color agarose gel based analytical device. 2022 , 639, 128356	1
180	One-step fabrication of nitrogen-doped laser-induced graphene derived from melamine/polyimide for enhanced flexible supercapacitors.	0
179	Synthesis of flower-like manganese oxide for accelerated surface redox reactions on nitrogen-rich graphene of fast charge transport for sustainable aqueous energy storage.	0
178	Nanomaterials for Quantum Information Science and Engineering.. 2022, e2109621	6
177	Recent Advances in Boron- and Nitrogen-Doped Carbon-Based Materials and Their Various Applications. 2101964	5
176	Bimetallic zeolitic imidazole framework derived Co@NC materials as oxygen reduction reaction catalysts application for microbial fuel cells. 2022,	0
175	Electronic Structure and Optical Properties of Non-metallic Modified Graphene: A First-principles Study.	1
174	Synthesis of Distorted Nitrogen-Doped Nanographenes by Partially Oxidative Cyclodehydrogenation Reaction.. 2022,	
173	Comparative analysis of characterization techniques of GQDs-based photovoltaic applications: A review. 2022, 255, 168709	1
172	Synthesis of nitrogen-doped carbons from single-source precursors by solution plasma. 2022, 475-505	
171	Recent Progress in N-Doped Graphene: Properties and Applications. 2022, 143-158	
170	Heteroatom Doping in Nanocarbon and Its Applications. 2022, 61-81	0
169	A New Strategy for Plasma-Catalytic Reduction of NO to N ₂ on the Surface of Modified Bi ₂ MoO ₆ .	
168	Multifunctional nanoarchitected porous carbon for solar steam generation and supercapacitor applications. 2022, 6, 1762-1769	3
167	Interface modulation and physical properties of heterostructure of metal nanoparticles and two-dimensional materials. 2022, 71, 066801	
166	Ultrasensitive Boron-Nitrogen-Codoped CVD Graphene-Derived NO ₂ Gas Sensor.	2

165	Advances in graphene-based materials for the treatment of water. 2022 , 15, 1	1
164	Engineering of N,P,S-Triple doped 3-dimensional graphene architecture: Catalyst-support for Surface-cleanPd nanoparticles to boost the electrocatalysis of ethanol oxidation reaction. 2022 ,	1
163	IR792-MCN@ZIF-8-PD-L1 siRNA drug delivery system enhances photothermal immunotherapy for triple-negative breast cancer under near-infrared laser irradiation.. 2022 , 20, 96	1
162	Ultrathin flexible terahertz metamaterial bandstop filter based on laser-induced graphene. 2022 , 39, 1229	0
161	2D Materials for Wearable Energy Harvesting. 2101623	1
160	Supercapacitors Fabrication and Performance Evaluation Techniques.	
159	Chemical vapor deposition-grown nitrogen-doped graphene synthesis, characterization and applications. 2022 , 6,	2
158	Successful Manufacturing Protocols of N-Rich Carbon Electrodes Ensuring High ORR Activity: A Review. 2022 , 10, 643	1
157	Recent Applications and Synthesis Techniques of Graphene. 2022 , 14,	1
156	Solution-Processable Semiconducting Conjugated Planar Network.. 2022 ,	
155	A comprehensive review on the thermal, electrical, and mechanical properties of graphene-based multi-functional epoxy composites. 1	4
154	Ultrathin Membranes for Separations: A New Era Driven by Advanced Nanotechnology.. 2022 , e2108457	1
153	Enhanced electrochemical sensing performance for trace Hg(II) by high activity of Co on CoO-NP/N-RGO surface.. 2022 , 1200, 339607	1
152	Regulating Sodium Deposition through Gradiently-Graphitized Framework for Dendrite-Free Na Metal Anode.. 2022 , e2107199	2
151	Graphene functionalization with metallic Pt nanoparticles: A path to cost-efficient H ₂ production in microbial electrolysis cells. 2022 ,	0
150	Sensitive detection of trace level Cd (II) triggered by chelation enhanced fluorescence (CHEF) "turn on": Nitrogen-doped graphene quantum dots (N-GQDs) as fluorometric paper-based sensor.. 2022 , 242, 123305	3
149	Synthesis of single-atom dispersed Co-NC catalytic materials in supercritical CO ₂ environment with inorganic salt precursor. 2022 , 59, 101948	0
148	Carboxylated nanocellulose dispersed nitrogen doped graphene nanosheets and sodium dodecyl sulfate modified electrochemical sensor for the simultaneous determination of paracetamol and naproxen sodium. 2022 , 194, 110961	2

147	Electrochemical CO ₂ conversion to fuels on metal-free N-doped carbon-based materials: functionalities, mechanistic, and techno-economic aspects. 2022 , 24, 100838	0
146	A new strategy for plasma-catalytic reduction of NO to N ₂ on the surface of modified Bi ₂ MoO ₆ . 2022 , 440, 135754	0
145	Physical and Chemical Sensors on the Basis of Laser-Induced Graphene: Mechanisms, Applications, and Perspectives. 2021 ,	9
144	Eliminating the Galvanic Corrosion Effect of Graphene Coating by an Accurate and Rapid Self-Assembling Defect Healing Approach. 2022 , 32, 2110264	1
143	Porous Carbon Nanofibers Derived from Silk Fibroin through Electrospinning as N-Doped Metal-Free Catalysts for Hydrogen Evolution Reaction in Acidic and Alkaline Solutions.. 2021 ,	1
142	Substrate Engineering-Tailored Fabrication of Aligned Graphene Nanoribbon Arrays: Implications for Graphene Electronic Devices. 2021 , 4, 13838-13847	0
141	Low-Dimensional InSe Compounds: From Material Preparations to Device Applications. 2021 ,	9
140	Two-Dimensional Field-Effect Transistor Sensors: The Road toward Commercialization.. 2022 ,	9
139	Nitrogen-doping effects on few-layer graphene as an anode material for Lithium-ion batteries. 2022 , 103498	1
138	Inhibited Surface Diffusion of High-Entropy Nano-Alloys for the Preparation of 3D Nanoporous Graphene with High Amounts of Single Atom Dopants. 978-986	0
137	Data_Sheet_1.PDF. 2020 ,	
136	N-Doped Graphene Film Prepared by Rapid Thermal Shock for Ultra-Sensitive Temperature Reading.	
135	Reversible and irreversible functionalization of graphene. 2022 , 157-189	
134	Structures, properties, and applications of nitrogen-doped graphene. 2022 , 211-248	
133	Enhancing the electronic properties of the graphene-based field-effect transistor via chemical doping of KBr. 2022 , 33, 12416	1
132	Direct Plasma-Enhanced-Chemical-Vapor-Deposition Syntheses of Vertically Oriented Graphene Films on Functional Insulating Substrates for Wide-Range Applications. 2202026	0
131	Engineering of Chemical Vapor Deposition Graphene Layers: Growth, Characterization, and Properties. 2202584	1
130	Laser-scribed Graphene Electrodes Functionalized with Nafion/FeO Nanohybrids for the Ultrasensitive Detection of Neurotoxin Drug Cloiquinol.. 2022 , 7, 15936-15950	1

- 129 Structural and Chemical Peculiarities of Nitrogen-Doped Graphene Grown Using Direct Microwave Plasma-Enhanced Chemical Vapor Deposition. **2022**, 12, 572
- 128 Beam-driven dynamics of aluminium dopants in graphene. 1
- 127 Work Function Describes the Electrocatalytic Activity of Graphite for Vanadium Oxidation. 6007-6015 1
- 126 A powerful approach to develop nitrogen-doped graphene sheets: theoretical and experimental framework. 1
- 125 Multifunctional boron-doped carbon fiber electrodes synthesized by electrospinning for supercapacitors, dye-sensitized solar cells, and photocapacitors. **2022**, 31, 101983 0
- 124 Few-layer graphene as an additive in negative electrodes for lead-acid batteries. **2022**, 753, 139273 0
- 123 Tetrabenzo[b,de,gh,j][1,10]phenanthroline:a nitrogen-doped nanographene as a selective metal cation and proton fluorophore.
- 122 Cuncn Derived Cu-Based/Cxny Catalysts for Highly Selective Co2 Electroreduction to Hydrocarbons.
- 121 Improvement of electromagnetic interference properties of 3D few-layer graphene composite by means of freeze-drying. **2022**,
- 120 Nitrogen-Rich Carbonaceous Materials for Advanced Oxygen Electrocatalysis: Synthesis, Characterization, and Activity of Nitrogen Sites. 2204137 4
- 119 Facile and scalable fabrication of sub-micro MnS@nitrogen-sulfur-codoped-carbon composites for high-performance lithium-ion half and full-cell batteries.
- 118 A Highly Sensitive Electrochemical Sensor for Cd²⁺ Detection Based on Prussian Blue-PEDOT-Loaded Laser-Scribed Graphene-Modified Glassy Carbon Electrode. **2022**, 10, 209 0
- 117 Modifying electronic and magnetic properties of the $\text{E}5\text{b}$ monolayer by doping with III-, IV-, and V-group atoms. **2022**, 142, 115315
- 116 Hierarchical hybrid architectures assembled from carbon coated Li₃VO₄ and in-situ generated N-doped graphene framework towards superior lithium storage. **2022**, 918, 165668 0
- 115 Oxygen reduction reaction by metal-free catalysts. **2022**, 241-275
- 114 N-Doped Carbon-Coated Cu₂O Nanowire Arrays on Copper Foam for Rapid and Stable Water Disinfection. **2022**, 0
- 113 High-Quality N-Doped Graphene with Controllable Nitrogen Bonding Configurations Derived from Ionic Liquids.
- 112 Band gap formation of 2D materialin graphene: Future prospect and challenges. **2022**, 100474 1

111	Rectifying Performance Induced by B/P, B/As, and B/Sb Co-doped Armchair Graphene Nanoribbons P-N Junction: A DFT Investigation. 2022 , 78, 13-26	
110	Construction of multilevel network structured carbon nanofiber counter electrode and back interface engineering in all inorganic HTL-free perovskite solar cells. 2022 , 648, 129420	1
109	Graphene-based nanocomposites and nanohybrids for the abatement of agro-industrial pollutants in aqueous environments. 2022 , 308, 119557	2
108	Regulation of structural and terahertz properties of TiC nanoparticles by carbon-coating and nitrogen-doping. 2022 , 169, 110825	0
107	Carbon-dot doped, transfer-free, low-temperature, high mobility graphene using microwave plasma CVD. 2022 , 12, 20610-20617	1
106	Configuration Sensitivity of Electrocatalytic Oxygen Reduction Reaction on Nitrogen-Doped Graphene. 2022 , 13, 6187-6193	
105	Doping of Graphene Films: Open the way to Applications in Electronics and Optoelectronics. 2203179	4
104	Influence of N-doping on dielectric properties of carbon-coated copper nanocomposites in the microwave and terahertz ranges. 2022 ,	
103	Supercapacitor performance of nitrogen doped graphene synthesized via DMF assisted single-step solvothermal method. 2022 , 34, 100400	2
102	Recent Developments in Chemical Doping of Graphene using Experimental Approaches and Its Applications. 2200259	0
101	Heteroatom-Doped Porous Carbon-Based Nanostructures for Electrochemical CO ₂ Reduction. 2022 , 12, 2379	0
100	Co-Precipitation Synthesis of Co ₃ [Fe(CN) ₆] ₂ ·10H ₂ O@rGO Anode Electrode for Lithium-Ion Batteries. 2022 , 15, 4705	
99	Powder Metallurgy Templates Methods. 2022 , 95-121	
98	N-doped graphene film prepared by rapid thermal shock for ultra-sensitive temperature reading. 2022 , 600, 154117	
97	Heteroatom-Modified Carbon Materials and Their Use as Supports and Electrocatalysts in Proton Exchange Membrane Fuel Cells (A Review). 2022 , 58, 529-561	
96	An In-Depth Exploration of the Electrochemical Oxygen Reduction Reaction (ORR) Phenomenon on Carbon-Based Catalysts in Alkaline and Acidic Mediums. 2022 , 12, 791	1
95	Full life cycle exposure of plants to nanomaterials: impact on productivity. 2022 , 1-48	
94	Preparation of sulfur-doped graphenes by Yucel's method and their corresponding polylactide-based nanocomposites. 2022 , 139,	

93	Fabrication of Binderless Electrodes via Non-destructive Electrochemical Oxidation/Reduction of Graphite Sheets using BF ₄ Salts. 2022 , 141087	2
92	Potential hydrogen storage materials from Li decorated N-doped Me-graphene.	
91	Review of H ₂ S selective oxidation over carbon-based materials at low temperature: from pollutant to energy storage materials. 2022 , 37, 675-694	1
90	Insight Into Heterogeneous Electrocatalyst Design Understanding for the Reduction of Carbon Dioxide. 2201461	1
89	Graphene-based lithium-ion battery anode materials manufactured by mechanochemical ball milling process: A review and perspective. 2022 , 110232	3
88	Nitrogen-tailored quasiparticle energy gaps of polyynes.	
87	A review of heteroatomic doped two-dimensional materials as electrocatalysts for hydrogen evolution reaction. 2022 ,	1
86	Activating multisite high-entropy alloy nanocrystals via enriching Mpyridinic Nπ bonds for superior electrocatalytic hydrogen evolution. 2022 ,	1
85	Influence of growth parameters on the dopant configuration of nitrogen-doped graphene synthesized from phthalocyanine molecules. 2022 , 33, 19361-19375	
84	Reduction time effect on the dielectric characteristics of reduced-graphene-oxide--encapsulated barium titanate powder fillers. 2022 , 199, 23-32	
83	Ni ₃ Sn ₂ /nitrogen-doped graphene composite with chemisorption and electrocatalysis as advanced separator modifying material for lithium sulfur batteries. 2022 , 628, 896-910	1
82	Self-assembled 3D Fe ₃ O ₄ /N-Doped graphene aerogel composite for large and fast lithium storage with an excellent cycle performance. 2022 , 922, 116763	0
81	A critical review on polyimide derived carbon materials for high-performance supercapacitor electrodes. 2022 , 55, 105667	1
80	Crumpled graphene epoxy nanocomposites modified with polydopamine for advanced semiconductor packaging applications. 2022 , 230, 109709	0
79	The O-doped layer under electron irradiation induced high sensitivity simultaneous electrochemical determination of colorants in the graphene intercalated carbon film. 2022 , 129, 109356	0
78	Microwave assisted hydrothermal synthesis of N doped graphene for supercapacitor applications. 2022 , 129, 109373	0
77	CuNCN derived Cu-based/C _x N _y catalysts for highly selective CO ₂ electroreduction to hydrocarbons. 2023 , 320, 121948	1
76	Cobalt Clusters in Superior Thin G-C ₃ N ₄ Nanosheets for Enhanced H ₂ /H ₂ O ₂ Generation and No Removal.	0

75	Various defects in graphene: a review. 2022 , 12, 21520-21547	5
74	Recent advances in novel graphene: new horizons in renewable energy storage technologies. 2022 , 10, 11472-11531	1
73	Graphene Quantum Dots. 2022 , 47-73	0
72	Review on recent applications of Nitrogen-Doped Carbon materials in CO ₂ capture and energy conversion and storage.	1
71	An Overview of Coating Processes on Metal Substrates Based on Graphene-Related Materials for Multifarious Applications. 2022 , 61, 13763-13786	0
70	Graphene: A future science material for water treatment. 2022 , 13, 358-368	0
69	Study and Application of Molecularly Imprinted Electrochemical Sensor Based on AuNPs/N-GR@CS for Highly Selective Recognition of Trace Hyperoside.	0
68	A fundamental study of improving thermal interface connection by using silane modified, in-situ formed silver-graphene fillers in epoxy polymers for future semiconductor device packaging. 2022 , 109759	0
67	Metal-organic coordination polymers-derived ultra-small MoC nanodot/N-doped carbon combined with CdS: a hollow Z-type catalyst for stable and efficient H ₂ production/CO ₂ reduction. 2022 , 155176	0
66	Docking studies and thiourea-mediated reduced graphene oxide nanosheets' larvicidal efficacy against <i>Culex quinquefasciatus</i> . 2022 , 242, 108391	0
65	Melamine-graphene epoxy nanocomposite based die attach films for advanced 3D semiconductor packaging applications. 2022 , 14, 15193-15202	0
64	Manufacturing and Measuring Techniques for Graphene-Silicone-Based Strain Sensors.	0
63	Graphene as the ultra-transparent conductive layer in developing the nanotechnology-based flexible smart touchscreens. 2022 , 111899	0
62	Preparing Co/N-Doped Carbon as Electrocatalyst toward Oxygen Reduction Reaction via the Ancient Pharaoh's Snakes Reaction. 2022 , 8, 150	0
61	Boosted solar water photoreduction by conjugated polymer-mediated tandem charge transfer. 2022 ,	0
60	The preparation of bifunctional Co-N co-doped carbon with bamboo-like hollow tubular as an efficient electrocatalyst for oxygen reduction and methanol oxidation reaction. 2022 , 926, 116911	0
59	Cobalt clusters on g-C ₃ N ₄ nanosheets for enhanced H ₂ /H ₂ O ₂ generation and NO removal. 2022 , 10, 108747	0
58	Ultralight N-doped platanus acerifolia biomass carbon microtubes/RGO composite aerogel with enhanced mechanical properties and high-performance microwave absorption. 2023 , 202, 194-203	0

57	Diverse electronic structures governed by N-substitution in stable two-dimensional dumbbell carbonitrides. 2023 , 609, 155463	0
56	Progress in the preparation, application, and recycling of black phosphorus. 2023 , 311, 137161	0
55	Surface acoustic wave sensors for NO ₂ detection based on sulfur-doped graphene. 2022 ,	0
54	Degradation of phenolic pollutants by persulfate-based advanced oxidation processes: metal and carbon-based catalysis. 2022 ,	0
53	Performance of N-Doped Graphene Nano Sheets on Electrode of Primary Battery Cells.	0
52	Flexible Devices Based on Soybean-Derived High-Quality N-Doped Graphene. 2022 , 14, 1050-1055	0
51	Chemical modification of graphene for atomic-scale catalyst supports.	0
50	Graphene/Polyaniline nanocomposite as efficient electrocatalyst for oxygen reduction reaction for fuel cells. 2022 , 110192	0
49	Advances in platinum-based and platinum-free oxygen reduction reaction catalysts for cathodes in direct methanol fuel cells. 10,	1
48	Facile Preparations of Electrochemically Exfoliated N-Doped Graphene Nanosheets from Spent Zn-Carbon Primary Batteries Recycled for Supercapacitors Using Natural Sea Water Electrolytes. 2022 , 15, 8650	0
47	Exploring the underlying oxygen reduction reaction electrocatalytic activities of pyridinic-N and pyrrolic-N doped graphene quantum dots. 2023 , 535, 112880	1
46	Thermodynamic Mechanism of Controllable Growth of Two-Dimensional Uniformly Ordered Boron Doped Graphene.	0
45	Theoretical exploration on the structural, electronic and optical properties of g-C ₃ N ₄ /C ₃ N heterostructures.	0
44	Enhanced Acetaminophen Electrochemical Sensing Based on Nitrogen-Doped Graphene. 2022 , 23, 14866	0
43	Molecular Doping of CVD-Graphene Surfaces by Perfluoroalkyl-Substituted Perylene Diimides Derivatives. 2022 , 12, 4239	0
42	Symmetric Supercapacitor Based on Nitrogen-Doped and Plasma-Functionalized 3D Graphene. 2022 , 8, 258	1
41	Non-Metal-Doped Porous Carbon Nitride Nanostructures for Photocatalytic Green Hydrogen Production. 2022 , 23, 15129	1
40	Electrochemical Performance and Conductivity of N-Doped Carbon Nanotubes Annealed under Various Temperatures as Cathode for Lithium-Ion Batteries. 2022 , 12, 2166	0

- 39 Long-Range Magnetic Order in Nickel Hydroxide-Functionalized Graphene Quantum Dots. **2022**, 13, 11536-11542
- 38 Tuning the electronic and magnetic properties of MgO monolayer by nonmetal doping: A first-principles investigation. **2023**, 105422 ○
- 37 Graphene Nanosheets Stabilized by P3HT Nanoparticles for Printable Metal-Free Electrocatalysts for Oxygen Reduction. ○
- 36 Effective carrier doping and quantum capacitance manipulation of graphene through two-dimensional solid electrolytes of Scl_3 and YBr_3 . **2023**, 156443 ○
- 35 Kinetic relevancy of surface defects and heteroatom functionalities of carbon electrodes for the vanadium redox reactions in flow batteries. **2023**, 557, 232612 ○
- 34 Preparation of microfiber composite nitrogen doped carbon nanotube membranes and their degradation properties of phenol in the structured fixed bed. **2023**, 11, 109255 ○
- 33 Fabrication of Si/N-doped carbon nanotube composite via spray drying followed by catalytic chemical vapor deposition. **2023**, 939, 168743 ○
- 32 Toward a Mechanistic Understanding of the Formation of 2D-GaN_x in Epitaxial Graphene. **2023**, 17, 230-239 ○
- 31 Synthesis of N-Doped Few-Layer Graphene through Shock-Induced Carbon Fixation from CO₂. **2023**, 13, 109 ○
- 30 Comprehensive Review on Nitrogen-Doped Graphene: Structure Characterization, Growth Strategy, and Capacitive Energy Storage. **2023**, 37, 902-918 ○
- 29 Growth of Low-Defect Nitrogen-Doped Graphene Film Using Condensation-Assisted Chemical Vapor Deposition Method. **2023**, 16, 1120 ○
- 28 CO₂ adsorption enhancement and charge transfer characteristics for composite graphene doped with atoms at defect sites. **2023**, 29, ○
- 27 Reducing Carbonaceous Salts for Facile Fabrication of Monolayer Graphene. 2201596 1
- 26 Synthesis and applications of carbon-polymer composites and nanocomposite functional materials. **2023**, 71-105 ○
- 25 Exploring 2D materials at surfaces through synchrotron-based core-level photoelectron spectroscopy. **2023**, 100586 ○
- 24 Carbon-based materials as anode materials for lithium-ion batteries and lithium-ion capacitors: A review. **2023**, 61, 106716 1
- 23 A comparative investigation into the thermoelectric properties of doped graphene nanoribbons in different doping manners. **2023**, 135, 109889 ○
- 22 Computational insight into bilayer NC7 anode material for Li/Na/Mg-ion batteries. **2023**, 225, 112194 ○

- 21 Nanoporous N/O:sp²-C films functionalized at nonbonding electrons of a biogenic husk (green chili) with deep UV-visible light absorption-emission for photocatalysis and other applications. **2023**, 38, 102824 ○
- 20 Electrospun amorphous CoOx/C composite nanofibers doped with heteroatoms for symmetric supercapacitors. **2023**, 341, 127735 ○
- 19 Fabrication, energy band engineering, and strong correlations of two-dimensional van der Waals moiré superlattices. **2023**, 50, 101829 ○
- 18 Ultrathin and highly flexible supercapacitor based on chemical vapor deposited nitrogen-doped bernal graphene for wearable electronics. **2023**, 208, 227-237 ○
- 17 Synthesis of Highly Active and Stable Carbon by a Soft-Template Hydrothermal Route as Pt Substrate for Oxygen Reduction Reaction. **2023**, 15, ○
- 16 Thiourea-assisted nitrogen and sulfur dual-doped carbon nanofibers for enhanced supercapacitive energy storage. **2023**, 34, ○
- 15 Graphene-based catalysts for carbon monoxide oxidation: Experimental and theoretical insights. **2023**, ○
- 14 A Density Functional Study on Adrucil Drug Sensing Based on the Rh-Decorated Gallium Nitride Nanotube. **2023**, 52, 3156-3164 ○
- 13 Porphyrin-Conjugated Microporous Polymer Nanospheres as Electrocatalysts for Nitrobenzene Detection and Oxygen Evolution Reaction. **2023**, 6, 3226-3235 ○
- 12 Regulation of the Electronic Properties of Graphene via Organic Molecular Intercalation. **2023**, 35, 2125-2132 ○
- 11 Facile and Tunable Synthesis of Nitrogen-Doped Graphene with Different Microstructures for High-Performance Supercapacitors. **2023**, 5, 944-954 ○
- 10 One-step pyrolysis synthesis of ternary (P,S,N)-doped graphene as an efficient metal-free electrocatalyst for the oxygen reduction reaction. **2023**, 52, 4389-4397 ○
- 9 CoPyridinic-N Bond Constructed at the Interface of CoxP and N-Doped Carbon to Effectively Facilitate Oxygen Reduction. **2023**, 11, 5238-5249 ○
- 8 Facile preparation of conductive carbon-based membranes on dielectric substrates. 11, ○
- 7 Synthesis of carbon materials with extremely high pyridinic-nitrogen content and controlled edges from aromatic compounds with highly symmetric skeletons. ○
- 6 N-doped carbon hollow sphere reservoirs containing Zn²⁺-mercaptobenzoxazole with pH-responsive function to fabricate a high-performance corrosion protective epoxy coating for aluminum alloy. **2023**, 111202 ○
- 5 A review of nitrogen-doped carbon materials for lithium-ion battery anodes. **2023**, 38, 247-278 ○
- 4 Honeycomb-kagome FSL-graphene: A carbon allotrope as an ultra-high capacity anode material for fast-rechargeable sodium-ion battery. **2023**, 122, ○

- 3 Facile synthesis and tunable microwave absorption properties of N-doped C modified SiC nanoparticles. **2023**, 34,
- 2 Single-atom Cu anchored on N-doped graphene/carbon nitride heterojunction for enhanced photocatalytic H₂O₂ production. **2023**, 161, 192-200
- 1 Effect of precursor molecular structure while synthesizing hetero-carbon nanomaterials via solution plasma process. **2023**, 47, 66-69