

CITATION REPORT

List of articles citing

Nitrogen-doped carbon nanostructures and their composites as catalytic materials for proton exchange membrane fuel cell

DOI: 10.1016/j.apcatb.2007.09.047

Applied Catalysis B: Environmental, 2008, 79, 89-99.

Source: <https://exaly.com/paper-pdf/43491974/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
679	The influence of the electrochemical stressing (potential step and potential-static holding) on the degradation of polymer electrolyte membrane fuel cell electrocatalysts. <i>Journal of Power Sources</i> , 2008 , 185, 280-286	8.9	56
678	Enhanced methanol electro-oxidation activity of PtRu catalysts supported on heteroatom-doped carbon. <i>Electrochimica Acta</i> , 2008 , 53, 7622-7629	6.7	125
677	Carbon Alloy Catalysts: Active Sites for Oxygen Reduction Reaction. 2008 , 112, 14706-14709		441
676	Proteins Induced Formation of Hydrothermal Nitrogen Doped Carbons. 2009 , 1219, 4051		
675	The Role of Nanostructure in Improving the Performance of Electrodes for Energy Storage and Conversion. 2009 , 2009, 3851-3878		128
674	X-ray absorption analysis of nitrogen contribution to oxygen reduction reaction in carbon alloy cathode catalysts for polymer electrolyte fuel cells. <i>Journal of Power Sources</i> , 2009 , 187, 93-97	8.9	414
673	Nitrogen-Containing Carbon Nanostructures as Oxygen-Reduction Catalysts. 2009 , 52, 1566-1574		189
672	High oxygen-reduction activity of silk-derived activated carbon. 2009 , 11, 376-378		97
671	3-D composite electrodes for high performance PEM fuel cells composed of Pt supported on nitrogen-doped carbon nanotubes grown on carbon paper. 2009 , 11, 438-441		136
670	Chelating agent assisted microwave synthesis of carbon supported Pt nanoparticles for low temperature polymer electrolyte fuel cells. 2009 , 11, 1792-1795		12
669	The corrosion of PEM fuel cell catalyst supports and its implications for developing durable catalysts. <i>Electrochimica Acta</i> , 2009 , 54, 3109-3114	6.7	92
668	PtRu nanoparticles supported on nitrogen-doped multiwalled carbon nanotubes as catalyst for methanol electrooxidation. <i>Electrochimica Acta</i> , 2009 , 54, 4208-4215	6.7	230
667	Iron porphyrin-based cathode catalysts for PEM fuel cells: Influence of pyrolysis gas on activity and stability. <i>Electrochimica Acta</i> , 2009 , 54, 6622-6630	6.7	95
666	Surface chemistry, porous texture, and morphology of N-doped carbon xerogels. 2009 , 25, 466-70		78
665	Highly Active Nitrogen-Doped Carbon Nanotubes for Oxygen Reduction Reaction in Fuel Cell Applications. 2009 , 113, 21008-21013		322
664	Co oxidation accompanied by degradation of Pt-Co alloy cathode catalysts in polymer electrolyte fuel cells. 2009 , 11, 8226-30		21
663	First-principles calculation of the electronic properties of graphene clusters doped with nitrogen and boron: Analysis of catalytic activity for the oxygen reduction reaction. 2009 , 80,		169

662	Structural evolution and electrocatalytic application of nitrogen-doped carbon shells synthesized by pyrolysis of near-monodisperse polyaniline nanospheres. 2009 , 19, 5985		91
661	CN _x nanofibers converted from polypyrrole nanowires as platinum support for methanol oxidation. 2009 , 2, 224-229		196
660	Improving PEM fuel cell catalyst activity and durability using nitrogen-doped carbon supports: observations from model Pt/HOPG systems. 2009 , 19, 7830		143
659	Novel catalyst support materials for PEM fuel cells: current status and future prospects. 2009 , 19, 46-59		563
658	Composition, surface segregation, and electrochemical properties of binary PtM/C (M = Co, Ni, Cr) catalysts. 2010 , 46, 1011-1020		10
657	Ammonia-Treated Ordered Mesoporous Carbons as Catalytic Materials for Oxygen Reduction Reaction. 2010 , 22, 2178-2180		326
656	Nitrogen-doped graphene and its electrochemical applications. 2010 , 20, 7491		934
655	Nitrogen-doped graphene and its application in electrochemical biosensing. 2010 , 4, 1790-8		1777
654	Chemical functionalization of pyridine-like and porphyrin-like nitrogen-doped carbon (CN _x) nanotubes with transition metal (TM) atoms: a theoretical study. 2010 , 127, 727-733		49
653	Electrocatalytic activity of nitrogen doped carbon nanotubes with different morphologies for oxygen reduction reaction. <i>Electrochimica Acta</i> , 2010 , 55, 4799-4804	6.7	92
652	Highly stable Pt and PtPd hybrid catalysts supported on a nitrogen-modified carbon composite for fuel cell application. <i>Journal of Power Sources</i> , 2010 , 195, 445-452	8.9	73
651	Oxygen-reduction activity of silk-derived carbons. <i>Journal of Power Sources</i> , 2010 , 195, 5840-5847	8.9	59
650	Nitrogen-doped mesoporous carbon for energy storage in vanadium redox flow batteries. <i>Journal of Power Sources</i> , 2010 , 195, 4375-4379	8.9	276
649	Electrocatalytic activity of iridium oxide nanoparticles coated on carbon for oxygen reduction as cathode catalyst in polymer electrolyte fuel cell. <i>Journal of Power Sources</i> , 2010 , 195, 5938-5941	8.9	32
648	Enhancement of oxygen reduction activity by sequential impregnation of Pt and Pd on carbon support. 2010 , 27, 1689-1694		10
647	Impact of nitrogen doping of carbon nanospheres on the nickel-catalyzed hydrogenation of butyronitrile. 2010 , 269, 242-251		53
646	One-step hydrothermal synthesis of nitrogen-doped nanocarbons: albumine directing the carbonization of glucose. 2010 , 3, 246-53		107
645	Metal-free heterogeneous catalysis for sustainable chemistry. 2010 , 3, 169-80		500

644	Graphene Based Electrochemical Sensors and Biosensors: A Review. 2010 , 22, 1027-1036		2430
643	Ionic liquids as precursors for nitrogen-doped graphitic carbon. <i>Advanced Materials</i> , 2010 , 22, 87-92	24	527
642	Nitrogen-Doped Ordered Mesoporous Graphitic Arrays with High Electrocatalytic Activity for Oxygen Reduction. <i>Angewandte Chemie</i> , 2010 , 122, 2619-2623	3.6	426
641	Nitrogen-doped ordered mesoporous graphitic arrays with high electrocatalytic activity for oxygen reduction. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 2565-9	16.4	1134
640	Electroreduction of oxygen on nitrogen-doped carbon nanotube modified glassy carbon electrodes in acid and alkaline solutions. <i>Journal of Electroanalytical Chemistry</i> , 2010 , 648, 169-175	4.1	168
639	Controlled growth and modification of vertically-aligned carbon nanotubes for multifunctional applications. 2010 , 70, 63-91		104
638	Functionalizing carbon nanotubes for proton exchange membrane fuel cells electrode. <i>Journal of Power Sources</i> , 2010 , 195, 6255-6261	8.9	90
637	Sustainable nitrogen-doped carbon latexes with high electrical and thermal conductivity. 2010 , 51, 4540-4546		46
636	Carbon spheres. 2010 , 70, 1-28		246
635	Iron porphyrin-based cathode catalysts for polymer electrolyte membrane fuel cells: Effect of NH ₃ and Ar mixtures as pyrolysis gases on catalytic activity and stability. <i>Electrochimica Acta</i> , 2010 , 55, 6450-6461	6.7	101
634	Electronic structure of Pt ₁₀₀ cathode catalysts in membrane electrolyte assembly observed by X-ray absorption fine structure spectroscopy with different probing depth. 2010 , 181, 239-241		
633	Problems and perspectives in nanostructured carbon-based electrodes for clean and sustainable energy. 2010 , 150, 151-162		65
632	Nitrogen doped carbon nanotubes and their impact on the oxygen reduction reaction in fuel cells. <i>Carbon</i> , 2010 , 48, 3057-3065	10.4	323
631	Sustainable nitrogen-doped carbonaceous materials from biomass derivatives. <i>Carbon</i> , 2010 , 48, 3778-3787		332
630	Oxygen Reduction Reaction Activity of Vulcan XC-72 Doped with Nitrogen under NH ₃ Gas in Acid Media. 2010 , 157, B1701		22
629	High Pt Utilization Electrodes for Polymer Electrolyte Membrane Fuel Cells by Dispersing Pt Particles Formed by a Preprecipitation Method on Carbon Polished with Polypyrrole. 2010 , 114, 14654-14661		55
628	Enhancement of Pt and Pt-alloy fuel cell catalyst activity and durability via nitrogen-modified carbon supports. 2010 , 3, 1437		521
627	Pt Nanoparticles Supported on Nitrogen-Doped Porous Carbon Nanospheres as an Electrocatalyst for Fuel Cells. 2010 , 22, 832-839		246

626	A detailed view on the polycondensation of ionic liquid monomers towards nitrogen doped carbon materials. 2010 , 20, 6746		222
625	Facile and controllable electrochemical reduction of graphene oxide and its applications. 2010 , 20, 743-748		702
624	Metal-free and electrocatalytically active nitrogen-doped carbon nanotubes synthesized by coating with polyaniline. 2010 , 2, 981-7		97
623	Metal-Free Carbon Nanomaterials Become More Active than Metal Catalysts and Last Longer. 2010 , 1, 2165-2173		477
622	Nitrogen-Doped Carbon Nanotubes as Platinum Catalyst Supports for Oxygen Reduction Reaction in Proton Exchange Membrane Fuel Cells. 2010 , 114, 21982-21988		145
621	Enhanced Catalytic Activity of Carbon Alloy Catalysts Codoped with Boron and Nitrogen for Oxygen Reduction Reaction. 2010 , 114, 8933-8937		66
620	Sputter deposition of highly dispersed platinum nanoparticles on carbon nanotube arrays for fuel cell electrode material. <i>Diamond and Related Materials</i> , 2010 , 19, 595-598	3-5	39
619	Nitrogen Doped Carbon Nanotubes from Organometallic Compounds: A Review. 2010 , 3, 2141-2171		83
618	Excellent performance of Pt0 on high nitrogen-containing carbon nanotubes using aniline as nitrogen/carbon source, dispersant and stabilizer. 2010 , 46, 7628-30		33
617	Structural Insights on Nitrogen-Containing Hydrothermal Carbon Using Solid-State Magic Angle Spinning ¹³ C and ¹⁵ N Nuclear Magnetic Resonance. 2011 , 115, 8976-8982		85
616	Stabilization of embedded Pt nanoparticles in the novel nanostructure carbon materials. 2011 , 3, 115-8		34
615	Nitrogen Doping Effects on Carbon Nanotubes and the Origin of the Enhanced Electrocatalytic Activity of Supported Pt for Proton-Exchange Membrane Fuel Cells. 2011 , 115, 3769-3776		211
614	Effect of Hydrogen Termination on Carbon K-Edge X-ray Absorption Spectra of Nanographene. 2011 , 115, 5392-5403		40
613	Nitrogen-promoted self-assembly of N-doped carbon nanotubes and their intrinsic catalysis for oxygen reduction in fuel cells. 2011 , 5, 1677-84		200
612	Microporous sulfur-doped carbon from thienyl-based polymer network precursors. 2011 , 47, 8283-5		140
611	Design and synthesis of nitrogen-containing calcined polymer/carbon nanotube hybrids that act as a platinum-free oxygen reduction fuel cell catalyst. 2011 , 47, 6843-5		37
610	Fabrication and electrocatalytic performance of highly stable and active platinum nanoparticles supported on nitrogen-doped ordered mesoporous carbons for oxygen reduction reaction. 2011 , 21, 12489		66
609	Micro/mesoporous conducting carbonized polyaniline 5-sulfosalicylate nanorods/nanotubes: Synthesis, characterization and electrocatalysis. 2011 , 161, 2179-2184		32

608	Preparation and characterization of PtRu nanoparticles supported on nitrogen-doped porous carbon for electrooxidation of methanol. 2011 , 3, 3824-30		49
607	Electrocatalytic Activity and Stability of Pt clusters on State-of-the-Art Supports: A Review. 2011 , 53, 256-336		103
606	Enhanced electrocatalytic performance of functionalized carbon nanotube electrodes for oxygen reduction in proton exchange membrane fuel cells. 2011 , 13, 10312-7		30
605	Fuel Cells: Molecular Catalysis. 2011 ,		
604	Fuel Cells: Molecular Catalysis. 2011 ,		
603	Carbon Nanotubes Supported Metal Nanoparticles for the Applications in Proton Exchange Membrane Fuel Cells (PEMFCs). 2011 ,		2
602	Role of residual transition-metal atoms in oxygen reduction reaction in cobalt phthalocyanine-based carbon cathode catalysts for polymer electrolyte fuel cell. <i>Journal of Power Sources</i> , 2011 , 196, 8346-8351	8.9	36
601	Ultrasonic synthesis of nitrogen-doped carbon nanofibers as platinum catalyst support for oxygen reduction. <i>Journal of Power Sources</i> , 2011 , 196, 9356-9360	8.9	26
600	Oxygen reduction reaction mechanism on nitrogen-doped graphene: A density functional theory study. 2011 , 282, 183-190		470
599	Nitrogen-containing mesoporous carbons prepared from melamine formaldehyde resins with CaCl ₂ as a template. 2011 , 363, 193-8		44
598	Electrochemical stability of carbon nanofibers in proton exchange membrane fuel cells. <i>Electrochimica Acta</i> , 2011 , 56, 9370-9377	6.7	29
597	Heat-treated platinum nanoparticles embedded in nitrogen-doped ordered mesoporous carbons: Synthesis, characterization and their electrocatalytic properties toward methanol-tolerant oxygen reduction. <i>International Journal of Hydrogen Energy</i> , 2011 , 36, 15060-15067	6.7	39
596	A novel structural design of CN _x -Fe ₃ O ₄ as support to immobilize Pd for catalytic oxidation of formic acid. 2011 , 16, 60-63		27
595	Biscrolling nanotube sheets and functional guests into yarns. 2011 , 331, 51-5		292
594	Pyridinic N doped graphene: synthesis, electronic structure, and electrocatalytic property. 2011 , 21, 8038		795
593	Carbon corrosion characteristics of CN _x nanostructures in acidic media and implications for ORR performance. 2011 , 41, 757-763		20
592	Nitrogen Functionalization of Carbon Black in a Thermo-Convective Plasma Reactor. 2011 , 31, 635-647		2
591	X-ray photoemission spectroscopy analysis of N-containing carbon-based cathode catalysts for polymer electrolyte fuel cells. <i>Journal of Power Sources</i> , 2011 , 196, 1006-1011	8.9	92

590	Effect of the Pt precursor on the morphology and catalytic performance of Pt-impregnated on Pd/C for the oxygen reduction reaction in polymer electrolyte fuel cells. <i>International Journal of Hydrogen Energy</i> , 2011 , 36, 9115-9122	6.7	33
589	Nitrogen-doped carbon nanotubes as a metal catalyst support. 2011 , 1, 67-77		123
588	The chemical composition and bonding structure of amorphous hydrogenated carbon nitride film on aluminum surface deposited by electrodeposition. 2011 , 43, 823-826		5
587	Open-Ended, N-Doped Carbon Nanotube/Graphene Hybrid Nanostructures as High-Performance Catalyst Support. <i>Advanced Functional Materials</i> , 2011 , 21, 999-1006	15.6	331
586	Carbon nanotubes for sustainable energy applications. 2011 , 4, 913-25		78
585	Polymer Electrolyte Fuel Cell Electrodes Grown by Vapor Deposition Techniques. 2011 , 17, 296-304		6
584	Selective Catalysis of the Aerobic Oxidation of Cyclohexane in the Liquid Phase by Carbon Nanotubes. <i>Angewandte Chemie</i> , 2011 , 123, 4064-4068	3.6	63
583	Selective catalysis of the aerobic oxidation of cyclohexane in the liquid phase by carbon nanotubes. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 3978-82	16.4	204
582	Reaction mechanism of aerobic oxidation of alcohols conducted on activated-carbon-supported cobalt oxide catalysts. 2011 , 17, 7112-7		55
581	Perfluorosulfonic acid-functionalized Pt/carbon nanotube catalysts with enhanced stability and performance for use in proton exchange membrane fuel cells. <i>Carbon</i> , 2011 , 49, 82-88	10.4	83
580	Lysine-assisted rapid synthesis of crack-free hierarchical carbon monoliths with a hexagonal array of mesopores. <i>Carbon</i> , 2011 , 49, 3762-3772	10.4	61
579	Self-assembly of Pt nanoparticles on highly graphitized carbon nanotubes as an excellent oxygen-reduction catalyst. <i>Applied Catalysis B: Environmental</i> , 2011 , 102, 372-377	21.8	84
578	Nitrogen doped carbon nanotubes synthesized from aliphatic diamines for oxygen reduction reaction. <i>Electrochimica Acta</i> , 2011 , 56, 1570-1575	6.7	119
577	Nitrogen-doped carbon coated palygorskite as an efficient electrocatalyst support for oxygen reduction reaction. <i>Electrochimica Acta</i> , 2011 , 56, 4526-4531	6.7	16
576	Nitrogen-doped carbon nanotubes as air cathode catalysts in zinc-air battery. <i>Electrochimica Acta</i> , 2011 , 56, 5080-5084	6.7	102
575	Nitrogen-doped carbon nanotubes with high activity for oxygen reduction in alkaline media. <i>International Journal of Hydrogen Energy</i> , 2011 , 36, 2258-2265	6.7	118
574	Non-noble metal oxygen reduction electrocatalysts based on carbon nanotubes with controlled nitrogen contents. <i>Journal of Power Sources</i> , 2011 , 196, 1795-1801	8.9	102
573	Heat-treated 2,2'-bipyridine iron complex supported on polypyrrole-coated carbon for oxygen reduction reaction. 2011 , 17, 304-309		9

572	Electronic Structures of Non-Pt Carbon Alloy Catalysts for Polymer Electrolyte Membrane Fuel Cells Revealed by Synchrotron Radiation Analyses. 2011 , 1318, 1		1
571	Theoretical Investigation on Single-Wall Carbon Nanotubes Doped with Nitrogen, Pyridine-Like Nitrogen Defects, and Transition Metal Atoms. <i>Journal of Nanomaterials</i> , 2012 , 2012, 1-14	3-2	38
570	Enhanced Stability of PtRu Supported on N-Doped Carbon for the Anode of a DMFC. 2012 , 159, F768-F778		17
569	Tuning the catalytic property of nitrogen-doped graphene for cathode oxygen reduction reaction. 2012 , 85,		69
568	Oxygen electrocatalysts for water electrolyzers and reversible fuel cells: status and perspective. 2012 , 5, 9331		415
567	Ordered mesoporous carbon nitrides with graphitic frameworks as metal-free, highly durable, methanol-tolerant oxygen reduction catalysts in an acidic medium. 2012 , 28, 991-6		130
566	Intrinsically sulfur- and nitrogen-co-doped carbons from thiazolium salts. 2012 , 18, 15416-23		72
565	Low Pt Loading High Catalytic Performance of PtFeNi/Carbon Nanotubes Catalysts for CO Preferential Oxidation in Excess Hydrogen I: Promotion Effects of Fe and/or Ni. 2012 , 142, 975-983		12
564	High Electrocatalytic Performance of NH ₃ -Activated Iron-Adsorbed Polyaniline for Oxygen Reduction Reactions. 2012 , 142, 1244-1250		12
563	Tubular shaped composites made from polythiophene covalently linked to Prato functionalized N-doped carbon nanotubes. 2012 , 162, 2307-2315		11
562	Nitrogen-containing carbon nanotubes as cathodic catalysts for proton exchange membrane fuel cells. <i>Diamond and Related Materials</i> , 2012 , 22, 12-22	3-5	43
561	3D hierarchical porous carbons containing numerous nitrogen atoms as catalyst supports for PEMFCs. 2012 , 162, 2337-2341		16
560	Effect of nitrogen-doping concentration in carbon nanotubes on cathodic performance for proton exchange membrane fuel cell. 2012 ,		1
559	Enhanced activity of Pt nano-crystals supported on a novel TiO ₂ @N-doped C nano-composite for methanol oxidation reaction. 2012 , 22, 19718		61
558	Facile synthesis of nitrogen-doped carbonPt nanoparticle hybrids via carbonization of poly([Bvim][Br]-co-acrylonitrile) for electrocatalytic oxidation of methanol. 2012 , 22, 13578		53
557	Enhanced thermal stability of multi-walled carbon nanotubes after coating with polyaniline salt. 2012 , 97, 1405-1414		36
556	Stabilization of high-performance oxygen reduction reaction Pt electrocatalyst supported on reduced graphene oxide/carbon black composite. 2012 , 134, 12326-9		400
555	Formation of active sites for oxygen reduction reactions by transformation of nitrogen functionalities in nitrogen-doped carbon nanotubes. 2012 , 6, 8904-12		479

554	Nanostructured carbon for energy storage and conversion. 2012 , 1, 195-220		797
553	Effect of a nitrogen-doped PtRu/carbon anode catalyst on the durability of a direct methanol fuel cell. <i>Journal of Power Sources</i> , 2012 , 217, 142-151	8.9	36
552	Examination of the electroactive composites containing cobalt nanoclusters and nitrogen-doped nanostructured carbon as electrocatalysts for oxygen reduction reaction. <i>Journal of Power Sources</i> , 2012 , 220, 20-30	8.9	18
551	Electrocatalysis of oxygen reduction reaction on polyaniline-derived nitrogen-doped carbon nanoparticle surfaces in alkaline media. <i>Journal of Power Sources</i> , 2012 , 220, 306-316	8.9	99
550	The Role of Oxygen- and Nitrogen-containing Surface Groups on the Sintering of Iron Nanoparticles on Carbon Nanotubes in Different Atmospheres. <i>ChemCatChem</i> , 2012 , 4, 1997-2004	5.2	32
549	Nanostructured metal-free electrochemical catalysts for highly efficient oxygen reduction. 2012 , 8, 3550-66		518
548	Catalysis in Low-Temperature Fuel Cells [An Overview]. 2012 , 407-438		3
547	Carbon-based Catalyst Support in Fuel Cell Applications. 2012 , 549-581		7
546	Nitrogen-doped carbon xerogel as high active oxygen reduction catalyst for direct methanol alkaline fuel cell. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 19065-19072	6.7	35
545	Nitrogen-doped graphene and its iron-based composite as efficient electrocatalysts for oxygen reduction reaction. 2012 , 6, 9541-50		578
544	Synthesis and Properties of Nitrogen-Doped Mesoporous Carbon Materials Obtained by Templating of SBA-15 with Melamine-Formaldehyde Resin. 2012 , 554-556, 778-782		1
543	Effect of nitrogen doping on hydrogen storage capacity of palladium decorated graphene. 2012 , 28, 7826-33		218
542	Preparation of sulfur-doped microporous carbons for the storage of hydrogen and carbon dioxide. <i>Carbon</i> , 2012 , 50, 5543-5553	10.4	177
541	A one-pot hydrothermal synthesis of sulfur and nitrogen doped carbon aerogels with enhanced electrocatalytic activity in the oxygen reduction reaction. 2012 , 14, 1515		494
540	Carbon Nanotubes and Related Carbonaceous Structures. 2012 , 331-374		4
539	Reduction Reaction by Porphyrin-Based Catalysts for Fuel Cells. 2012 , 3, 238-251		38
538	Carbon nanomaterials for advanced energy conversion and storage. 2012 , 8, 1130-66		1149
537	Graphene as a new carbon support for low-temperature fuel cell catalysts. <i>Applied Catalysis B: Environmental</i> , 2012 , 123-124, 52-68	21.8	327

536	Carbon Modifications and Surfaces for Catalytic Organic Transformations. 2012 , 2, 1267-1284		152
535	Functional Carbon Materials From Ionic Liquid Precursors. 2012 , 213, 1132-1145		91
534	Controllable-Nitrogen Doped Carbon Layer Surrounding Carbon Nanotubes as Novel Carbon Support for Oxygen Reduction Reaction. 2012 , 12, 649-655		19
533	Electrocatalysts for Nonaqueous Lithium-Air Batteries: Status, Challenges, and Perspective. 2012 , 2, 844-857		409
532	Spectroscopy of thin polyaniline films deposited during chemical oxidation of aniline. 2012 , 66,		111
531	Synthesis of nitrogen-doped porous graphitic carbons using nano-CaCO ₃ as template, graphitization catalyst, and activating agent. <i>Carbon</i> , 2012 , 50, 3753-3765	10.4	132
530	Influence of N-doping on the structural and photoluminescence properties of graphene oxide films. <i>Carbon</i> , 2012 , 50, 3799-3806	10.4	63
529	Enhanced methanol oxidation activity of Pt catalyst supported on the phosphorus-doped multiwalled carbon nanotubes in alkaline medium. 2012 , 22, 34-38		28
528	Coals as a novel cathode catalyst for polymer electrolyte fuel cell. 2012 , 94, 204-210		16
527	Pt supported on phosphorus-doped carbon nanotube as an anode catalyst for direct methanol fuel cells. 2012 , 16, 73-76		61
526	Preparation and electrochemical characterization of nitrogen doped graphene by microwave as supporting materials for fuel cell catalysts. <i>Electrochimica Acta</i> , 2012 , 60, 354-358	6.7	101
525	Role of Pt-pyridinic nitrogen sites in methanol oxidation on Pt/polypyrrole-carbon black Catalyst. <i>Journal of Power Sources</i> , 2012 , 197, 44-49	8.9	41
524	Three-dimensional cubic ordered mesoporous carbon (CMK-8) as highly efficient stable Pd electro-catalyst support for formic acid oxidation. <i>Journal of Power Sources</i> , 2012 , 211, 147-153	8.9	52
523	Microporous conducting carbonized polyaniline nanorods: Synthesis, characterization and electrocatalytic properties. 2012 , 152, 50-57		42
522	The carbonization of thin polyaniline films. 2012 , 520, 6088-6094		41
521	Nitrogen doping and vacancy effects on the mechanical properties of graphene: A molecular dynamics study. 2012 , 376, 1146-1153		71
520	Hollow nitrogen-containing core/shell fibrous carbon nanomaterials as support to platinum nanocatalysts and their TEM tomography study. 2012 , 7, 165		23
519	Catalytic Twist-Spun Yarns of Nitrogen-Doped Carbon Nanotubes. <i>Advanced Functional Materials</i> , 2012 , 22, 1069-1075	15.6	33

518	Hydrothermal ammoniated treatment of PAN-graphite felt for vanadium redox flow battery. 2012 , 16, 579-585		116
517	Catalytic activity of Pt anchored onto graphite nanofiber-poly (3,4-ethylenedioxythiophene) composite toward oxygen reduction reaction in polymer electrolyte fuel cells. <i>Electrochimica Acta</i> , 2013 , 108, 95-103	6.7	32
516	Synthesis of high carbon content microspheres using 2-step microwave carbonization, and the influence of nitrogen doping on catalytic activity. <i>Carbon</i> , 2013 , 60, 307-316	10.4	21
515	Doping carbons beyond nitrogen: an overview of advanced heteroatom doped carbons with boron, sulphur and phosphorus for energy applications. 2013 , 6, 2839		1320
514	Pt nanoclusters stabilized by N-doped carbon nanofibers for hydrogen production from formic acid. 2013 , 307, 94-102		110
513	Ultrahigh oxygen reduction activity of Pt/nitrogen-doped porous carbon microspheres prepared via spray-drying. <i>Journal of Power Sources</i> , 2013 , 229, 58-64	8.9	28
512	Temperature controlled surface chemistry of nitrogen-doped mesoporous carbon and its influence on Pt ORR activity. 2013 , 464-465, 233-242		25
511	Electrochemical and oxygen reduction properties of pristine and nitrogen-doped few layered graphene nanoflakes (FLGs). 2013 , 17, 2139-2149		28
510	A First-Principles Study of the Role of Quaternary-N Doping on the Oxygen Reduction Reaction Activity and Selectivity of Graphene Edge Sites. 2013 , 56, 1623-1633		51
509	Research progress in metal-free carbon-based catalysts. 2013 , 34, 508-523		91
508	Phosphorus-doped porous carbons as efficient electrocatalysts for oxygen reduction. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 9889	13	193
507	Ultrahigh methanol electro-oxidation activity of PtRu nanoparticles prepared on TiO ₂ -embedded carbon nanofiber support. <i>Journal of Power Sources</i> , 2013 , 242, 280-288	8.9	65
506	Influence of ethanol on the chain-ordering of carbonised polyaniline. 2013 , 67,		11
505	25th anniversary article: "Cooking carbon with salt": carbon materials and carbonaceous frameworks from ionic liquids and poly(ionic liquid)s. <i>Advanced Materials</i> , 2013 , 25, 5838-54	24	154
504	Characterization of Hydrothermal Carbonization Materials. 2013 , 151-211		3
503	Applications of Hydrothermal Carbon in Modern Nanotechnology. 2013 , 213-294		3
502	Influence of the nanofibrous morphology on the catalytic activity of NiO nanostructures: an effective impact toward methanol electrooxidation. 2013 , 8, 402		82
501	Sulfur/graphitic hollow carbon sphere nano-composite as a cathode material for high-power lithium-sulfur battery. 2013 , 8, 343		25

500	Preparation of onion-like carbon with high nitrogen content (~15%) from pyridine. 2013 , 86, 1493-1503		13
499	Effects of cobalt precursor on pyrolyzed carbon-supported cobalt-polypyrrole as electrocatalyst toward oxygen reduction reaction. 2013 , 8, 478		35
498	Cadmium-doped cobalt/carbon nanoparticles as novel nonprecious electrocatalyst for methanol oxidation. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 3387-3394	6.7	44
497	Towards a highly-efficient fuel-cell catalyst: optimization of Pt particle size, supports and surface-oxygen group concentration. 2013 , 15, 3803-13		39
496	One-pot synthesis of nitrogen-sulfur-co-doped carbons with tunable composition using a simple isothiocyanate ionic liquid. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 14097	13	62
495	Effect of the viscosity of poly(benzimidazole) on the performance of a multifunctional electrocatalyst with an ideal interfacial structure. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 4265	13	4
494	Density functional theory calculations of XPS binding energy shift for nitrogen-containing graphene-like structures. 2013 , 49, 2539-41		275
493	Synthesis of nitrogen doped graphene with high electrocatalytic activity toward oxygen reduction reaction. 2013 , 28, 24-26		201
492	Electrocatalysis of oxygen reduction on nitrogen-containing multi-walled carbon nanotube modified glassy carbon electrodes. <i>Electrochimica Acta</i> , 2013 , 87, 709-716	6.7	100
491	The Oxygen Reduction Reaction on Nitrogen-Doped Graphene. 2013 , 143, 58-60		65
490	Carbon Nanomaterials in Catalysis: Proton Affinity, Chemical and Electronic Properties, and their Catalytic Consequences. <i>ChemCatChem</i> , 2013 , 5, 378-401	5.2	199
489	Oxygen reduction reaction over nitrogen-doped graphene oxide cathodes in acid and alkaline fuel cells at intermediate temperatures. <i>Electrochimica Acta</i> , 2013 , 112, 82-89	6.7	35
488	Highly effective and CO-tolerant PtRu electrocatalysts supported on poly(ethyleneimine) functionalized carbon nanotubes for direct methanol fuel cells. <i>Electrochimica Acta</i> , 2013 , 99, 124-132	6.7	66
487	Operando soft X-ray emission spectroscopy of iron phthalocyanine-based oxygen reduction catalysts. 2013 , 35, 57-60		37
486	A non-precious metal catalyst for oxygen reduction prepared by heat-treating a mechanical mixture of carbon black, melamine and cobalt chloride. 2013 , 24, 1109-1111		6
485	Cobalt selenide electrocatalyst supported by nitrogen-doped carbon and its stable activity toward oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 5655-5664	6.7	31
484	Mesoporous nitrogen-doped carbon for copper-mediated Ullmann-type C-C/N/S cross-coupling reactions. 2013 , 3, 1890-1895		50
483	Nitrogen-enriched carbon from melamine resins with superior oxygen reduction reaction activity. 2013 , 6, 807-12		71

482	Understanding Interfaces in Metal-Graphitic Hybrid Nanostructures. 2013 , 4, 147-60		75
481	Nitrogen-Rich Mesoporous Carbons: Highly Efficient, Regenerable Metal-Free Catalysts for Low-Temperature Oxidation of H ₂ S. 2013 , 3, 862-870		110
480	Oxygen reduction reaction on active sites of heteroatom-doped graphene. 2013 , 3, 5498		54
479	Electronic structure of N-doped graphene with native point defects. 2013 , 87,		97
478	Nitrogen-doped reduced graphene oxide supports for noble metal catalysts with greatly enhanced activity and stability. <i>Applied Catalysis B: Environmental</i> , 2013 , 132-133, 379-388	21.8	211
477	Mesoporous carbon with uniquely combined electrochemical and mass transport characteristics for polymer electrolyte membrane fuel cells. 2013 , 3, 16-24		53
476	Graphene-Based Chemical and Biosensors. 2013 , 103-141		9
475	Nitrogen: unraveling the secret to stable carbon-supported Pt-alloy electrocatalysts. 2013 , 6, 2957		85
474	Fuel cell electrocatalyst using polybenzimidazole-modified carbon nanotubes as support materials. <i>Advanced Materials</i> , 2013 , 25, 1666-81	24	138
473	Nitrogen Doping Effects on the Physical and Chemical Properties of Mesoporous Carbons. 2013 , 117, 8318-8328		194
472	Enhanced-electrocatalytic activity of Pt nanoparticles supported on nitrogen-doped carbon for the oxygen reduction reaction. <i>Journal of Power Sources</i> , 2013 , 240, 60-65	8.9	38
471	Metal-Free Electrocatalysts for Oxygen Reduction. 2013 , 375-389		3
470	Promises and Challenges of Unconventional Electrocatalyst Supports. 2013 , 689-728		2
469	Polypyrrole-derived mesoporous nitrogen-doped carbons with intrinsic catalytic activity in the oxygen reduction reaction. 2013 , 3, 9904		82
468	Copper-phthalocyanine and nickel nanoparticles as novel cathode catalysts in microbial fuel cells. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 9533-9540	6.7	115
467	Synthesis and electrocatalytic performance of nitrogen-doped macroporous carbons. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 9469	13	25
466	Facile chemical synthesis of nitrogen-doped graphene sheets and their electrochemical capacitance. <i>Journal of Power Sources</i> , 2013 , 241, 460-466	8.9	60
465	Synthesis and Electrochemical Characterization of N-Doped Partially Graphitized Ordered Mesoporous Carbon/Co Composite. 2013 , 117, 16896-16906		93

464	Nitrogen Doping Mechanism in Small Diameter Single-Walled Carbon Nanotubes: Impact on Electronic Properties and Growth Selectivity. 2013 , 117, 25805-25816		40
463	CNx-modified Fe ₃ O ₄ as Pt nanoparticle support for the oxygen reduction reaction. 2013 , 17, 1021-1028		41
462	Transformation of Oligoaniline Microspheres to Platelike Nitrogen-Containing Carbon. 2013 , 117, 2289-2299		20
461	Improving sulfur tolerance of noble metal catalysts by tungsten oxide-induced effects. 2013 , 3, 764-773		25
460	Graphene as a Target for Polymer Synthesis. 2013 , 61-92		11
459	Nitrogen-Doped Carbon Nanotubes Synthesised by Pyrolysis of (4-[(pyridine-4-yl)methylidene]amino)phenyl)ferrocene. <i>Journal of Nanomaterials</i> , 2013 , 2013, 1-7	3.2	22
458	Effects of Pyrrole Polymerizing Oxidant on the Properties of Pyrolysed Carbon-Supported Cobalt-Polypyrrole as Electrocatalysts for Oxygen Reduction Reaction. 2013 , 160, F507-F513		19
457	Stabilized Metal Nanoparticles from Organometallic Precursors for Low Temperature Fuel Cells. 2013 , 7, 13-25		9
456	. 2014 ,		15
455	Controlled synthesis of sustainable N-doped hollow core-mesoporous shell carbonaceous nanospheres from biomass. 2014 , 7, 1809-1819		50
454	Facile Fabrication of Platinum Nanoparticles Supported on Nitrogen-doped Carbon Nanotubes and Their Catalytic Activity. 2014 , 27, 327-331		1
453	Development of Highly Active and Durable Hybrid Cathode Catalysts for Polymer Electrolyte Membrane Fuel Cells. 2014 , 161, F1489-F1501		14
452	Influence of Nitrogen doping on the Catalytic Activity of Ni-incorporated Carbon Nanofibers for Alkaline Direct Methanol Fuel Cells. <i>Electrochimica Acta</i> , 2014 , 142, 228-239	6.7	52
451	Effects of Carbonization Temperature and Time during Carbon Riveting Process on the Stability of Pt/C Catalyst. 2014 , 14, 660-666		5
450	First Principles Study of Morphology, Doping Level, and Water Solvation Effects on the Catalytic Mechanism of Nitrogen-Doped Graphene in the Oxygen Reduction Reaction. <i>ChemCatChem</i> , 2014 , 6, 2662-2670	5.2	35
449	Cobalt/copper-decorated carbon nanofibers as novel non-precious electrocatalyst for methanol electrooxidation. 2014 , 9, 2		85
448	Ordered nitrogen doped mesoporous carbon assembled under aqueous acidic conditions and its electrochemical capacitive properties. 2014 , 197, 237-243		33
447	ZIF-8 Derived Graphene-Based Nitrogen-Doped Porous Carbon Sheets as Highly Efficient and Durable Oxygen Reduction Electrocatalysts. <i>Angewandte Chemie</i> , 2014 , 126, 14459-14463	3.6	69

446	Synthesis of Nitrogen Doped Carbon and Its Enhanced Electrochemical Activity towards Ascorbic Acid Electrooxidation. 2014 , 2014, 1-11		5
445	Experimental identification of the active sites in pyrolyzed carbon-supported cobalt polypyrrole-toluenesulfonic acid as electrocatalysts for oxygen reduction reaction. <i>Journal of Power Sources</i> , 2014 , 255, 76-84	8.9	39
444	Biomass-derived N-doped carbon and its application in electrocatalysis. <i>Applied Catalysis B: Environmental</i> , 2014 , 154-155, 177-182	21.8	45
443	Electrocatalytic oxygen reduction on nitrogen-doped graphene in alkaline media. <i>Applied Catalysis B: Environmental</i> , 2014 , 147, 369-376	21.8	189
442	Metal-Organic Framework-Derived Nitrogen-Doped Core-Shell-Structured Porous Fe/Fe ₃ C@C Nanoboxes Supported on Graphene Sheets for Efficient Oxygen Reduction Reactions. 2014 , 4, 1400337		461
441	Recent progress on carbon-based support materials for electrocatalysts of direct methanol fuel cells. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 6266-6291	13	393
440	Nitrogen-doped porous carbon nanofiber webs/sulfur composites as cathode materials for lithium-sulfur batteries. <i>Electrochimica Acta</i> , 2014 , 116, 210-216	6.7	57
439	Porous polyaniline-derived Fe _N xC/C catalysts with high activity and stability towards oxygen reduction reaction using ferric chloride both as an oxidant and iron source. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 1242-1246	13	136
438	Origin of the electrocatalytic oxygen reduction activity of graphene-based catalysts: a roadmap to achieve the best performance. 2014 , 136, 4394-403		794
437	Highly graphitized nitrogen-doped porous carbon nanopolyhedra derived from ZIF-8 nanocrystals as efficient electrocatalysts for oxygen reduction reactions. 2014 , 6, 6590-602		594
436	Development and Simulation of Sulfur-doped Graphene Supported Platinum with Exemplary Stability and Activity Towards Oxygen Reduction. <i>Advanced Functional Materials</i> , 2014 , 24, 4325-4336	15.6	184
435	Carbon as catalyst and support for electrochemical energy conversion. <i>Carbon</i> , 2014 , 75, 5-42	10.4	359
434	Bicontinuous nanoporous N-doped graphene for the oxygen reduction reaction. <i>Advanced Materials</i> , 2014 , 26, 4145-50	24	229
433	The effect of carbon supports on the performance of platinum/carbon nanotubes for proton exchange membrane fuel cells. 2014 , 570, 221-229		9
432	Interaction of multi-walled carbon nanotubes with perfluorinated sulfonic acid ionomers and surface treatment studies. <i>Carbon</i> , 2014 , 71, 218-228	10.4	27
431	Application of carbon materials in redox flow batteries. <i>Journal of Power Sources</i> , 2014 , 253, 150-166	8.9	220
430	Improved electrocatalytic activity of carbon materials by nitrogen doping. <i>Applied Catalysis B: Environmental</i> , 2014 , 147, 633-641	21.8	92
429	ZIF-8 derived graphene-based nitrogen-doped porous carbon sheets as highly efficient and durable oxygen reduction electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 14235-9	16.4	724

428	Nitrogen-Doped Carbon Nanotubes Prepared at Different Temperatures for Oxygen Reduction Reaction. 2014 , 161, F1140-F1145		12
427	Two and three dimensional network polymers for electrocatalysis. 2014 , 16, 11150-61		8
426	Nitrogen-doped mesoporous carbon hollow spheres as a novel carbon support for oxygen reduction reaction. <i>New Journal of Chemistry</i> , 2014 , 38, 5521-5526	3.6	17
425	Plasma synthesis of nitrogen-doped porous graphene supporting Pd nanoparticles as a new catalyst for C-C coupling reactions. 2014 , 4, 26804		19
424	Nitrogen functionalized graphite nanofibers/Ir nanoparticles for enhanced oxygen reduction reaction in polymer electrolyte fuel cells (PEFCs). 2014 , 4, 11080		20
423	Platinum-Decorated Nitrogen-Doped Graphene Foam Electrocatalysts. 2014 , 14, 728-734		19
422	Effect of nitriding/nanostructuring of few layer graphene supported iron-based particles; catalyst in graphene etching and carbon nanofilament growth. 2014 , 16, 15988-93		18
421	Facile syntheses of spherical and nubby nitrogen-containing carbon materials from imidazo[1,2-a]pyridin-2-one and furfural. 2014 , 137, 421-423		
420	ZIF-derived in situ nitrogen-doped porous carbons as efficient metal-free electrocatalysts for oxygen reduction reaction. 2014 , 7, 442-450		634
419	Nickel cobalt oxide/carbon nanotubes hybrid as a high-performance electrocatalyst for metal/air battery. 2014 , 6, 10235-42		96
418	Nitrogen-Doped Hollow Carbon Spheres as a Support for Platinum-Based Electrocatalysts. 2014 , 4, 3856-3868		93
417	Nitrogen-doped porous carbons from bipyridine-based metal-organic frameworks: Electrocatalysis for oxygen reduction reaction and Pt-catalyst support for methanol electrooxidation. <i>Carbon</i> , 2014 , 79, 544-553	10.4	55
416	Carbon nanofibers doped by Ni x Co 1-x alloy nanoparticles as effective and stable non precious electrocatalyst for methanol oxidation in alkaline media. 2014 , 394, 177-187		55
415	Nickel nanoparticles immobilized on three-dimensional nitrogen-doped graphene as a superb catalyst for the generation of hydrogen from the hydrolysis of ammonia borane. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 16652-16659	13	113
414	Metal-free doped carbon materials as electrocatalysts for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 4085-4110	13	608
413	One-step synthesis of nitrogen-doped microporous carbon materials as metal-free electrocatalysts for oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 11666-11671	13	70
412	Nitrogen-Doped Carbon-Copper Nanohybrids as Electrocatalysts in H ₂ O ₂ and Glucose Sensing. 2014 , 1, 799-807		31
411	Design of a non-precious metal electrocatalyst for alkaline electrolyte oxygen reduction by using soybean biomass as the nitrogen source of electrocatalytically active center structures. <i>Journal of Power Sources</i> , 2014 , 269, 841-847	8.9	56

410	Structuring Porous Iron-Nitrogen-Doped Carbon in a Core/Shell Geometry for the Oxygen Reduction Reaction. 2014 , 4, 1400840		68
409	Possible Oxygen Reduction Reactions for Graphene Edges from First Principles. 2014 , 118, 17616-17625		46
408	Noble-metal-free electrocatalysts with enhanced ORR performance by task-specific functionalization of carbon using ionic liquid precursor systems. 2014 , 136, 14486-97		202
407	Pt-decorated 3D architectures built from graphene and graphitic carbon nitride nanosheets as efficient methanol oxidation catalysts. <i>Advanced Materials</i> , 2014 , 26, 5160-5	24	304
406	Carbon Composite Cathode Catalysts for Alkaline PEM Fuel Cells. 2014 , 319-356		2
405	Modified Carbon Materials for O ₂ Reduction Reaction Electrocatalysts in Acid PEM Fuel Cells. 2014 , 119-156		3
404	Tailored design of functional nanoporous carbon materials toward fuel cell applications. 2014 , 9, 305-323		230
403	Direct Synthesis of Nitrogen-Doped Carbon Materials from Protic Ionic Liquids and Protic Salts: Structural and Physicochemical Correlations between Precursor and Carbon. 2014 , 26, 2915-2926		130
402	The Impact of Loading and Temperature on the Oxygen Reduction Reaction at Nitrogen-doped Carbon Nanotubes in Alkaline Medium. <i>Electrochimica Acta</i> , 2014 , 129, 47-54	6.7	32
401	Nitrogen-doped nanodiamond rod array electrode with superior performance for electroreductive debromination of polybrominated diphenyl ethers. <i>Applied Catalysis B: Environmental</i> , 2014 , 154-155, 206-212	21.8	27
400	One-pot synthesis of silver nanoparticle catalysts supported on N-doped ordered mesoporous carbon and application in the detection of nitrobenzene. <i>Carbon</i> , 2014 , 69, 481-489	10.4	35
399	Simultaneous formation of nitrogen and sulfur-doped transition metal catalysts for oxygen reduction reaction through pyrolyzing carbon-supported copper phthalocyanine tetrasulfonic acid tetrasodium salt. <i>Journal of Power Sources</i> , 2014 , 266, 88-98	8.9	35
398	One-pot synthesis of shell/core structural N-doped carbide-derived carbon/SiC particles as electrocatalysts for oxygen reduction reaction. <i>Carbon</i> , 2014 , 69, 630-633	10.4	9
397	Nitrogen-doped reduced graphene oxide electrodes for electrochemical supercapacitors. 2014 , 16, 2280-4		70
396	Carbon Corrosion in Proton-Exchange Membrane Fuel Cells: From Model Experiments to Real-Life Operation in Membrane Electrode Assemblies. 2014 , 4, 2258-2267		146
395	Protic ionic liquids and salts as versatile carbon precursors. 2014 , 136, 1690-3		192
394	Enhanced Oxygen Reduction Activities of Pt Supported on Nitrogen-Doped Carbon Nanocapsules. <i>Electrochimica Acta</i> , 2014 , 137, 41-48	6.7	18
393	Effect of nitrogen post-doping on a commercial platinum/iridium/carbon anode catalyst. <i>Journal of Power Sources</i> , 2014 , 248, 296-306	8.9	13

392	Graphene as a Support for ORR Electrocatalysts. 2015 , 149-176		1
391	Study on the Relationship Between Catalytic Activity and C-N Structures of a Nitrogen-contained Non-precious Metal Catalyst for Oxygen Reduction Reaction. 2015 , 83, 595-599		3
390	Heteroatom-Doped Carbon Nanotubes as Advanced Electrocatalysts for Oxygen Reduction Reaction. 2015 , 1-16		3
389	Effect of the Carbon Support on the Catalytic Activity of Ruthenium-Magnetite Catalysts for p-Chloronitrobenzene Hydrogenation. <i>ChemCatChem</i> , 2015 , 7, 2971-2978	5.2	16
388	A Comparative Study of CO Oxidation on Nitrogen- and Phosphorus-Doped Graphene. 2015 , 16, 3719-27		64
387	Metal-Free Carbonaceous Materials as Promising Heterogeneous Catalysts. <i>ChemCatChem</i> , 2015 , 7, 2765-2787	9.8	
386	Engineering of Carbon-Based Electrocatalysts for Emerging Energy Conversion: From Fundamentality to Functionality. <i>Advanced Materials</i> , 2015 , 27, 5372-8	24	216
385	. 2015 ,		13
384	Hydrogen adsorption of nitrogen-doped carbon nanotubes functionalized with 3d-block transition metals. 2015 , 127, 751-759		31
383	Highly Active and Durable Co-Doped Pt/CCC Cathode Catalyst for Polymer Electrolyte Membrane Fuel Cells. <i>Electrochimica Acta</i> , 2015 , 167, 1-12	6.7	27
382	Hydrogen-bonding supramolecular protic salt as an all-in-one precursor for nitrogen-doped mesoporous carbons for CO ₂ adsorption. 2015 , 13, 376-386		52
381	Preparation of a platinum electrocatalyst by coaxial pulse arc plasma deposition. 2015 , 16, 024804		16
380	Spherical nitrogen-doped hollow mesoporous carbon as an efficient bifunctional electrocatalyst for Zn-air batteries. 2015 , 7, 20547-56		61
379	Upper Limit of Nitrogen Content in Carbon Materials. <i>Angewandte Chemie</i> , 2015 , 127, 1318-1322	3.6	18
378	Bamboo shaped carbon nanotube supported platinum electrocatalyst synthesized by high power ultrasonic-assisted impregnation method for methanol electrooxidation and related density functional theory calculations. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 2216-2224	6.7	15
377	Recent Advances in Heteroatom-Doped Metal-Free Electrocatalysts for Highly Efficient Oxygen Reduction Reaction. 2015 , 6, 132-147		104
376	Different polyaniline/carbon nanotube composites as Pt catalyst supports for methanol electro-oxidation. 2015 , 50, 1159-1168		18
375	Effects of nitrogen doping on the electrochemical performance of graphite felts for vanadium redox flow batteries. 2015 , 39, 709-716		54

374	Facile synthesis of nitrogen-doped unzipped carbon nanotubes and their electrochemical properties. 2015 , 5, 8175-8181		16
373	A hybrid of titanium nitride and nitrogen-doped amorphous carbon supported on SiC as a noble metal-free electrocatalyst for oxygen reduction reaction. 2015 , 51, 2625-8		22
372	Nitrogen-doped carbon-TiO ₂ composite as support of Pd electrocatalyst for formic acid oxidation. <i>Journal of Power Sources</i> , 2015 , 284, 186-193	8.9	28
371	Exploration of the catalytically active site structures of animal biomass-modified on cheap carbon nanospheres for oxygen reduction reaction with high activity, stability and methanol-tolerant performance in alkaline medium. <i>Carbon</i> , 2015 , 85, 279-288	10.4	76
370	CHAPTER 4:Surface Chemistry of Nanostructured Carbon Materials and Preparation of Nanocarbon Supported Catalysts. 2015 , 163-222		1
369	CHAPTER 1:Carbon (Nano)materials for Catalysis. 2015 , 1-45		11
368	RETRACTED: Morphological and electrical properties of few layer graphene after nitrogen doping by LPCVD technique. <i>Journal of Alloys and Compounds</i> , 2015 , 644, 97-100	5.7	8
367	Honeycomb-like mesoporous nitrogen-doped carbon supported Pt catalyst for methanol electrooxidation. <i>Carbon</i> , 2015 , 93, 1050-1058	10.4	73
366	Nitrogen Post Modification of PtRu/Carbon Catalysts for Improved Methanol Oxidation Reaction Performance in Alkaline Media. 2015 , 162, F913-F918		2
365	A sensitive electrochemical immunosensor for the detection of squamous cell carcinoma antigen by using PtAu nanoparticles loaded on TiO ₂ colloidal spheres as labels. 2015 , 5, 59853-59860		6
364	Achieving significantly enhanced visible-light photocatalytic efficiency using a polyelectrolyte: the composites of exfoliated titania nanosheets, graphene, and poly(diallyl-dimethyl-ammonium chloride). 2015 , 7, 14002-9		22
363	MOF derived Co ₃ O ₄ nanoparticles embedded in N-doped mesoporous carbon layer/MWCNT hybrids: extraordinary bi-functional electrocatalysts for OER and ORR. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 17392-17402	13	304
362	One-step, template-free synthesis of highly porous nitrogen/sulfur-codoped carbons from a single protic salt and their application to CO ₂ capture. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 17849-17857	13	28
361	Enhanced electrocatalytic activity of nitrogen-doped multi-walled carbon nanotubes towards the oxygen reduction reaction in alkaline media. 2015 , 5, 59495-59505		56
360	The acid-base properties of nitrogen-containing mesoporous carbon materials. 2015 , 212, 156-168		11
359	Carbon-supported Pt-based alloy electrocatalysts for the oxygen reduction reaction in polymer electrolyte membrane fuel cells: particle size, shape, and composition manipulation and their impact to activity. 2015 , 115, 3433-67		907
358	Functionalization of carbon nanotubes using aminobenzene acids and electrochemical methods. Electroactivity for the oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 11242-11253	6.7	30
357	Fabrication of the pyrolyzing carbon-supported cobalt-dicyandiamide electrocatalysts and study on the active sites and mechanism for oxygen reduction in alkaline electrolyte. 2015 , 19, 1695-1707		7

356	Influence of N addition in mesoporous carbons used as supports of Pt, Pd and Ru for toluene hydrogenation and iron oxide for benzene oxidation. 2015 , 115, 263-282		10
355	A theoretical study of the binding mechanisms of atomic platinum on Be-, B-, N-, O-doped (6, 6) single-walled carbon nanotubes. 2015 , 26, 815-822		13
354	Structure-dependent electrocatalytic activity of La _{1-x} Sr _x MnO ₃ for oxygen reduction reaction. 2015 , 58, 871-878		15
353	Cobalt-incorporated, nitrogen-doped carbon nanofibers as effective non-precious catalyst for methanol electrooxidation in alkaline medium. 2015 , 498, 230-240		51
352	The adsorption mechanism of platinum on phosphorus-doped single walled carbon nanotube. <i>Computational and Theoretical Chemistry</i> , 2015 , 1059, 1-6	2	14
351	Metal-free catalysts for oxygen reduction reaction. 2015 , 115, 4823-92		1763
350	Platinum nanoparticles supported on N-doped carbon nanotubes for the selective oxidation of glycerol to glyceric acid in a base-free aqueous solution. 2015 , 5, 31566-31574		48
349	Protic-salt-derived nitrogen/sulfur-codoped mesoporous carbon for the oxygen reduction reaction and supercapacitors. 2015 , 8, 1608-17		64
348	An efficient low-temperature route to nitrogen-doping and activation of mesoporous carbons for CO ₂ capture. 2015 , 51, 17261-4		44
347	Enhancement of the catalytic performance of a CNT supported Pt nanorod cluster catalyst by controlling their microstructure. 2015 , 5, 80176-80183		3
346	Structural and Chemical Dynamics of Pyridinic-Nitrogen Defects in Graphene. 2015 , 15, 7408-13		157
345	Hydrodechlorination activity of catalysts based on nitrogen-doped carbons from low-density polyethylene. <i>Carbon</i> , 2015 , 87, 444-452	10.4	15
344	Easy conversion of protein-rich enoki mushroom biomass to a nitrogen-doped carbon nanomaterial as a promising metal-free catalyst for oxygen reduction reaction. 2015 , 7, 15990-8		108
343	Human hair-derived nitrogen and sulfur co-doped porous carbon materials for gas adsorption. 2015 , 5, 73980-73988		46
342	Nitrogen-doped carbon nanofibers with effectively encapsulated GeO ₂ nanocrystals for highly reversible lithium storage. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 21699-21705	13	36
341	Mesoporous carbon nanoparticles: a super catalyst support for fuel cells. <i>New Journal of Chemistry</i> , 2015 , 39, 8667-8672	3.6	5
340	Controllable Nitrogen Doping of High-Surface-Area Microporous Carbons Synthesized from an Organic-Inorganic Sol-Gel Approach for Li-S Cathodes. 2015 , 7, 21188-97		25
339	Nanostructured Electrocatalysts for PEM Fuel Cells and Redox Flow Batteries: A Selected Review. 2015 , 5, 7288-7298		68

338	Regeneration and Enhanced Catalytic Activity of Pt/C Electrocatalysts. 2015 , 5, 233-240		26
337	Nitrogen-doped carbon nanomaterials: To the mechanism of growth, electrical conductivity and application in catalysis. 2015 , 249, 12-22		108
336	Fe, Co, N-functionalized carbon nanotubes in situ grown on 3D porous N-doped carbon foams as a noble metal-free catalyst for oxygen reduction. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 3559-3567	13	103
335	CN x -modified montmorillonite as support to immobilize Pd and its enhanced electrocatalytic activity for formic acid oxidation. 2015 , 21, 1693-1701		6
334	Pd nanoparticles supported on phenanthroline modified carbon as high active electrocatalyst for ethylene glycol oxidation. <i>Electrochimica Acta</i> , 2015 , 154, 1-8	6.7	38
333	Effect of the Number of Benzene-Ring, the Functional Groups and the Absorbent Material on the Performance of Pt Nanoparticles Supported on Modified Graphite Nanoplatelet. <i>Electrochimica Acta</i> , 2015 , 153, 439-447	6.7	4
332	Enhanced catalytic activity for the oxygen reduction reaction with co-doping of phosphorus and iron in carbon. <i>Journal of Power Sources</i> , 2015 , 277, 161-168	8.9	38
331	Upper limit of nitrogen content in carbon materials. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 1302-6	16.4	144
330	Co/CeO ₂ -decorated carbon nanofibers as effective non-precious electro-catalyst for fuel cells application in alkaline medium. 2015 , 41, 2271-2278		52
329	Fe ₃ C-based oxygen reduction catalysts: synthesis, hollow spherical structures and applications in fuel cells. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 1752-1760	13	103
328	Tungsten nitride nanocrystals on nitrogen-doped carbon black as efficient electrocatalysts for oxygen reduction reactions. 2015 , 51, 572-5		61
327	Carbon materialization of ionic liquids: from solvents to materials. 2015 , 2, 168-197		135
326	Non-precious metal nanoparticles supported on nitrogen-doped graphene as a promising catalyst for oxygen reduction reaction: Synthesis, characterization and electrocatalytic performance. <i>Journal of Power Sources</i> , 2015 , 273, 981-989	8.9	44
325	M(salen)-derived nitrogen-doped M/C (M = Fe, Co, Ni) porous nanocomposites for electrocatalytic oxygen reduction. 2014 , 4, 4386		79
324	Platinum nanoparticles supported on nitrogen and fluorine co-doped graphite nanofibers as an excellent and durable oxygen reduction catalyst for polymer electrolyte fuel cells. <i>Carbon</i> , 2016 , 107, 667-679	10.4	55
323	Progress in modified carbon support materials for Pt and Pt-alloy cathode catalysts in polymer electrolyte membrane fuel cells. 2016 , 82, 445-498		123
322	Spectroscopic investigation of nitrogen-functionalized carbon materials. 2016 , 48, 283-292		13
321	Nanocarbon-based Electrochemical Detection of Heavy Metals. 2016 , 28, 2472-2488		34

320	Metal-Organic Framework-Templated Porous Carbon for Highly Efficient Catalysis: The Critical Role of Pyrrolic Nitrogen Species. 2016 , 22, 3470-3477		72
319	Hydrocarbon Cracking Over Red Mud and Modified Red Mud Samples. 2016 , 2, 387-393		6
318	Synthesis and characterization of nitrogen-functionalized graphene oxide in high-temperature and high-pressure ammonia. 2016 , 6, 113924-113932		16
317	In-Situ-Activated N-Doped Mesoporous Carbon from a Protic Salt and Its Performance in Supercapacitors. 2016 , 8, 35243-35252		29
316	Functional Carbon Materials from Ionic Liquid Precursors. 2016 , 21-42		2
315	Nitrogen and sulfur co-doped mesoporous carbon as cathode catalyst for H ₂ /O ₂ alkaline membrane fuel cell Effect of catalyst/bonding layer loading. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 9159-9166	6.7	13
314	Hierarchisch strukturierte Nanomaterialien für die elektrochemische Energieumwandlung. <i>Angewandte Chemie</i> , 2016 , 128, 128-156	3.6	16
313	Nitrogen/Sulfur-Codoped Carbon Materials from Chitosan for Supercapacitors. 2016 , 45, 4331-4337		12
312	Iron-Nitrogen-functionalized carbon as efficient oxygen reduction reaction electrocatalyst in microbial fuel cells. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 19637-19644	6.7	45
311	Modified carbon cloth as positive electrode with high electrochemical performance for vanadium redox flow batteries. <i>Journal of Energy Chemistry</i> , 2016 , 25, 720-725	12	19
310	Fe-N-Doped Carbon Capsules with Outstanding Electrochemical Performance and Stability for the Oxygen Reduction Reaction in Both Acid and Alkaline Conditions. 2016 , 10, 5922-32		345
309	Hierarchically Structured Nanomaterials for Electrochemical Energy Conversion. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 122-48	16.4	170
308	Creation of Ge-Nx-Cy Configures in Carbon Nanotubes: Origin of Enhanced Electrocatalytic Performance for Oxygen Reduction Reaction. 2016 , 8, 10383-91		18
307	Nitrogen-doped carbon with mesoporous structure as high surface area catalyst support for methanol oxidation reaction. 2016 , 6, 39310-39316		10
306	Iron incorporation on graphene nanoflakes for the synthesis of a non-noble metal fuel cell catalyst. <i>Applied Catalysis B: Environmental</i> , 2016 , 193, 9-15	21.8	11
305	Effective ionic-liquid microemulsion based electrodeposition of mesoporous CoPt films for methanol oxidation catalysis in alkaline media. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 7805-7814	13	22
304	High graphite N content in nitrogen-doped graphene as an efficient metal-free catalyst for reduction of nitroarenes in water. 2016 , 18, 4254-4262		86
303	Efficient metal-free N-doped mesoporous carbon catalysts for ORR by a template-free approach. <i>Carbon</i> , 2016 , 106, 179-187	10.4	149

302	Selective Hydrodeoxygenation of Lignin-Derived Phenols to Cyclohexanols or Cyclohexanes over Magnetic [email[protected]] Catalysts under Mild Conditions. 2016 , 6, 7611-7620		132
301	Cobalt phosphide nanowall array as an efficient 3D catalyst electrode for methanol electro-oxidation. 2016 , 27, 44LT02		12
300	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. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 14665-14675	6.7	29
299	Recent Advancements in All-Vanadium Redox Flow Batteries. 2016 , 3, 1500309		253
298	Oxygen Reduction at Carbon Nanotubes (CNTs)/Cobaltous Phthalocyanine (CoPc) and MFC Electricity Generation Affected by Air-Cathode Catalyst Layer Structure. 2016 , 163, F1209-F1216		
297	Nitrogen Doping in Oxygen-Deficient CaFeO: A Strategy for Efficient Oxygen Reduction Oxide Catalysts. 2016 , 8, 34387-34395		37
296	Tunable plasmons in few-layer nitrogen-doped graphene nanostructures: A time-dependent density functional theory study. 2016 , 93,		11
295	Mixed Transition Metal Oxide Supported on Nitrogen Doped Carbon Nanotubes as Simple Bifunctional Electrocatalyst Studied with Scanning Electrochemical Microscopy. 2016 , 28, 2335-2345		4
294	Facile Synthesis of Core/Shell-like NiCo ₂ O ₄ -Decorated MWCNTs and its Excellent Electrocatalytic Activity for Methanol Oxidation. 2016 , 6, 20313		76
293	Directed Growth of Metal-Organic Frameworks and Their Derived Carbon-Based Network for Efficient Electrocatalytic Oxygen Reduction. <i>Advanced Materials</i> , 2016 , 28, 2337-44	24	381
292	N-Doped carbon supported Co ₃ O ₄ nanoparticles as an advanced electrocatalyst for the oxygen reduction reaction in Al ^{air} batteries. 2016 , 6, 55552-55559		29
291	Carbon dots-decorated multiwalled carbon nanotubes nanocomposites as a high-performance electrochemical sensor for detection of H ₂ O ₂ in living cells. 2016 , 408, 4705-14		40
290	Preferential adsorption of pentachlorophenol from chlorophenols-containing wastewater using N-doped ordered mesoporous carbon. 2016 , 23, 1482-91		12
289	Mechanical Properties of Graphene Sheets. 2016 , 77-94		
288	Enhancement of catalytic durability through nitrogen-doping treatment on the CNF-derivatized ACF support for high temperature PEMFC. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 6864-6876	6.7	14
287	Nitrogen-Doped High Surface Area Carbon as Efficient Electrode Material for Supercapacitors. 2016 , 11, 1650076		6
286	The particle size effect of N-doped mesoporous carbons as oxygen reduction reaction catalysts for PEMFC. 2016 , 33, 1831-1836		7
285	The influence of pore size distribution on the oxygen reduction reaction performance in nitrogen doped carbon microspheres. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 2581-2589	13	158

284	Nitrogen-doped carbons by sustainable N- and C-containing natural resources as nonprecious catalysts and catalyst supports for low temperature fuel cells. 2016 , 58, 34-51		78
283	Carbon nanocomposite catalysts for oxygen reduction and evolution reactions: From nitrogen doping to transition-metal addition. 2016 , 29, 83-110		54 ^o
282	Defect-driven oxygen reduction reaction (ORR) of carbon without any element doping. 2016 , 3, 417-421		117
281	Effect of post heat-treatment of composition-controlled PdFe nanoparticles for oxygen reduction reaction. <i>Journal of Power Sources</i> , 2016 , 303, 234-242	8.9	30
280	Interactions between metal species and nitrogen-functionalized carbon nanotubes. 2016 , 6, 630-644		66
279	Porous carbons from ionic liquid precursors confined within nanoporous silicas. 2016 , 223, 163-175		10
278	Review of Low Pressure Plasma Processing of Proton Exchange Membrane Fuel Cell Electrocatalysts. 2016 , 13, 10-18		19
277	In situ formation of nitrogen-doped onion-like carbon as catalyst support for enhanced oxygen reduction activity and durability. <i>Carbon</i> , 2016 , 101, 420-430	10.4	35
276	Bio-inspired carbon electro-catalysts for the oxygen reduction reaction. <i>Journal of Energy Chemistry</i> , 2016 , 25, 228-235	12	19
275	Polymer-mediated synthesis of a nitrogen-doped carbon aerogel with highly dispersed Pt nanoparticles for enhanced electrocatalytic activity. <i>Electrochimica Acta</i> , 2016 , 193, 137-144	6.7	22
274	Nitrogen doped carbide derived carbon aerogels by chlorine etching of a SiCN aerogel. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 4525-4533	13	31
273	Reactivity of boron- and nitrogen-doped carbon nanotubes functionalized by (Pt, Eu) atoms toward O ₂ and CO: A density functional study. 2016 , 27, 1650075		2
272	Metal-supported carbon-based materials: opportunities and challenges in the synthesis of valuable products. 2016 , 6, 1265-1291		107
271	Fabrication of Pt@FeO ₂ nanoparticles supported sulfonated reduced graphene oxide as an efficient electrocatalyst for ethanol oxidation. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 3861-3869	6.7	48
270	An efficient preparation of N-doped mesoporous carbon derived from milk powder for supercapacitors and fuel cells. <i>Electrochimica Acta</i> , 2016 , 196, 527-534	6.7	42
269	Synthesis of novel 2-d carbon materials: sp ² carbon nanoribbon packing to form well-defined nanosheets. 2016 , 3, 214-219		23
268	Nitrogen-doped carbon nanofibers on expanded graphite as oxygen reduction electrocatalysts. <i>Carbon</i> , 2016 , 101, 191-202	10.4	56
267	Fibrous porous carbon electrocatalysts for hydrazine oxidation by using cellulose filter paper as precursor and self-template. <i>Carbon</i> , 2016 , 102, 97-105	10.4	23

266	Highly sensitive simultaneous determination of cadmium (II), lead (II), copper (II), and mercury (II) ions on N-doped graphene modified electrode. <i>Journal of Electroanalytical Chemistry</i> , 2016 , 760, 52-58	4.1	116
265	Hierarchical nickel oxide nanosheet@nanowire arrays on nickel foam: an efficient 3D electrode for methanol electro-oxidation. 2016 , 6, 1157-1161		60
264	Mesoporous nitrogen-doped carbons with high nitrogen contents and ultrahigh surface areas: synthesis and applications in catalysis. 2016 , 18, 1976-1982		92
263	Coordination chemistry on carbon surfaces. 2016 , 308, 236-345		83
262	Acid doped polybenzimidazoles based membrane electrode assembly for high temperature proton exchange membrane fuel cell: A review. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 9156-9179	6.7	76
261	Nitrogen-doped Carbon Nanofibers for the Oxygen Reduction Reaction: Importance of the Iron Growth Catalyst Phase. <i>ChemCatChem</i> , 2017 , 9, 1663-1674	5.2	15
260	Highly regenerable carbon-Fe ₃ O ₄ core@satellite nanospheres as oxygen reduction electrocatalyst and magnetic adsorbent. 2017 , 246, 357-362		19
259	Nitrogen-doped carbon quantum dot/graphene hybrid nanocomposite as an efficient catalyst support for the oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 2931-2942	6.7	32
258	Application of Ionic Liquids to Energy Storage and Conversion Materials and Devices. 2017 , 117, 7190-7239		858
257	Fabrication of flexible nanoporous nitrogen-doped graphene film for high-performance supercapacitors. 2017 , 21, 1653-1663		19
256	Determination of amino groups on functionalized graphene oxide for polyurethane nanomaterials: XPS quantitation vs. functional speciation. 2017 , 7, 12464-12473		169
255	Zn-MOF-74 Derived N-Doped Mesoporous Carbon as pH-Universal Electrocatalyst for Oxygen Reduction Reaction. <i>Advanced Functional Materials</i> , 2017 , 27, 1606190	15.6	182
254	Synthesis of honeycomb-like mesoporous nitrogen-doped carbon nanospheres as Pt catalyst supports for methanol oxidation in alkaline media. 2017 , 407, 64-71		50
253	Doped porous carbon nanostructures as non-precious metal catalysts prepared by amino acid glycine for oxygen reduction reaction. <i>Applied Catalysis B: Environmental</i> , 2017 , 211, 235-244	21.8	44
252	The active site exploration of Co-based non-precious metal electrocatalysts for oxygen reduction reaction. 2017 , 23, 1849-1859		6
251	Sustainable metal-free carbogels as oxygen reduction electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 16336-16343	13	21
250	Pt electrocatalyst supported on metal ion-templated hierarchical porous nitrogen-doped carbon from chitosan for methanol electrooxidation. 2017 , 248, 99-107		14
249	Nitrogen-Doped Carbon Nanotube-Supported Pd Catalyst for Improved Electrocatalytic Performance toward Ethanol Electrooxidation. 2017 , 9, 28		29

248	Porous coral reefs-like MoS ₂ /nitrogen-doped bio-carbon as an excellent Pt support/co-catalyst with promising catalytic activity and CO-tolerance for methanol oxidation reaction. <i>Electrochimica Acta</i> , 2017 , 246, 517-527	6.7	28
247	Ni/NiO nanoparticles on a phosphorous oxide/graphene hybrid for efficient electrocatalytic water splitting. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 14758-14762	13	20
246	Hollow Nitrogen- or Boron-Doped Carbon Submicrospheres with a Porous Shell: Preparation and Application as Supports for Hydrodechlorination Catalysts. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 7665-7674	3.9	18
245	Preparation and dispersity of carbon nanospheres by carbonizing polyacrylonitrile microspheres. 2017 , 7, 16341-16347		6
244	MOF-templated nitrogen-doped porous carbon materials as efficient electrocatalysts for oxygen reduction reactions. 2017 , 4, 1231-1237		12
243	Ultrathin nitrogen doped carbon layer stabilized Pt electrocatalyst supported on N-doped carbon nanotubes. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 10354-10362	6.7	13
242	Pd 3 Cu coupling with nitrogen-doped mesoporous carbon to boost performance in glycerol oxidation. 2017 , 538, 123-130		25
241	Pyridinic and graphitic nitrogen-rich graphene for high-performance supercapacitors and metal-free bifunctional electrocatalysts for ORR and OER. 2017 , 7, 17950-17958		82
240	Distinctive morphology effects of porous-spherical/yolk-shell/hollow Pd-nitrogen-doped-carbon spheres catalyst for catalytic reduction of 4-nitrophenol. 2017 , 496, 465-473		33
239	Influence of the Synthesis Parameters in Carbon Nanotubes Doped with Nitrogen for Oxygen Electroreduction. 2017 , 6, M3135-M3139		8
238	NiO/nanoporous carbon heterogeneous Fenton catalyst for aqueous microcystine-LR decomposition. 2017 , 74, 289-295		9
237	Understanding the Influence of N-Doping on the CO ₂ Adsorption Characteristics in Carbon Nanomaterials. 2017 , 121, 616-626		45
236	N, S-Codoped Mesoporous Carbon Derived from Protic Salt for Oxygen Reduction Reaction. 2017 , 164, H32-H36		8
235	Ternary PtNi/PtxPb/Pt core/multishell nanowires as efficient and stable electrocatalysts for fuel cell reactions. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 18977-18983	13	27
234	P-, B- and N-doped carbon black for the catalytic wet peroxide oxidation of phenol: Activity, stability and kinetic studies. 2017 , 102, 131-135		15
233	Enhanced electrocatalytic performance of Pt nanoparticles on triazine-functionalized graphene nanoplatelets for both oxygen and iodine reduction reactions. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 21936-21946	13	9
232	Nitrogen-Doped Porous Carbon Matrix Derived from Metal-Organic Framework-Supported Pt Nanoparticles with Enhanced Oxygen Reduction Activity. 2017 , 4, 2814-2818		8
231	Facile synthesis and supercapacitor performances of nitrogen doped CNTs grown over mesoporous Fe/SBA-15 catalyst. <i>New Journal of Chemistry</i> , 2017 , 41, 11591-11599	3.6	11

230	Carbon scaffold modified by metal (Ni) or non-metal (N) to enhance hydrogen storage of MgH ₂ through nanoconfinement. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 22933-22941	6.7	44
229	Protic salt-based nitrogen-doped mesoporous carbon for simultaneous electrochemical detection of Cd(II) and Pb(II). 2017 , 7, 36929-36934		3
228	Pd Nanoparticles-Supported Carbon Nanotube-Encapsulated NiO/MgO Composite as an Enhanced Electrocatalyst for Ethanol Electrooxidation in Alkaline Medium. 2017 , 2, 11438-11444		3
227	Ni-O ₄ species anchored on N-doped graphene-based materials as molecular entities and electrocatalytic performances for oxygen reduction reaction. 2017 , 74, 56-61		3
226	Parametric study on the influence of synthesis variables in the properties of nitrogen-doped carbon nanotubes. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 30318-30329	6.7	5
225	Hybrid cathode catalyst with synergistic effect between carbon composite catalyst and Pt for ultra-low Pt loading in PEMFCs. 2017 , 295, 65-74		21
224	Improved durability of Pt catalyst supported on N-doped mesoporous graphitized carbon for oxygen reduction reaction in polymer electrolyte membrane fuel cells. <i>Carbon</i> , 2017 , 122, 746-755	10.4	29
223	Fe/N/S-doped mesoporous carbon nanostructures as electrocatalysts for oxygen reduction reaction in acid medium. <i>Applied Catalysis B: Environmental</i> , 2017 , 203, 889-898	21.8	138
222	FeNi alloy supported on nitrogen-doped graphene catalysts by polyol process for oxygen reduction reaction (ORR) in proton exchange membrane fuel cell (PEMFC) cathode. 2017 , 43, 2905-2919		11
221	Active sites for oxygen reduction reaction on nitrogen-doped carbon nanotubes derived from polyaniline. <i>Carbon</i> , 2017 , 112, 219-229	10.4	149
220	Facile synthesis of porous nitrogen-doped holey graphene as an efficient metal-free catalyst for the oxygen reduction reaction. 2017 , 10, 305-319		51
219	Superior catalytic performances of platinum nanoparticles loaded nitrogen-doped graphene toward methanol oxidation and hydrogen evolution reaction. 2017 , 487, 330-335		64
218	MnO ₂ nanorods grown NGNF nanocomposites for the application of highly sensitive and selective electrochemical detection of hydrogen peroxide. 2017 , 46, 19-27		31
217	Advancing Lithium-Oxygen Battery Technology with an Iron-Nitrogen-Doped Mesoporous Core-Shell Carbon Cathode Loaded with Ruthenium(IV) Oxide Nanoparticles. 2017 , 5, 732-739		5
216	Enhanced electrocatalytic activity and stability of Pd nanoparticles supported on TiO ₂ -modified nitrogen-doped carbon for ethanol oxidation in alkaline media. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 1103-1112	6.7	44
215	Engineering nanostructures of PGM-free oxygen-reduction catalysts using metal-organic frameworks. 2017 , 31, 331-350		257
214	Pt/CN-doped electrocatalysts: Superior electrocatalytic activity for methanol oxidation reaction and mechanistic insight into interfacial enhancement. <i>Applied Catalysis B: Environmental</i> , 2017 , 203, 541-548	21.8	128
213	A comparison study of alkali metal-doped g-C ₃ N ₄ for visible-light photocatalytic hydrogen evolution. 2017 , 38, 1981-1989		183

212	Ag/Fe ₃ O ₄ -N-Doped Ketjenblack Carbon Composite as Highly Efficient Oxygen Reduction Catalyst in Al-Air Batteries. 2017 , 164, A3595-A3601		14
211	Effect of Platinum loading on Graphene Nano Sheets at Cathode. 2017 , 33, 134-140		3
210	Anchoring Iron-EDTA Complex on Graphene toward the Synthesis of Highly Efficient Fe-N-C Oxygen Reduction Electrocatalyst for Fuel Cells. 2018 , 36, 287-292		15
209	Facile synthesis of porous nitrogen-doped carbon for aerobic oxidation of amines to imines. 2018 , 266, 198-203		17
208	Soldering a gas diffusion layer to a stainless steel bipolar plate using metallic tin. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 9006-9014	6.7	7
207	A Novel Thermoresponsive Catalytic Membrane with Multiscale Pores Prepared via Vapor-Induced Phase Separation. 2018 , 14, e1703650		17
206	Platinum-Palladium Core-Shell Nanoflower Catalyst with Improved Activity and Excellent Durability for the Oxygen Reduction Reaction. 2018 , 5, 1701508		5
205	Ionic liquids and derived materials for lithium and sodium batteries. 2018 , 47, 2020-2064		297
204	3D Carbon Electrocatalysts In Situ Constructed by Defect-Rich Nanosheets and Polyhedrons from NaCl-Sealed Zeolitic Imidazolate Frameworks. <i>Advanced Functional Materials</i> , 2018 , 28, 1705356	15.6	180
203	Low-Pressure Plasma Synthesis of Ni/C Nanocatalysts from Solid Precursors: Influence of the Plasma Chemistry on the Morphology and Chemical State. 2018 , 1, 265-273		10
202	Functionalized Ionic Liquid-based Catalytic Systems with Diversified Performance Enhancements. 2018 , 35-58		
201	The selective adsorption of formaldehyde and methanol over Al- or Si-decorated graphene oxide: A DFT study. 2018 , 80, 25-31		33
200	Nitrogen-doped carbon-decorated copper catalyst for highly efficient transfer hydrogenolysis of 5-hydroxymethylfurfural to convertibly produce 2,5-dimethylfuran or 2,5-dimethyltetrahydrofuran. <i>Applied Catalysis B: Environmental</i> , 2018 , 226, 523-533	21.8	99
199	Preparation of an efficient Fe/N/C electrocatalyst and its application for oxygen reduction reaction in alkaline media. <i>Journal of Electroanalytical Chemistry</i> , 2018 , 810, 62-68	4.1	19
198	Internal structure [Na storage mechanisms [Electrochemical performance relations in carbons. 2018 , 97, 170-203		72
197	Carbon and non-carbon support materials for platinum-based catalysts in fuel cells. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 7823-7854	6.7	134
196	Plasmons in N-doped graphene nanostructures tuned by Au/Ag films: a time-dependent density functional theory study. 2018 , 20, 10439-10444		4
195	A Synthetic Route for the Preparation of Core-Shell Nanoparticles Using a Protective Carbon Layer and Ozone Treatment. 2018 , 165, F285-F290		2

194	Improved Electrocatalytic Performance of Tailored Metal-Free Nitrogen-Doped Ordered Mesoporous Carbons for the Oxygen Reduction Reaction. 2018 , 5, 1899-1904	14
193	Optimal sidewall functionalization for the growth of ultrathin TiO ₂ nanotubes via atomic layer deposition. 2018 , 53, 2005-2015	7
192	Thiourea aldehyde resin-based carbon/graphene composites for high-performance supercapacitors. 2018 , 22, 113-121	3
191	Bimetallic Cu-Ni nanoparticles supported on activated carbon for catalytic oxidation of benzyl alcohol. 2018 , 112, 50-53	25
190	High-performance bimetallic alloy catalyst using Ni and N co-doped composite carbon for the oxygen electro-reduction. 2018 , 514, 30-39	13
189	Atomic layer deposition of Ti-Nb-O thin films onto electrospun fibers for fibrous and tubular catalyst support structures. 2018 , 36, 01A102	6
188	Imprinted Naked Pt Nanoparticles on N-Doped Carbon Supports: A Synergistic Effect between Catalyst and Support. 2018 , 24, 1365-1372	15
187	Redox Flow Batteries for Energy Storage: A Technology Review. <i>Journal of Electrochemical Energy Conversion and Storage</i> , 2018 , 15,	2 85
186	Metal-organic frameworks-derived core-shell FeO/FeN@graphite carbon nanocomposites as excellent non-precious metal electrocatalyst for oxygen reduction. 2018 , 47, 16567-16577	22
185	Nitrogen-doped porous carbon sphere supported Pt nanoparticles for methanol and ethanol electro-oxidation in alkaline media.. 2018 , 8, 36353-36359	9
184	A Potential Use of Al ₂ O ₃ Coated Cordierite Honeycomb Reinforced Ti _{0.97} Pd _{0.03} O ₂ Catalyst for Selective High Rates in coupling reactions. 2018 , 5, 22466-22472	1
183	. 2018 ,	3
182	In-Situ S/TEM Probing of the Behavior of Nanoparticles Under Chemical and Electrochemical Reactions in the System Involving Solid, Liquid and Gas. 2018 , 24, 1876-1877	4
181	A brief review on plasma for synthesis and processing of electrode materials. 2018 , 3, 28-47	30
180	Pt-C Interfaces Based on Electronegativity-Functionalized Hollow Carbon Spheres for Highly Efficient Hydrogen Evolution. 2018 , 10, 43561-43569	22
179	Interaction of CO and CH Adsorption with Noble Metal (Rh, Pd, and Pt)-Decorated N-CNTs: A First-Principles Study. 2018 , 3, 16892-16898	11
178	Transformation of biomass into carbon nanofiber for supercapacitor application [A review. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 20811-20821	6.7 97
177	Restructured Fe/Mn Alloys Encapsulated by N-doped Carbon Nanotube Catalysts Derived from Bimetallic MOF for Enhanced Oxygen Reduction Reaction. <i>ChemCatChem</i> , 2018 , 10, 5475-5486	5.2 22

176	MOF Derived Catalysts for Oxygen Reduction Reaction in Proton Exchange Membrane Fuel Cell. 2018 , 778, 275-282		1
175	Active Sites in Nitrogen-Doped Carbon Materials for Oxygen Reduction Reaction. 2018 , 227-249		8
174	Highly Graphitic, Mesoporous Carbon Materials as Electrocatalysts for Vanadium Redox Reactions in All-Vanadium Redox-Flow Batteries. 2018 , 165, A2510-A2518		7
173	Synergistic Effects of Active Sites' Nature and Hydrophilicity on the Oxygen Reduction Reaction Activity of Pt-Free Catalysts. 2018 , 8,		7
172	Facilely Prepared N-Doped Graphene/Pt/TiO ₂ as an Efficient Anode for Acetaminophen Degradation. 2018 , 148, 2418-2431		3
171	Application of Nanomaterials Prepared by Thermolysis of Metal Chelates. 2018 , 459-541		
170	Hydrogenation of Pyridines Using a Nitrogen-Modified Titania-Supported Cobalt Catalyst. <i>Angewandte Chemie</i> , 2018 , 130, 14696-14700	3.6	6
169	Electric Field Poling Effect on the Electrocatalytic Properties of Nitrogen-Functionalized Graphene Nanosheets. 2018 , 6, 2408-2418		2
168	MOF Templated Nitrogen Doped Carbon Stabilized Pt ₂ Co Bimetallic Nanoparticles: Low Pt Content and Robust Activity toward Electrocatalytic Oxygen Reduction Reaction. 2018 , 1, 3331-3338		33
167	Electrochemical properties of Ni(OH) ₂ /MnO ₂ on hybrid N-doped carbon structure as high-performance electrode material. 2018 , 8, 075223		2
166	Synergism of nitrogen and reduced graphene in the electrocatalytic behavior of resorcinol - Formaldehyde based carbon aerogels. <i>Carbon</i> , 2018 , 139, 872-879	10.4	20
165	Toxicology of Heterocarbon and Application of Nanoheterocarbon Materials for CBRN Defense. 2018 , 245-277		2
164	Adsorption Properties of N ₂ , CH ₄ , and CO ₂ on Sulfur-Doped Microporous Carbons. 2018 , 63, 2914-2920		12
163	Facile synthesis of 3D N-doped porous carbon nanosheets as highly active electrocatalysts toward the reduction of hydrogen peroxide. 2018 , 10, 14923-14930		22
162	High strain rate effects on mechanical properties of inductively coupled plasma treated carbon nanotube reinforced epoxy composites. 2018 , 154, 209-215		7
161	Research on the oxygen reduction reaction (ORR) mechanism of g-C ₃ N ₄ doped by Ag based on first-principles calculations. 2018 , 65, 1431-1436		8
160	The different influences of graphene quantum dots and N over oxygen reduction reaction. 2018 , 190, 1-7		2
159	Development of nitrogen-doped carbon for selective metal ion capture. 2018 , 350, 608-615		48

158	Regenerating Spent Solutions of Vanadium-containing Heteropoly Acids in the Presence of Additives. 2018 , 644, 869-876		1
157	Structure and permeability of ionomers studied by atomistic molecular simulation combined with the theory of solutions in the energy representation. 2018 , 148, 214903		12
156	Understanding the Effect of Germanium as an Efficient Auxiliary Pre-Dopant in Carbon Nanotubes on Enhancing Oxygen Reduction Reaction. 2018 , 6, 2387-2393		2
155	Hydrogenation of Pyridines Using a Nitrogen-Modified Titania-Supported Cobalt Catalyst. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 14488-14492	16.4	29
154	La _{0.4} Ca _{0.6} Mn _{0.9} Fe _{0.1} O ₃ nanoparticle-dispersed nitrogen-doped porous carbon composite as an efficient oxygen reduction electrocatalyst. 2019 , 131, 105786		2
153	Rational Synthesis of Iron/Nitrogen-Doped Carbon Catalyst through a Spatial Isolation Strategy for Efficient Oxygen Reduction in Acidic and Alkaline Media. 2019 , 25, 11560-11565		3
152	3D porous graphitic nanocarbon for enhancing the performance and durability of Pt catalysts: a balance between graphitization and hierarchical porosity. 2019 , 12, 2830-2841		112
151	Precious Metal-Free Nickel Nitride Catalyst for the Oxygen Reduction Reaction. 2019 , 11, 26863-26871		47
150	Influence of Heat Resistance of Precursor in Cathode Catalysts for Polymer Electrolyte Fuel Cell on Oxygen Reduction Activity. 2019 , 48, 152-155		1
149	Iron, Cobalt, and Nitrogen Tri-Doped Ordered Mesoporous Carbon as a Highly Efficient Electrocatalyst for Oxygen Reduction Reaction. 2019 , 4, 7728-7733		2
148	Promotion of the performance of nitrogen-doped graphene by secondary heteroatoms doping in energy transformation and storage. 2019 , 25, 3499-3522		2
147	Effect of nitrogen co-doping with ruthenium on the catalytic performance of Ba/Ru-N-MC catalysts for ammonia synthesis.. 2019 , 9, 22045-22052		6
146	N-Doped Mesoporous Carbons: From Synthesis to Applications as Metal-Free Reduction Catalysts and Energy Storage Materials. <i>Frontiers in Chemistry</i> , 2019 , 7, 761	5	14
145	Microbial Membrane-Supported Catalysts: A Paradigm Shift in Clean Energy and Greener Production. 2019 , 7, 19321-19331		7
144	Upcycling of polyurethane waste by mechanochemistry: synthesis of N-doped porous carbon materials for supercapacitor applications. 2019 , 10, 1618-1627		10
143	Noble-Metal based Metallic Glasses as Highly Catalytic Materials for Hydrogen Oxidation Reaction in Fuel Cells. 2019 , 9, 12136		16
142	Indirect fuel cell based on a redox-flow battery with a new structure to avoid cross-contamination toward the non-use of noble metals. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 27046-27055	6.7	0
141	An N-doped porous carbon network with a multidirectional structure as a highly efficient metal-free catalyst for the oxygen reduction reaction. 2019 , 11, 2423-2433		45

140	Electroreduction of oxygen in alkaline solution on iron phthalocyanine modified carbide-derived carbons. <i>Electrochimica Acta</i> , 2019 , 299, 999-1010	6.7	26
139	Capacitive storage at nitrogen doped amorphous carbon electrodes: structural and chemical effects of nitrogen incorporation.. 2019 , 9, 4063-4071		9
138	Carbon nanotube@ZIF derived Fe-N-doped carbon electrocatalysts for oxygen reduction and evolution reactions. 2019 , 23, 2225-2232		5
137	Controllable preparation of nitrogen-doped graphitized carbon from molecular precursor as non-metal oxygen evolution reaction electrocatalyst. 2019 , 491, 723-734		16
136	Thermodynamic stability of nitrogen functionalities and defects in graphene and graphene nanoribbons from first principles. <i>Carbon</i> , 2019 , 152, 715-726	10.4	11
135	Tuning surface properties of N-doped carbon with TiO ₂ nano-islands for enhanced phenol hydrogenation to cyclohexanone. 2019 , 488, 555-564		21
134	Graphene-Based Metal-Free Catalysis. 2019 , 173-200		
133	Facile preparation of trace-iron doped manganese oxide/N-doped ketjenblack carbon composite for efficient ORR electrocatalyst. 2019 , 100, 230-238		14
132	Comparative study on dry reforming of methane over Co-M (M = Ce, Fe, Zr) catalysts supported on N-doped activated carbon. 2019 , 192, 1-12		22
131	Designing bifunctional catalysts for oxygen reduction/evolution reactions for high efficiency and long lifetime. <i>Electrochimica Acta</i> , 2019 , 313, 41-47	6.7	4
130	Methanol dissociation and oxidation on single Fe atom supported on graphitic carbon nitride. 2019 , 33, e4930		3
129	C59N Heterofullerene: A Promising Catalyst for NO Conversion into N ₂ O. 2019 , 4, 4308-4315		5
128	Electrocatalytic Imprinted Polymer of N-Doped Hollow Carbon Nanosphere-Palladium Nanocomposite for Ultratrace Detection of Anticancer Drug 6-Mercaptopurine. 2019 , 11, 16065-16074		17
127	Synthesis of Au@nitrogen-doped carbon quantum dots@Pt core-shell structure nanoparticles for enhanced methanol electrooxidation. <i>Journal of Alloys and Compounds</i> , 2019 , 793, 635-645	5.7	15
126	Characterization of Complex Interactions at the Gas/Solid Interface with in Situ Spectroscopy: The Case of Nitrogen-Functionalized Carbon. 2019 , 123, 9074-9086		12
125	Simple synthesis of N-doped catalysts with controllable Pt/Ni nanoparticles for high-efficiency ethanol oxidation. 2019 , 25, 3179-3188		4
124	A dual amplification electrochemical immunosensor based on HRP-Au@Ag NPs for carcinoembryonic antigen detection. 2019 , 574, 23-30		15
123	Multidimensional nanostructured membrane electrode assemblies for proton exchange membrane fuel cell applications. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 9447-9477	13	29

122	Cross-linked poly(ionic liquid) as precursors for nitrogen-doped porous carbons.. 2019 , 9, 8137-8145		6
121	A Comprehensive Investigation on Pyrolyzed Fe-N-C Composites as Highly Efficient Electrocatalyst toward the Oxygen Reduction Reaction of PEMFCs. 2019 , 11, 14126-14135		18
120	One-step synthesis of hollow chain-like nitrogen doped carbon nanotubes/iron carbide as highly efficient bifunctional oxygen electrocatalyst. <i>Journal of Electroanalytical Chemistry</i> , 2019 , 838, 16-22	4-1	13
119	PGM-Free Cathode Catalysts for PEM Fuel Cells: A Mini-Review on Stability Challenges. <i>Advanced Materials</i> , 2019 , 31, e1807615	24	267
118	Nanoconfinement effects of N-doped hierarchical carbon on thermal behaviors of organic phase change materials. 2019 , 18, 280-288		51
117	Graphene/pyrrolic-structured nitrogen-doped CNT nanocomposite supports for Pd-catalysed Heck coupling and chemoselective hydrogenation of nitroarenes. 2019 , 1, 1		3
116	Enhancement of Electricity Generation in Single Chamber Microbial Fuel Cell Using Binuclear-Cobalt-Phthalocyanine and Cerium Oxide Co-Supported on Ordered Mesoporous Carbon as Cathode Catalyst. 2019 , 166, F9-F17		6
115	LaMnO ₃ nanoparticles supported on N doped porous carbon as efficient photocatalyst. 2019 , 159, 59-68		18
114	High pressure study of nitrogen doped carbon nanotubes using Raman spectroscopy and synchrotron X-ray diffraction. 2020 , 13, 3008-3016		4
113	A Theory/Experience Description of Support Effects in Carbon-Supported Catalysts. 2020 , 120, 1250-1349		215
112	Nitrogen-Doped Carbon Nanomaterials: Synthesis, Characteristics and Applications. 2020 , 15, 2282-2293		38
111	Recent progress of carbon dots and carbon nanotubes applied in oxygen reduction reaction of fuel cell for transportation. 2020 , 257, 114027		64
110	Three 2D polyhalogenated Co(II)-based MOFs: Syntheses, crystal structure and electrocatalytic hydrogen evolution reaction. 2020 , 281, 121052		14
109	Selective hydrogenolysis of lignin-derived aryl ethers over Co/C@N catalysts. 2020 , 148, 729-738		19
108	Understanding the roles of amorphous domains and oxygen-containing groups of nitrogen-doped carbon in oxygen reduction catalysis: toward superior activity. 2020 , 7, 177-185		8
107	Sulfur doped carbon porous as an efficient catalyst for sustainable energy processes. 2020 , 39, 13299		3
106	Pomelo peel-derived, N-doped biochar microspheres as an efficient and durable metal-free ORR catalyst in microbial fuel cells. 2020 , 4, 1642-1653		22
105	Electrocatalysis at Nanocarbons: Model Systems and Applications in Energy Conversion. 2020 , 201-249		3

104	Effective electrochemical detection of dopamine with highly active molybdenum oxide nanoparticles decorated on 2, 6 diaminopyridine/reduced graphene oxide. 2020 , 153, 104501		22
103	Enhancing oxygen reduction reaction by using metal-free nitrogen-doped carbon black as cathode catalysts in microbial fuel cells treating wastewater. 2020 , 182, 109011		32
102	Chitosan as a sustainable precursor for nitrogen-containing carbon nanomaterials: synthesis and uses. 2020 , 10, 100053		17
101	A multi-component system for urea electrooxidation: Ir ₃ Sn nanoparticles loading on Iron- and Nitrogen- codoped composite carbon support. 2020 , 112, 116-121		3
100	Highly stable and ordered intermetallic PtCo alloy catalyst supported on graphitized carbon containing Co@CN for oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 19833-19842	13	18
99	Bermuda grass derived nitrogen-doped carbon as electrocatalyst in graphite felt electrode to increase the efficiency of all-iron redox flow batteries. <i>Journal of Electroanalytical Chemistry</i> , 2020 , 878, 114577	4.1	6
98	Enhancing Methanol Oxidation Reaction with Platinum-based Catalysts using a N-Doped Three-dimensional Graphitic Carbon Support. <i>ChemCatChem</i> , 2020 , 12, 6000-6012	5.2	5
97	The oxygen reduction reaction of two electron transfer of nitrogen-doped carbon in the electro-Fenton system. <i>New Journal of Chemistry</i> , 2020 , 44, 16584-16593	3.6	2
96	Configuring the Porosity and Microstructure of Carbon Paper Electrode Using Pore Formers and Its Influence on the Performance of PEMFC. <i>Energy & Fuels</i> , 2020 , 34, 16736-16745	4.1	6
95	Ionic liquid derived nitrogen-doped graphite felt electrodes for vanadium redox flow batteries. <i>Carbon</i> , 2020 , 166, 131-137	10.4	8
94	Synthesis, morphology, magnetic and electrochemical studies of nitrogen-doped multiwall carbon nanotubes fabricated using banded iron-formation as catalyst. <i>Journal of Alloys and Compounds</i> , 2020 , 835, 155200	5.7	9
93	Recent advances in the removal of persistent organic pollutants (POPs) using multifunctional materials: a review. 2020 , 265, 114908		33
92	Cross-dimensional model of the oxygen transport behavior in low-Pt proton exchange membrane fuel cells. 2020 , 400, 125796		13
91	Single Si-Doped Graphene as a Catalyst in Oxygen Reduction Reactions: An In Silico Study. 2020 , 5, 15268-15279		9
90	Synthesis of π -Extended Carbazoles via One-Pot C-C Coupling and Chlorination Promoted by FeCl ₃ . 2020 , 38, 1538-1544		3
89	Chitosan-Based N-Doped Carbon Materials for Electrocatalytic and Photocatalytic Applications. 2020 , 8, 4708-4727		48
88	Role of nitrogenated carbon in tuning Pt-CeOx based anode catalysts for higher performance of hydrogen-powered fuel cells. 2020 , 515, 146054		5
87	Nitrogen-Doping Through Two-Step Pyrolysis of Polyacrylonitrile on Graphite Felts for Vanadium Redox Flow Batteries. <i>Energy & Fuels</i> , 2020 , 34, 5052-5059	4.1	5

86	Polymer-Assisted Electrophoretic Synthesis of N-Doped Graphene-Polypyrrole Demonstrating Oxygen Reduction with Excellent Methanol Crossover Impact and Durability. 2020 , 26, 12664-12673		8
85	Janus Structured Multiwalled Carbon Nanotube Forests for Simple Asymmetric Surface Functionalization and Patterning at the Nanoscale. 2020 , 3, 7554-7562		1
84	CuN doped graphene as an active electrocatalyst for oxygen reduction reaction in fuel cells: A DFT study. 2020 , 96, 107537		10
83	Hydrothermal carbonization in the synthesis of sustainable porous carbon materials for water treatment. 2020 , 445-503		3
82	. 2020 ,		2
81	Catalytic Activity Towards Hydrogen Evolution Dependent of the Degree of Conjugation and Absorption of Six Organic Chromophores. 2020 , 9, 405-408		1
80	Facile synthesis of synergistic Pt/(Co-N)@C composites as alternative oxygen-reduction electrode of PEMFCs with attractive activity and durability. 2020 , 193, 108012		13
79	Stripping voltammetric analysis of mercury ions at nitrogen-doped reduced graphene oxide modified electrode. <i>Journal of Electroanalytical Chemistry</i> , 2020 , 865, 114121	4.1	8
78	Ga and Ge-doped graphene structures: A DFT study of sensor applications for methanol. <i>Computational and Theoretical Chemistry</i> , 2020 , 1180, 112828	2	22
77	Si-Doped Single-Walled Carbon Nanotubes as Potential Catalysts for Oxygen Reduction Reactions. <i>Russian Journal of General Chemistry</i> , 2020 , 90, 454-459	0.7	3
76	Template-Free Synthesis of N-Doped Porous Carbon Materials From Furfuryl Amine-Based Protic Salts. <i>Frontiers in Chemistry</i> , 2020 , 8, 196	5	4
75	Synthesis of polymer/MWCNT nanocomposite catalyst supporting materials for high-temperature PEM fuel cells. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 4339-4353	6.7	3
74	Emerging carbon nanostructures in electrochemical processes. 2021 , 353-388		3
73	Recent progress in the development of biomass-derived nitrogen-doped porous carbon. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 3703-3728	13	69
72	Polyethyleneimine-functionalized mesoporous carbon nanosheets as metal-free catalysts for the selective oxidation of H ₂ S at room temperature. <i>Applied Catalysis B: Environmental</i> , 2021 , 283, 119650	21.8	7
71	CHAPTER 9:Fuelling the Hydrogen Economy with 3D Graphene-based Macroscopic Assemblies. <i>Chemistry in the Environment</i> , 2021 , 237-256		
70	Bimetallic PdBe Supported on Nitrogen-Doped Reduced Graphene Oxide as Electrocatalyst for Formic Acid Oxidation. <i>Arabian Journal for Science and Engineering</i> , 2021 , 46, 6543-6556	2.5	3
69	A Robust PtNi Nanoframe/N-Doped Graphene Aerogel Electrocatalyst with Both High Activity and Stability. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 9590-9597	16.4	26

68	A Robust PtNi Nanoframe/N-Doped Graphene Aerogel Electrocatalyst with Both High Activity and Stability. <i>Angewandte Chemie</i> , 2021 , 133, 9676-9683	3.6	2
67	Microwave-Assisted Facile Hydrothermal Synthesis of Fe ₃ O ₄ @TiO ₂ Nanocomposites for the Efficient Bifunctional Electrocatalytic Activity of OER/ORR. <i>Energy & Fuels</i> , 2021 , 35, 8263-8274	4.1	7
66	CoP-anchored high N-doped carbon@graphene sheet as bifunctional electrocatalyst for efficient overall water splitting. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 18224-18232	6.7	8
65	Nitrogen-doped carbon spheres-decorated graphite felt as a high-performance electrode for Fe based redox flow batteries. <i>Diamond and Related Materials</i> , 2021 , 116, 108413	3.5	3
64	Photoionization cross-section in a GaAs spherical quantum shell: the effect of parabolic confining electric potentials. <i>European Physical Journal B</i> , 2021 , 94, 1	1.2	0
63	Enhanced Performance of Pt Nanoparticles on Ni-N Co-Doped Graphitized Carbon for Oxygen Reduction Reaction in Polymer Electrolyte Membrane Fuel Cells. <i>Catalysts</i> , 2021 , 11, 909	4	1
62	Lignin Biorefinery: New Horizons in Catalytic Hydrodeoxygenation for the Production of Chemicals. <i>Energy & Fuels</i> ,	4.1	4
61	Ab initio study of graphitic-N and pyridinic-N doped graphene for catalytic oxygen reduction reactions. <i>Computational and Theoretical Chemistry</i> , 2021 , 1201, 113292	2	3
60	Pt-Based Intermetallic Nanocrystals in Cathode Catalysts for Proton Exchange Membrane Fuel Cells: From Precise Synthesis to Oxygen Reduction Reaction Strategy. <i>Catalysts</i> , 2021 , 11, 1050	4	2
59	Hydrogen absorption-desorption cycle decay mechanism of palladium nanoparticle decorated nitrogen doped graphene. <i>Progress in Natural Science: Materials International</i> , 2021 , 31, 514-520	3.6	3
58	Novel metal-free in-plane functionalized graphitic carbon nitride with graphene quantum dots for effective photodegradation of 4-bromophenol. <i>Carbon</i> , 2021 , 182, 89-99	10.4	5
57	Engineering Pt Nanoparticles onto Resin-Derived Iron and Nitrogen Co-Doped Porous Carbon Nanostructure Boosts Oxygen Reduction Catalysis. <i>ChemCatChem</i> ,	5.2	0
56	Recent Studies on Bimetallic Pt ₂ M Catalyst for the Oxygen Reduction Reaction in Polymer Electrolyte Membrane Fuel Cells. <i>Journal of Korean Institute of Metals and Materials</i> , 2021 , 59, 741-752	1	0
55	Fluorination-assisted preparation of self-supporting single-atom Fe-N-doped single-wall carbon nanotube film as bifunctional oxygen electrode for rechargeable Zn-Air batteries. <i>Applied Catalysis B: Environmental</i> , 2021 , 294, 120239	21.8	21
54	Polybenzimidazole/cerium dioxide/graphitic carbon nitride nanosheets for high performance and durable high temperature proton exchange membranes. <i>Journal of Membrane Science</i> , 2021 , 639, 119768	8.6	9
53	Electrocatalysis using nanomaterials. <i>Frontiers of Nanoscience</i> , 2021 , 18, 343-420	0.7	0
52	Characteristics of Carbon Nanofibers. <i>Springer Series in Materials Science</i> , 2020 , 215-245	0.9	23
51	Microstructural analysis of nitrogen-doped char by Raman spectroscopy: Raman shift analysis from first principles. <i>Carbon</i> , 2020 , 167, 559-574	10.4	20

50	CHAPTER 7:Hydrothermal Carbon Materials for Heterogeneous Catalysis. <i>RSC Green Chemistry</i> , 2015 , 191-224	0.9	1
49	ZIF-67 Derived Cu-Doped Electrocatalyst for Oxygen Reduction Reaction. <i>Journal of Electrochemical Energy Conversion and Storage</i> , 2021 , 18,	2	8
48	Fabrication of electro-catalytic nano-particles and applications to proton exchange membrane fuel cells. <i>Sustainable Energy Developments</i> , 2015 , 95-129		2
47	Synchrotron Radiation Analysis of Carbon Alloy Catalysts. <i>Hyomen Kagaku</i> , 2011 , 32, 716-722		1
46	Doped graphene/carbon black hybrid catalyst giving enhanced oxygen reduction reaction activity with high resistance to corrosion in proton exchange membrane fuel cells. <i>Journal of Energy Chemistry</i> , 2021 ,	12	1
45	Applications of DV-XE Method for New Material Design in Dye-Sensitized Solar Cell. 2015 , 237-256		
44	Fuel Cell Catalysts Based on Carbon Nanomaterials. 267-294		
43	Influence of nitrogen and oxygen heteroatoms on catalytic activity of carbon nanoporous materials of KAU and SCN types in the model reaction of benzoyl peroxide decomposition. <i>Reports National Academy of Science of Ukraine</i> , 2015 , 75-81	0.2	
42	References. 2017 , 105-121		
41	Tuning metal catalysts via nitrogen-doped nanocarbons for energy chemistry: From metal nanoparticles to single metal sites. <i>EnergyChem</i> , 2021 , 3, 100066	36.9	3
40	Catalytic Performance of Copper-Manganese Supported on Activated Carbon Synthesized by Deposition-Precipitation Method. <i>Chemistry and Chemical Technology</i> , 2020 , 14, 32-37	0.9	
39	Construction of a three-dimensional S,N co-doped ZIF-67 derivative assisted by PEDOT nanowires and its application in rechargeable Zn ir batteries. <i>New Journal of Chemistry</i> , 2021 , 45, 22787-22797	3.6	1
38	Nitrogen-Doped Graphene Aerogel Microspheres Used as Electrocatalyst Supports for Methanol Oxidation. <i>Industrial & Engineering Chemistry Research</i> , 2022 , 61, 1398-1407	3.9	2
37	Bio-Based Graphene Sheet/Copolymer Composite as Supporting Material for Nanocatalysts towards Electrochemical Studies and Direct Alkaline Alcohol Fuel Cells. <i>Journal of Nanomaterials</i> , 2022 , 2022, 1-13	3.2	0
36	Porous carbons for energy storage and conversion. 2022 , 239-540		
35	CoZn-ZIF-derived carbon-supported Cu catalyst for methanol oxidative carbonylation to dimethyl carbonate. <i>New Journal of Chemistry</i> ,	3.6	0
34	Doping of Carbon Nanostructures for Energy Application. <i>Advances in Material Research and Technology</i> , 2022 , 83-109	0.4	
33	Corrosion Chemistry of Electrocatalysts.. <i>Advanced Materials</i> , 2022 , e2200840	24	5

32	2,2'-bipyridine palladium (II) complexes derived N-doped carbon encapsulated palladium nanoparticles for formic acid oxidation. <i>Electrochimica Acta</i> , 2022 , 413, 140179	6.7	0
31	Recent advances in high-loading catalysts for low-temperature fuel cells: From nanoparticle to single atom. <i>SusMat</i> , 2021 , 1, 569-592		8
30	Identifying the realistic catalyst for aqueous phase reforming of methanol over Pt supported by lanthanum nickel perovskite catalyst. <i>Applied Catalysis B: Environmental</i> , 2022 , 121435	21.8	0
29	Perspectives on carbon-alternative materials as Pt catalyst supports for a durable oxygen reduction reaction in proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2022 , 534, 231422	8.9	0
28	Table_1.DOCX. 2020 ,		
27	Pore Structure and Gas Diffusion Features of Ionic Liquid-Derived Carbon Membranes. <i>Journal of Carbon Research</i> , 2022 , 8, 25	3.3	
26	Stable and high-performance N-micro/mesoporous carbon-supported Pt/Co nanoparticles-GDE for electrocatalytic oxygen reduction in PEMFC. <i>International Journal of Hydrogen Energy</i> , 2022 ,	6.7	0
25	Environmentally Friendly Bifunctional Catalyst for ORR and OER from Coconut Shell Particles. <i>Advances in Materials Physics and Chemistry</i> , 2022 , 12, 106-123	0.5	0
24	Effect of Polymer-Coating on Acetylene Black for Durability of Polymer Electrolyte Membrane Fuel Cell. <i>SSRN Electronic Journal</i> ,	1	
23	Nitrogen-Rich Carbonaceous Materials for Advanced Oxygen Electrocatalysis: Synthesis, Characterization, and Activity of Nitrogen Sites. <i>Advanced Functional Materials</i> , 2204137	15.6	4
22	Design a promising non-precious electro-catalyst for oxygen reduction reaction in fuel cells. <i>International Journal of Hydrogen Energy</i> , 2022 ,	6.7	0
21	Oxygen reduction reaction by metal-free catalysts. 2022 , 241-275		
20	Recent Advances in Carbon-Based Adsorbents for Adsorptive Separation of Light Hydrocarbons. <i>Research</i> , 2022 , 2022, 1-21	7.8	0
19	Universal avenue to metal-transition metal carbide grafted N-doped carbon framework as efficient dual Mott-Schottky electrocatalysts for water splitting. <i>Sustainable Materials and Technologies</i> , 2022 , 33, e00451	5.3	0
18	Transfer- and lithography-free CVD of N-doped graphenic carbon thin films on non-metal substrates. <i>Materials Research Bulletin</i> , 2022 , 154, 111943	5.1	
17	Hierarchically porous N-doped carbon nanosheet networks with ultrafine encapsulated Fe ₃ C and Fe-N _x for oxygen reduction reaction in alkaline and acidic media. <i>Journal of Alloys and Compounds</i> , 2022 , 920, 165821	5.7	0
16	The Role of Carbon-Based Materials for Fuel Cells Performance. <i>Carbon</i> , 2022 ,	10.4	2
15	Machine-learning-assisted insight into the cathode catalyst layer in proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2022 , 543, 231827	8.9	0

14	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
13	Ni/Co Bimetallic Metal-Organic Frameworks on Nitrogen-Doped Graphene Oxide Nanoribbons for Electrochemical Sensing of Doxorubicin. 2022 , 5, 11045-11058	1
12	Effect of polymer-coating on acetylene black for durability of polymer electrolyte membrane fuel cell. 2022 , 549, 232079	0
11	Electrocatalytic hydrogenation of phenol by active sites on Pt-decorated shrimp shell biochar catalysts: Performance and internal mechanism. 2023 , 331, 125845	0
10	Development of Low-Cost Nitrogen and Boron Doped Carbon Black Cathode Catalysts for the Improvement of Hydrogen Bromine Flow Battery Cathode Kinetics.	0
9	Revealing the role of ionic liquids in promoting fuel cell catalysts reactivity and durability. 2022 , 13,	1
8	Ultrathin ZnIn ₂ S ₄ nanosheet arrays activated by nitrogen-doped carbon for electrocatalytic CO ₂ reduction reaction toward ethanol. 2022 , 155696	1
7	Atomically dispersed FeN ₄ moieties in porous carbon as efficient cathode catalyst for enhancing the performance in microbial fuel cells. 2023 , 556, 232434	0
6	Facile template-free synthesis of 3D cluster-like nitrogen-doped mesoporous carbon as metal-free catalyst for selective oxidation of H ₂ S. 2023 , 11, 109095	0
5	Hydrothermal Carbonization vs. Pyrolysis: Effect on the Porosity of the Activated Carbon Materials. 2022 , 14, 15982	0
4	Amorphous Carbon Films for Electronic Applications. 2204912	1
3	Size and near-surface engineering in weak-oxidative confined space to fabricate 4 nm L10-PtCo@Pt nanoparticles for oxygen reduction reaction.	1
2	Recent progress of Ni-based catalysts for methanol electrooxidation reaction in alkaline media. 2023 , 2, 100055	0
1	Development of low-cost nitrogen- and boron-doped carbon black cathode catalysts for the improvement of hydrogen-bromine flow battery cathode kinetics.	0