Mohammad Shamsuddin Ahmed

List of Publications by Year
in descending order

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107 papers	3,977 citations	81900 39 h-index	149698 56 g-index
110 all docs	110 docs citations	110 times ranked	4407 citing authors

#	Article	IF	Citations
1	Highly Active Graphene-Supported Ni_xPd_{100â€“x}Binary Alloyed Catalysts for Electro-Oxidation of Ethanol in an Alkaline Media. ACS Catalysis, 2014, 4, 1830-1837.	11.2	179
2	Reductive determination of hydrogen peroxide with MWCNTs-Pd nanoparticles on a modified glassy carbon electrode. Biosensors and Bioelectronics, 2011, 26, 2287-2291.	10.1	109
3	Development of Highly Active Bifunctional Electrocatalyst Using Co3O4 on Carbon Nanotubes for Oxygen Reduction and Oxygen Evolution. Scientific Reports, 2018, 8, 2543.	3.3	108
4	Electrochemical deposition of silver on manganese dioxide coated reduced graphene oxide for enhanced oxygen reduction reaction. Journal of Power Sources, 2015, 288, 261-269.	7.8	97
5	New approach of nitrogen and sulfur-doped graphene synthesis using dipyrrolemethane and their electrocatalytic activity for oxygen reduction in alkaline media. Journal of Power Sources, 2015, 275, 73-79.	7.8	95
6	New functionalized graphene sheets for enhanced oxygen reduction as metal-free cathode electrocatalysts. Journal of Power Sources, 2012, 218, 168-173.	7.8	87
7	Electrochemical determination of serotonin on glassy carbon electrode modified with various graphene nanomaterials. Sensors and Actuators B: Chemical, 2012, 174, 285-291.	7.8	79
8	3,4-Ethylenedioxythiophene functionalized graphene with palladium nanoparticles for enhanced electrocatalytic oxygen reduction reaction. Journal of Power Sources, 2015, 281, 211-218.	7.8	75
9	Electrocatalytic determination of hydrazine by a glassy carbon electrode modified with PEDOP/MWCNTsâ€“Pd nanoparticles. Sensors and Actuators B: Chemical, 2011, 153, 246-251.	7.8	74
10	Electrochemical sensor for hydroquinone and catechol based on electrochemically reduced GOâ€“terthiopheneâ€“CNT. Sensors and Actuators B: Chemical, 2014, 194, 460-469.	7.8	74
11	Novel determination of hydrogen peroxide by electrochemically reduced graphene oxide grafted with aminothiophenolâ€“Pd nanoparticles. Sensors and Actuators B: Chemical, 2013, 178, 450-457.	7.8	72
12	The individual role of pyrrolic, pyridinic and graphitic nitrogen in the growth kinetics of Pd NPs on N-rGO followed by a comprehensive study on ORR. International Journal of Hydrogen Energy, 2018, 43, 5690-5702.	7.1	72
13	Highly Efficient Dual Active Palladium Nanonetwork Electrocatalyst for Ethanol Oxidation and Hydrogen Evolution. ACS Applied Materials & Interfaces, 2017, 9, 39303-39311.	8.0	71
14	One-step chemical reduction of graphene oxide with oligothiophene for improved electrocatalytic oxygen reduction reactions. Carbon, 2013, 61, 164-172.	10.3	70
15	Fabrication of 1,4-bis(aminomethyl)benzene and cobalt hydroxide @ graphene oxide for selective detection of dopamine in the presence of ascorbic acid and serotonin. Sensors and Actuators B: Chemical, 2017, 240, 297-307.	7.8	70
16	Thiolated graphene oxide-supported palladium cobalt alloyed nanoparticles as high performance electrocatalyst for oxygen reduction reaction. Journal of Power Sources, 2015, 293, 380-387.	7.8	68
17	Palladiumâ€Catalyzed Sonogashira Reaction for the Synthesis of Arylalkynecarboxylic Acids from Aryl Bromides at Low Temperature. European Journal of Organic Chemistry, 2013, 2013, 1973-1978.	2.4	67
18	Î´-MnO2 nanoflowers on sulfonated graphene sheets for stable oxygen reduction and hydrogen evolution reaction. Electrochimica Acta, 2019, 296, 235-242.	5.2	62

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19	A new fluoride ion colorimetric sensor based on dipyrrolemethanes. Sensors and Actuators B: Chemical, 2010, 146, 160-164.	7.8	61
20	Ultrasmall PdmMn1â‾'mOx binary alloyed nanoparticles on graphene catalysts for ethanol oxidation in alkaline media. Journal of Power Sources, 2016, 308, 180-188.	7.8	59
21	Enhanced electrocatalytic activity of oxygen reduction by cobalt-porphyrin functionalized withÂgraphene oxide in an alkaline solution. International Journal of Hydrogen Energy, 2014, 39, 4803-4811.	7.1	58
22	Electrochemical activity evaluation of chemically damaged carbon nanotube with palladium nanoparticles for ethanol oxidation. Journal of Power Sources, 2015, 282, 479-488.	7.8	57
23	Electrocatalytic reduction of dioxygen at a modified glassy carbon electrode based on NafionÂ®-dispersed single-walled carbon nanotubes and cobaltâ€"porphyrin with palladium nanoparticles in acidic media. Electrochimica Acta, 2011, 56, 4924-4929.	5.2	54
24	Covalently grafted platinum nanoparticles to multi walled carbon nanotubes for enhanced electrocatalytic oxygen reduction. Electrochimica Acta, 2013, 92, 168-175.	5.2	54
25	A novel Î´-MnO₂ with carbon nanotubes nanocomposite as an enzyme-free sensor for hydrogen peroxide electrosensing. RSC Advances, 2016, 6, 50572-50580.	3.6	54
26	Synthesis of graphene oxide grafted poly(lactic acid) with palladium nanoparticles and its application to serotonin sensing. Applied Surface Science, 2013, 284, 438-445.	6.1	52
27	New Approach for Porous Chitosanâ€"Graphene Matrix Preparation through Enhanced Amidation for Synergic Detection of Dopamine and Uric Acid. ACS Omega, 2017, 2, 3043-3054.	3.5	52
28	Electrocatalytic reduction of H2O2 by Pt nanoparticles covalently bonded to thiolated carbon nanostructures. Electrochimica Acta, 2012, 65, 288-293.	5.2	50
29	Synthesis and Electrocatalytic Activity Evaluation of Nanoflower Shaped Ni-Pd on Alcohol Oxidation Reaction. Journal of the Electrochemical Society, 2014, 161, F1300-F1306.	2.9	50
30	Electrochemical oxidation and determination of dopamine in the presence of AA using ferulic acid functionalized electrochemically reduced graphene. Sensors and Actuators B: Chemical, 2014, 204, 289-296.	7.8	50
31	Determination of Dopamine in the Presence of Ascorbic Acid by Nafion and Single-Walled Carbon Nanotube Film Modified on Carbon Fiber Microelectrode. Sensors, 2008, 8, 6924-6935.	3.8	49
32	Simultaneous reduction and nitrogen functionalization of graphene oxide using lemon for metal-free oxygen reduction reaction. Journal of Power Sources, 2017, 372, 116-124.	7.8	48
33	Various Carbon Chain Containing Linkages Grafted Graphene with Silver Nanoparticles Electrocatalysts for Oxygen Reduction Reaction. Journal of the Electrochemical Society, 2015, 162, F1-F8.	2.9	47
34	A novel reduced graphene oxide based absorber for augmenting the water yield and thermal performance of solar desalination unit. Materials Letters, 2021, 286, 128867.	2.6	45
35	3D graphene preparation via covalent amide functionalization for efficient metal-free electrocatalysis in oxygen reduction. Scientific Reports, 2017, 7, 43279.	3.3	44
36	Improved electrocatalytic effect of carbon nanomaterials by covalently anchoring with CoTAPP via diazonium salt reactions. Electrochemistry Communications, 2012, 22, 141-144.	4.7	43

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37	Different length linkages of graphene modified with metal nanoparticles for oxygen reduction in acidic media. Journal of Materials Chemistry, 2012, 22, 16353.	6.7	41
38	High catalytic activity of electrochemically reduced graphene composite toward electrochemical sensing of Orange II. Food Chemistry, 2015, 169, 114-119.	8.2	41
39	Covalent functionalization of graphene with 1,5-diaminonaphthalene and ultrasmall palladium nanoparticles for electrocatalytic oxygen reduction. International Journal of Hydrogen Energy, 2017, 42, 2061-2070.	7.1	41
40	Effective electrochemical detection of dopamine with highly active molybdenum oxide nanoparticles decorated on 2, 6 diaminopyridine/reduced graphene oxide. Microchemical Journal, 2020, 153, 104501.	4.5	41
41	Nitrogen-rich graphitic-carbon@graphene as a metal-free electrocatalyst for oxygen reduction reaction. Scientific Reports, 2020, 10, 12431.	3.3	41
42	Iron nanoparticles implanted metal-organic-frameworks based Feâ€“Nâ€“C catalysts for high-performance oxygen reduction reaction. Journal of Power Sources, 2020, 451, 227733.	7.8	41
43	A highly stable and sensitive GO-XDA-Mn2O3 electrochemical sensor for simultaneous electrooxidation of paracetamol and ascorbic acid. Electrochimica Acta, 2017, 245, 742-751.	5.2	39
44	Advancement in graphene-based nanocomposites as high capacity anode materials for sodium-ion batteries. Journal of Materials Chemistry A, 2021, 9, 2628-2661.	10.3	39
45	Graphene Supported Silver Nanocrystals Preparation for Efficient Oxygen Reduction in Alkaline Fuel Cells. Journal of the Electrochemical Society, 2016, 163, F1169-F1176.	2.9	38
46	Non-enzymatic superoxide anion radical sensor based on Pt nanoparticles covalently bonded to thiolated MWCNTs. Electrochimica Acta, 2012, 81, 31-36.	5.2	37
47	Highly efficient benzylamine functionalized graphene supported palladium for electrocatalytic hydrazine determination. Sensors and Actuators B: Chemical, 2015, 221, 1256-1263.	7.8	37
48	Determination of Dopamine by Dual Doped Graphene-Fe₂O₃in Presence of Ascorbic Acid. Journal of the Electrochemical Society, 2015, 162, B363-B369.	2.9	37
49	Amide-functionalized graphene with 1,4-diaminobutane as efficient metal-free and porous electrocatalyst for oxygen reduction. Carbon, 2017, 111, 577-586.	10.3	36
50	Electrocatalytic reduction of dioxygen by cobalt porphyrin-modified glassy carbon electrode with single-walled carbon nanotubes and nafion in aqueous solutions. Electrochimica Acta, 2008, 53, 2579-2584.	5.2	35
51	Preparation of electrochemically reduced graphene oxide-based silver-cobalt alloy nanocatalysts for efficient oxygen reduction reaction. International Journal of Hydrogen Energy, 2017, 42, 21751-21761.	7.1	35
52	Trouble Free Dopamine Sensing by Palladium Nanoparticles Fabricated Poly(3,4-ethylenedioxythiophene) Functionalized Graphene. Journal of the Electrochemical Society, 2016, 163, B113-B118.	2.9	31
53	Freestanding palladium nanonetworks electrocatalyst for oxygen reduction reaction in fuel cells. International Journal of Hydrogen Energy, 2018, 43, 229-238.	7.1	31
54	A Green Preparation of Nitrogen Doped Graphene Using Urine for Oxygen Reduction in Alkaline Fuel Cells. Journal of Nanoscience and Nanotechnology, 2014, 14, 5722-5729.	0.9	30

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55	The Determination of Dopamine in Presence of Serotonin on Dopamine-Functionalized Electrochemically Prepared Graphene Biosensor. Journal of the Electrochemical Society, 2015, 162, B75-B82.	2.9	29
56	Electrocatalytic oxidation of NADH on a glassy carbon electrode modified with MWCNT-Pd nanoparticles and poly 3,4-ethylenedioxypyrrole. Electrochimica Acta, 2011, 56, 10077-10082.	5.2	28
57	Carbon nanotubes-based PdM bimetallic catalysts through N4-system for efficient ethanol oxidation and hydrogen evolution reaction. Scientific Reports, 2019, 9, 11051.	3.3	28
58	A noble silver nanoflower on nitrogen doped carbon nanotube for enhanced oxygen reduction reaction. International Journal of Hydrogen Energy, 2017, 42, 1075-1084.	7.1	27
59	Multiscale Understanding of Covalently Fixed Sulfurâ€"Polyacrylonitrile Composite as Advanced Cathode for Metalâ€"Sulfur Batteries. Advanced Science, 2021, 8, e2101123.	11.2	27
60	The Nanostructure of Nitrogen Atom Linked Carbon Nanotubes with Platinum Employed to the Electrocatalytic Oxygen Reduction. Journal of Nanoscience and Nanotechnology, 2013, 13, 306-314.	0.9	26
61	Highly efficient and stable bifunctional electrocatalyst for water splitting on Feâ€"Co3O4/carbon nanotubes. International Journal of Hydrogen Energy, 2018, 43, 5522-5529.	7.1	26
62	Electrochemically reduced graphene-oxide supported bimetallic nanoparticles highly efficient for oxygen reduction reaction with excellent methanol tolerance. Applied Surface Science, 2018, 434, 905-912.	6.1	25
63	Covalent Hybridization of Thiolated Graphene Sheet and Platinum Nanoparticles for Electrocatalytic Oxygen Reduction Reaction. Journal of Nanoscience and Nanotechnology, 2012, 12, 8349-8355.	0.9	24
64	Conducting polymerâ€coated, palladiumâ€functionalized multiâ€walled carbon nanotubes for the electrochemical sensing of hydroxylamine. Thin Solid Films, 2012, 520, 6664-6668.	1.8	24
65	Template-free synthesis of polyacrylonitrile-derived porous carbon nanoballs on graphene for efficient oxygen reduction in zincâ€"air batteries. Journal of Materials Chemistry A, 2021, 9, 9644-9654.	10.3	23
66	Synergistic Effect of 1,4-Benzenedimethaneamine Assembled Graphene Supported Palladium for Formaldehyde Oxidation Reaction in Alkaline Media. Journal of the Electrochemical Society, 2016, 163, B163-B168.	2.9	22
67	Influence of pyrrolic and pyridinic-N in the size and distribution behaviour of Pd nanoparticles and ORR mechanism. Applied Surface Science, 2020, 533, 147500.	6.1	22
68	Surface functionalization of acidified graphene through amidation for enhanced oxygen reduction reaction. Applied Surface Science, 2021, 536, 147760.	6.1	22
69	Highly efficient Ag doped Î´-MnO2 decorated graphene: Comparison and application in electrochemical detection of H2O2. Applied Surface Science, 2022, 592, 153162.	6.1	22
70	Optoelectrochemical properties of copolymer of terthiophene with 3,4-ethlenedioxypyrrole. Journal of Electroanalytical Chemistry, 2009, 636, 107-112.	3.8	21
71	Nickel nanoflakes on 4-Amino-4H-1,2,4-triazole/graphene for sustainable hydrogen evolution in acid and alkaline media. Applied Surface Science, 2020, 515, 145999.	6.1	21
72	Manganese Dioxide/Reduced Graphene Oxide with Poly(3,4-ethylenedioxythiophene) for Improved Electrocatalytic Oxygen Reduction Reaction. Journal of Nanoscience and Nanotechnology, 2015, 15, 5684-5690.	0.9	20

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73	Nitrogen-Doped Graphene Supported Cobalt Oxide for Sensitive Determination of Dopamine in Presence of High Level Ascorbic Acid. Journal of the Electrochemical Society, 2016, 163, B491-B498.	2.9	20
74	A selective determination of norepinephrine on the glassy carbon electrode modified with poly(ethylenedioxypyrrole dicarboxylic acid) nanofibers. Journal of Solid State Electrochemistry, 2009, 13, 1881-1887.	2.5	19
75	Carbonaceous Materials-12: a Novel Highly Sensitive Graphene Oxide-Based Carbon Electrode: Preparation, Characterization, and Heavy Metal Analysis in Food Samples. Food Analytical Methods, 2016, 9, 322-331.	2.6	19
76	Synthesis and application of electrochemically reduced N-rGO-Co(OH)2 nanocomposite for concurrent detection of biomolecules. Electrochimica Acta, 2017, 235, 709-719.	5.2	19
77	Ultra-fast and highly sensitive enzyme-free glucose biosensing on a nickelâ€“nickel oxide coreâ€“shell electrode. RSC Advances, 2017, 7, 3554-3562.	3.6	18
78	Poly-Cobalt[tetrakis(o-aminophenyl)porphyrin] Nanowire and Single-Walled Carbon Nanotube for the Analysis of Hydrogen Peroxide. Journal of Nanoscience and Nanotechnology, 2011, 11, 987-993.	0.9	17
79	Electrochemical determination of hydrazine in surface water on Co(OH)2 nanoparticles immobilized on functionalized graphene interface. Applied Surface Science, 2021, 540, 148346.	6.1	17
80	Anion Recognition by Urea Derivatives of Anthraquinone: Dihydrogen Phosphate Ion Selective Neutral Receptors. Supramolecular Chemistry, 2002, 14, 405-410.	1.2	16
81	Electrodeposited Palladium Nanotubes on Nanoclusters Mosaic Basement for Electrooxidation of Hydrazine. Journal of Nanoscience and Nanotechnology, 2017, 17, 4961-4969.	0.9	16
82	Palladium doped Î±-MnO2 nanorods on graphene as an electrochemical sensor for simultaneous determination of dopamine and paracetamol. Applied Surface Science, 2022, 578, 152090.	6.1	16
83	Nanocrystal co-existed highly dense atomically disperse Pt@3D-hierarchical porous carbon electrocatalysts for tri-iodide and oxygen reduction reactions. Chemical Engineering Journal, 2022, 446, 137249.	12.7	16
84	Potential enhancement of antibacterial activity of graphene oxide-silver nanocomposite by introducing C2 carbon chain linkage. Applied Surface Science, 2016, 360, 915-920.	6.1	15
85	2,3-diaminopyridine functionalized reduced graphene oxide-supported palladium nanoparticles with high activity for electrocatalytic oxygen reduction reaction. Applied Surface Science, 2017, 406, 226-234.	6.1	15
86	Selective Determination of Serotonin on Poly(3,4-ethylenedioxy pyrrole)-single-walled Carbon Nanotube-Modified Glassy Carbon Electrodes. Bulletin of the Korean Chemical Society, 2011, 32, 1215-1220.	1.9	15
87	Polymeric ISE for Hydrogen Sulfite Based on Bis-Urea Calix[4]diquinones as Neutral Lipophilic Ionophores. Electroanalysis, 2003, 15, 872-877.	2.9	14
88	Synthesis and catalytic activity of Ag nanoparticles dispersed on nitrogen-doped GOPx toward direct electrooxidation of formaldehyde. Journal of Electroanalytical Chemistry, 2018, 813, 31-38.	3.8	14
89	Nitrogen-functionalized carbon nanotube based palladium nanoparticles as an efficient catalyst for oxygen reduction and ethanol oxidation reaction. Applied Surface Science Advances, 2022, 9, 100235.	6.8	13
90	Synthesis and characterization of an electrochromic copolymer based on 2,2â€²:5â€²,2â€³-terthiophene and 3,4-ethylenedioxythiophene. Applied Nanoscience (Switzerland), 2012, 2, 133-141.	3.1	12

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91	Determination of Serotonin on a Glassy Carbon Electrode Modified by Electropolymerization of <I>Meso</I>-Tetrakis(2-aminophenyl)porphyrin and Single Walled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2011, 11, 2407-2412.	0.9	11
92	Gold nanoparticle included graphene oxide modified electrode: Picomole detection of metal ions in seawater by stripping voltammetry. Journal of Analytical Chemistry, 2016, 71, 685-695.	0.9	11
93	Novel Silver(I) Ion Selective PVC Membrane Electrode Based on the Schiff Base (N2E,N2'E)-N2,N2'-Bis(Thiophen-2-ylmethylene)-1,1'-Binaphthyl-2,2'-Diamine. Bulletin of the Korean Chemical Society, 2011, 32, 800-804.	1.9	11
94	Electrooxidation of N2H4 through CuCuO electronic oscillation on a nitrogen-doped GO surface. Sensors and Actuators B: Chemical, 2019, 284, 494-504.	7.8	10
95	A Glassy Carbon Electrode Modified with Glucose Oxidase and MWCNTâ€Palladium Nanoparticles for the Determination of Glucose. Electroanalysis, 2011, 23, 2103-2108.	2.9	9
96	The insight study of SnO pico size particles in an ethanol-water system followed by its biosensing application. Biosensors and Bioelectronics, 2018, 117, 129-137.	10.1	9
97	A review on carbon nanomaterials for <scp>Kâ€ion</scp> battery anode: Progress and perspectives. International Journal of Energy Research, 2022, 46, 4033-4070.	4.5	9
98	Novel Cesium-Selective Electrodes Based on Lipophilic 1,3-Bisbridged Cofacial-calix[6]crowns. Electroanalysis, 2004, 16, 472-477.	2.9	8
99	A potentiometric sensor of silver ions based on the Schiff base of diphenol. Journal of Solid State Electrochemistry, 2012, 16, 2591-2596.	2.5	6
100	Selective Electrocatalytic Ethanol Oxidation on Graphene Supported Palladium Nanostructures with Sulfur Linkage for Biosensor Application. Journal of Nanoscience and Nanotechnology, 2016, 16, 8294-8301.	0.9	6
101	Nitrogen-Doped Graphene Supported Cobalt Oxide Nanocomposite as High Performance Electrocatalyst for Oxygen Reduction Reaction. Journal of Nanoscience and Nanotechnology, 2017, 17, 3959-3966.	0.9	6
102	Increasing the number of active sites of polymer-assisted carbon nanotubes/Ag nanoparticles for enhanced oxygen reduction. Applied Surface Science, 2022, 578, 151973.	6.1	6
103	Efficient Electron Transfer Processes and Enhanced Electrocatalytic Activity of Cobalt(II) Porphyrin Anchored on Graphene Oxide. Israel Journal of Chemistry, 2016, 56, 169-174.	2.3	5
104	Hollow Carbon Nanoballs on Graphene as Metalâ€Free Catalyst for Overall Electrochemical Water Splitting. Advanced Materials Interfaces, 2021, 8, 2101265.	3.7	5
105	9-Vinylcarbazole Based Semiconducting Electrochromic Copolymer with 3,4-Ethylenedioxythiophene. Science of Advanced Materials, 2011, 3, 289-295.	0.7	4
106	Platinum-Cobalt Binary Alloyed Nanoparticles Supported on Thiolated Graphene Oxide for Oxygen Reduction Reaction in Alkaline Media. Journal of Nanoscience and Nanotechnology, 2016, 16, 9675-9682.	0.9	2
107	Electrochemical Sensing of Monohydric Alcohols on Different Linkers Imbedded in Between Graphene and Platinum Nanoparticles. Journal of Nanoscience and Nanotechnology, 2016, 16, 333-341.	0.9	2