

# Bhaskar R Sathe

## List of Publications by Year in descending order

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80  
papers

3,348  
citations

236833

25  
h-index

149623

56  
g-index

81  
all docs

81  
docs citations

81  
times ranked

4978  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cobalt-Embedded Nitrogen-Rich Carbon Nanotubes Efficiently Catalyze Hydrogen Evolution Reaction at All pH Values. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 4372-4376.	7.2	857
2	Metal-free B-doped graphene with efficient electrocatalytic activity for hydrogen evolution reaction. <i>Catalysis Science and Technology</i> , 2014, 4, 2023-2030.	2.1	268
3	Efficient oxygen evolution reaction catalyzed by low-density Ni-doped Co <sub>3</sub> O <sub>4</sub> nanomaterials derived from metal-embedded graphitic C <sub>3</sub> N <sub>4</sub> . <i>Chemical Communications</i> , 2013, 49, 7522.	2.2	220
4	Superior humidity sensor and photodetector of mesoporous ZnO nanosheets at room temperature. <i>Sensors and Actuators B: Chemical</i> , 2019, 293, 83-92.	4.0	84
5	Enhanced electrocatalytic activity towards urea oxidation on Ni nanoparticle decorated graphene oxide nanocomposite. <i>Electrochimica Acta</i> , 2020, 349, 136386.	2.6	69
6	Ni/NiO@rGO as an efficient bifunctional electrocatalyst for enhanced overall water splitting reactions. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 27001-27009.	3.8	62
7	Silver nanoparticles sensitized C <sub>60</sub> (Ag@C <sub>60</sub> ) as efficient electrocatalysts for hydrazine oxidation: Implication for hydrogen generation reaction. <i>Applied Surface Science</i> , 2017, 396, 939-944.	3.1	52
8	Cobalt oxide nanoparticle-decorated reduced graphene oxide (Co <sub>3</sub> O <sub>4</sub> @rGO): active and sustainable nanoelectrodes for water oxidation reaction. <i>New Journal of Chemistry</i> , 2020, 44, 15776-15784.	1.4	51
9	Heterostructural CuO@ZnO Nanocomposites: A Highly Selective Chemical and Electrochemical NO <sub>2</sub> Sensor. <i>ACS Omega</i> , 2019, 4, 20129-20141.	1.6	50
10	Selective cis-dihydroxylation of olefins using recyclable homogeneous molybdenum acetylide catalyst. <i>Journal of Molecular Catalysis A</i> , 2008, 285, 111-119.	4.8	47
11	Template-Assisted Synthesis of Ruthenium Oxide Nanoneedles: Electrical and Electrochemical Properties. <i>Journal of Physical Chemistry C</i> , 2007, 111, 16593-16600.	1.5	46
12	Enhanced electrocatalytic performance of interconnected Rh nano-chains towards formic acid oxidation. <i>Energy and Environmental Science</i> , 2011, 4, 1029.	15.6	44
13	Overall noble metal free Ni and Fe doped Cu <sub>2</sub> ZnSnS <sub>4</sub> (CZTS) bifunctional electrocatalytic systems for enhanced water splitting reactions. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 8144-8155.	3.8	40
14	Lysine-Functionalized Reduced Graphene Oxide as a Highly Efficient Electrocatalyst for Enhanced Oxygen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 5524-5533.	3.2	39
15	CZTS Decorated on Graphene Oxide as an Efficient Electrocatalyst for High-Performance Hydrogen Evolution Reaction. <i>ACS Omega</i> , 2019, 4, 7650-7657.	1.6	38
16	Heteroatom (N, O, and S)-Based Biomolecule-Functionalized Graphene Oxide: A Bifunctional Electrocatalyst for Enhancing Hydrazine Oxidation and Oxygen Reduction Reactions. <i>Energy &amp; Fuels</i> , 2021, 35, 6823-6834.	2.5	34
17	Electrocatalytic Ethanol Oxidation on Cobalt-Bismuth Nanoparticle-Decorated Reduced Graphene Oxide (Co-Bi@rGO): Reaction Pathway Investigation toward Direct Ethanol Fuel Cells. <i>Journal of Physical Chemistry C</i> , 2021, 125, 2345-2356.	1.5	34
18	Recent Progress on Carbon Quantum Dots Based Photocatalysis. <i>Frontiers in Chemistry</i> , 2022, 10, 881495.	1.8	34

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19	Enhanced electrocatalytic hydrogen generation from water <i>via</i> cobalt-doped Cu <sub>2</sub> ZnSnS <sub>4</sub> nanoparticles. RSC Advances, 2018, 8, 20341-20346.	1.7	33
20	Highly sensitive nanostructured platinum electrocatalysts for CO oxidation: Implications for CO sensing and fuel cell performance. Sensors and Actuators A: Physical, 2007, 138, 376-383.	2.0	31
21	Enhanced Hydrogen Evolution Reactions on Nanostructured Cu <sub>2</sub> ZnSnS <sub>4</sub> (CZTS) Electrocatalyst. Applied Surface Science, 2017, 412, 475-481.	3.1	31
22	Tyramine Functionalized Graphene: Metal-Free Electrochemical Non-Enzymatic Biosensing of Hydrogen Peroxide. ChemElectroChem, 2018, 5, 3191-3197.	1.7	30
23	Surface-State-Mediated Electron Transfer at Nanostructured ZnO Multipod/Electrolyte Interfaces. Journal of Physical Chemistry C, 2007, 111, 13092-13102.	1.5	28
24	Preparation and Characterization of Rhodium Nanostructures through the Evolution of Microgalvanic Cells and Their Enhanced Electrocatalytic Activity for Formaldehyde Oxidation. Journal of Physical Chemistry C, 2009, 113, 9616-9622.	1.5	28
25	Electrocatalytic and catalytic CO <sub>2</sub> hydrogenation on ZnO/g-C <sub>3</sub> N <sub>4</sub> hybrid nanoelectrodes. Applied Surface Science, 2021, 538, 148120.	3.1	28
26	Ultrasensitive and bifunctional ZnO nanoplates for an oxidative electrochemical and chemical sensor of NO <sub>2</sub> : implications towards environmental monitoring of the nitrite reaction. RSC Advances, 2018, 8, 11177-11185.	1.7	26
27	Biomass-Mediated Synthesis of Cu-Doped TiO <sub>2</sub> Nanoparticles for Improved-Performance Lithium-Ion Batteries. ACS Omega, 2018, 3, 13676-13684.	1.6	25
28	Graphene Oxide Decorated with Rh Nanospheres for Electrocatalytic Water Splitting. ACS Applied Nano Materials, 2020, 3, 12288-12296.	2.4	25
29	Enhanced oxygen evolution reaction on amine functionalized graphene oxide in alkaline medium. RSC Advances, 2019, 9, 6444-6451.	1.7	24
30	Bi <sub>2</sub> O <sub>3</sub> Nanoparticles Decorated Carbon Nanotube: An Effective Nanoelectrode for Enhanced Electrocatalytic 4-Nitrophenol Reduction. Frontiers in Chemistry, 2020, 8, 325.	1.8	24
31	Rhodium nanoparticle-carbon nanosphere hybrid material as an electrochemical hydrogen sensor. RSC Advances, 2013, 3, 5361.	1.7	22
32	Binder free 2D aligned efficient MnO <sub>2</sub> micro flowers as stable electrodes for symmetric supercapacitor applications. RSC Advances, 2017, 7, 36886-36894.	1.7	21
33	Bismuth Oxide Decorated Graphene Oxide Hybrids for Catalytic and Electrocatalytic Reduction of CO <sub>2</sub> . Chemistry - A European Journal, 2020, 26, 8801-8809.	1.7	21
34	Urea Electro-Oxidation Catalyzed by an Efficient and Highly Stable Ni-Bi Bimetallic Nanoparticles. ACS Applied Energy Materials, 2021, 4, 13172-13182.	2.5	21
35	Pd nanoparticles: an efficient catalyst for the solvent-free synthesis of 2,3-disubstituted-4-thiazolidinones. Research on Chemical Intermediates, 2016, 42, 6695-6703.	1.3	19
36	Enhanced Overall Water-Splitting Performance: Oleylamine-Functionalized GO/Cu <sub>2</sub> ZnSnS <sub>4</sub> Composite as a Nobel Metal-Free and Non-Precious Electrocatalyst. ACS Omega, 2019, 4, 18969-18977.	1.6	19

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37	Facile synthesis of highly porous CuO nanoplates (NPs) for ultrasensitive and highly selective nitrogen dioxide/nitrite sensing. RSC Advances, 2019, 9, 5742-5747.	1.7	19
38	A novel catalyst-free synthesis of vertically aligned silicon nanowire-carbon nanotube heterojunction arrays for high performance electron field emitters. Chemical Communications, 2011, 47, 7785.	2.2	18
39	A scalable and facile synthesis of carbon nanospheres as a metal free electrocatalyst for oxidation of L-ascorbic acid: Alternate fuel for direct oxidation fuel cells. Journal of Electroanalytical Chemistry, 2017, 799, 609-616.	1.9	18
40	Copper fluorapatite assisted synthesis of new 1,2,3-triazoles bearing a benzothiazolyl moiety and their antibacterial and anticancer activities. New Journal of Chemistry, 2019, 43, 7663-7673.	1.4	18
41	High-purity synthesis of scrolled mats of multi-walled carbon nanotubes using temperature modulation. Carbon, 2008, 46, 567-576.	5.4	17
42	Silica nanosphere-graphene oxide (SiO <sub>2</sub> -GO) hybrid catalyzed facile synthesis of functionalized quinoxaline derivatives. Research on Chemical Intermediates, 2017, 43, 829-841.	1.3	17
43	Electrochemical determination of semicarbazide on cobalt oxide nanoparticles: Implication towards environmental monitoring. Journal of Industrial and Engineering Chemistry, 2021, 93, 259-266.	2.9	17
44	Amine-functionalized multi-walled carbon nanotubes (EDA-MWCNTs) for electrochemical water splitting reactions. New Journal of Chemistry, 2021, 45, 3932-3939.	1.4	17
45	Thermally Driven High-Rate Intercalated Pseudocapacitance of Flower-like Architecture of Ultrathin Few Layered MnO <sub>2</sub> Nanosheets on Carbon Nano-Onions. ACS Applied Energy Materials, 2020, 3, 11398-11409.	2.5	16
46	Copper phthalocyanine films deposited by liquid-liquid interface recrystallization technique (LLIRCT). Journal of Colloid and Interface Science, 2007, 315, 747-752.	5.0	14
47	Bi <sub>2</sub> O <sub>3</sub> @Bi nanoparticles for ultrasensitive electrochemical determination of thiourea: monitoring towards environmental pollutants. Electrochimica Acta, 2021, 394, 139111.	2.6	14
48	Quantized Double-Layer Charging of Rhodium(Tridecylamine) <sub>3</sub> Clusters Using Differential Pulse and Cyclic Voltammetry. Advanced Materials, 2007, 19, 272-275.	11.1	13
49	Synthesis of Rh-carbon nanotube based heterostructures and their enhanced field emission characteristics. Chemical Communications, 2010, 46, 5671.	2.2	13
50	Metal-free graphene-based nanoelectrodes for the electrochemical determination of ascorbic acid (AA) and p-nitrophenol (NP): implication towards biosensing and environmental monitoring. New Journal of Chemistry, 2021, 45, 4666-4674.	1.4	13
51	CZTS/MoS <sub>2</sub> -rGO Heterostructures: An efficient and highly stable electrocatalyst for enhanced hydrogen generation reactions. Journal of Electroanalytical Chemistry, 2021, 882, 114983.	1.9	13
52	Fabrication of In-doped SnO <sub>2</sub> nanowire arrays and its field emission investigations. Journal of Experimental Nanoscience, 2010, 5, 527-535.	1.3	12
53	High aspect ratio rhodium nanostructures for tunable electrocatalytic performance. Physical Chemistry Chemical Physics, 2013, 15, 7866.	1.3	12
54	Highly efficient manganese oxide decorated graphitic carbon nitrite electrocatalyst for reduction of CO <sub>2</sub> to formate. Catalysis Today, 2021, 370, 104-113.	2.2	12

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55	Enhanced field emission from hexagonal rhodium nanostructures. Applied Physics Letters, 2008, 92, 253106.	1.5	11
56	Field emission investigation of single Fe-doped SnO <sub>2</sub> wire. Solid State Sciences, 2009, 11, 1114-1117.	1.5	11
57	Significant Enhancement of Formic Acid Oxidation Using Rhodium Nanostructures. Journal of Nanoscience and Nanotechnology, 2012, 12, 8994-8998.	0.9	11
58	Electrochemical Studies of Anti-HIV Drug Emtricitabine: Oxidative Determination and Improved Antimicrobial Activity. ChemElectroChem, 2018, 5, 3926-3931.	1.7	11
59	Near-complete phase transfer of single-wall carbon nanotubes by covalent functionalization. Journal of Chemical Sciences, 2008, 120, 599-606.	0.7	10
60	Electrochemical Sensing of Sulphur Dioxide: A Comparison Using Dodecanethiol and Citrate Capped Gold Nanoclusters. Journal of Nanoscience and Nanotechnology, 2008, 8, 3184-3190.	0.9	10
61	Highly efficient metal-free ethylenediamine-functionalized fullerene (EDA@C <sub>60</sub> ) electrocatalytic system for enhanced hydrogen generation from hydrazine hydrate. New Journal of Chemistry, 2022, 46, 14004-14009.	1.4	10
62	Bioactive ceramic composite material stability, characterization, and bonding to bone. , 2018, , 273-296.		9
63	Effect of Fe <sub>3</sub> O <sub>4</sub> on morphology of Fe-SnO <sub>2</sub> hyperbranched heterostructures. Chemical Physics Letters, 2010, 493, 121-125.	1.2	8
64	Capping induced morphology evolution of Rh nanostructures and their electrocatalytic studies. RSC Advances, 2012, 2, 3735.	1.7	8
65	Visible light motivated synthesis of polyhydroquinoline derivatives using CdS nanowires. Research on Chemical Intermediates, 2017, 43, 3237-3249.	1.3	8
66	Graphene oxide-based electrochemical activation of ethionamide towards enhanced biological activity. RSC Advances, 2019, 9, 35463-35472.	1.7	8
67	Reflux temperature-dependent zinc cobaltite nanostructures for asymmetric supercapacitors. Journal of Materials Science: Materials in Electronics, 2021, 32, 5859-5869.	1.1	7
68	Methanol Electro-Oxidation on Nanostructured Rhodium Network. Energy and Environment Focus, 2015, 4, 196-200.	0.3	7
69	Engineering two-dimensional materials for high-performance supercapacitor devices. , 2021, , 359-387.		6
70	Enhanced electrocatalytic H <sub>2</sub> S splitting on a multiwalled carbon nanotubes-graphene oxide nanocomposite. New Journal of Chemistry, 2021, 45, 20266-20271.	1.4	6
71	Tunable optical features from self-organized rhodium nanostructures. Applied Physics Letters, 2010, 96, 233102.	1.5	5
72	A facile approach for shape selective synthesis of rhodium nanostructures and conductivity studies. AIP Advances, 2012, 2, 042122.	0.6	4

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73	Enhanced Electrochemical NO <sub>2</sub> Oxidation Reactions on Biomolecule Functionalised Graphene Oxide. ChemistrySelect, 2021, 6, 6050-6055.	0.7	4
74	Synthesis of Sb-Doped SnO <sub>2</sub> Nanowires and Hyperbranched Structures. Science of Advanced Materials, 2009, 1, 38-43.	0.1	4
75	Enhanced Hydrazine Oxidation on Histidine-Functionalized Graphene-Based Electrocatalysts. Energy & Fuels, 2022, 36, 4799-4806.	2.5	4
76	Temperature dependent fabrication of cost-effective and nontoxic Cu <sub>2</sub> ZnSnS <sub>4</sub> (CZTS) thin films for solar cell. AIP Conference Proceedings, 2016, , .	0.3	3
77	Synthesis of Metal-Free Nanoporous Carbon with Few-Layer Graphene Electrocatalyst for Electrochemical NO <sub>2</sub> Oxidation. ChemistrySelect, 2021, 6, 9847-9852.	0.7	3
78	Design and Synthesis of Lead(II)-Based Electrocatalysts for Oxygen Evolution Reaction. Inorganic Chemistry, 2022, 61, 7579-7589.	1.9	2
79	Supercapacitors based on two-dimensional metal oxides, hydroxides, and its graphene-based hybrids. , 2021, , 193-215.		1
80	Editorial: Smart Materials for Energy Conversion and Sensor Based Technologies. Frontiers in Materials, 2021, 8, .	1.2	0