Arpan Kumar Nayak

List of Publications by Year
in descending order

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52 papers	1,722 citations	257101 24 h-index	288905 40 g-index
54 all docs	54 docs citations	54 times ranked	2289 citing authors

#	Article	IF	Citations
1	Novel porous heteroatom-doped biomass activated carbon nanoflakes for efficient solid-state symmetric supercapacitor devices. Journal of the Taiwan Institute of Chemical Engineers, 2022, 132, 104148.	2.7	21
2	Bismuth series photocatalytic materials for the treatment of environmental pollutants. , 2022, , 135-151.		1
3	Facet-dependent nanostructures for visible light photocatalysis. , 2022, , 351-374.		1
4	Fundamentals principle of photocatalysis. , 2022, , 1-22.		3
5	Carbon-based materials for visible light photocatalysis. , 2022, , 115-134.		0
6	Fabrication of Mn3O4-WO3 nanoparticles based nanocomposites symmetric supercapacitor device for enhanced energy storage performance under neutral electrolyte. Electrochimica Acta, 2022, 406, 139870.	2.6	33
7	Recent advancement of biomass-derived porous carbon based materials for energy and environmental remediation applications. Journal of Materials Chemistry A, 2022, 10, 6965-7005.	5.2	98
8	Sustainable synthesis of heteroatom-doped porous carbon skeleton from Acacia auriculiformis bark for high-performance symmetric supercapacitor device. Electrochimica Acta, 2022, 414, 140205.	2.6	23
9	Degradation of mixed cationic dye pollutant by metal free melem derivatives and graphitic carbon nitride. Chemosphere, 2022, 298, 134249.	4.2	14
10	Facile hydrothermal synthesis of Au-Mn3O4 decorated graphene oxide nanocomposites for solid-state supercapacitor. Journal of Energy Storage, 2022, 50, 104615.	3.9	16
11	Crystal structure controlled synthesis of tin oxide nanoparticles for enhanced energy storage activity under neutral electrolyte. Journal of Materials Science: Materials in Electronics, 2022, 33, 13668-13683.	1.1	5
12	Biowaste assisted preparation of self-nitrogen-doped nanoflakes carbon framework for highly efficient solid-state supercapacitor application. Journal of Energy Storage, 2022, 54, 105210.	3.9	19
13	Intercalation pseudocapacitance in Bi2Se3â˜'MnO2 nanotube composite for high electrochemical energy storage. Electrochimica Acta, 2021, 367, 137531.	2.6	20
14	Inherent Oxygenâ€•and Nitrogenâ€Đoped Porous Carbon Derived from Biomass of Tamarind Leaf for Highâ€Performance Supercapacitor Application. Energy Technology, 2021, 9, .	1.8	10
15	Surface engineered Tb and Co co-doped BiFeO3 nanoparticles for enhanced photocatalytic and magnetic properties. Journal of Materials Science: Materials in Electronics, 2021, 32, 7956-7972.	1.1	9
16	Surface engineered NiOâ€“Co3O4 nanostructures as high-performance electrocatalysts for oxygen reduction reaction. Ceramics International, 2020, 46, 25351-25358.	2.3	14
17	Mn incorporated MoS2 nanoflowers: A high performance electrode material for symmetric supercapacitor. Electrochimica Acta, 2020, 338, 135815.	2.6	68
18	Facile Synthesis of N-Doped WS2 Nanosheets as an Efficient and Stable Electrocatalyst for Hydrogen Evolution Reaction in Acidic Media. Catalysts, 2020, 10, 1238.	1.6	13

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19	Bos taurus Urine Assisted Biosynthesis of CuO Nanomaterials: A New Paradigm of Antimicrobial and Antineoplatic Therapy. Macromolecular Symposia, 2020, 392, 1900172.	0.4	6
20	Partial Dehydration in Hydrated Tungsten Oxide Nanoplates Leads to Excellent and Robust Bifunctional Oxygen Reduction and Hydrogen Evolution Reactions in Acidic Media. ACS Sustainable Chemistry and Engineering, 2020, 8, 9507-9518.	3.2	23
21	Improved bioelectricity generation of air-cathode microbial fuel cell using sodium hexahydroxostannate as cathode catalyst. Journal of Power Sources, 2020, 450, 227679.	4.0	12
22	Facile single phase synthesis of Sr, Co co-doped BiFeO3 nanoparticles for boosting photocatalytic and magnetic properties. Applied Surface Science, 2019, 493, 593-604.	3.1	42
23	Morphology-dependent charge storage performance of Co₃O₄ nanostructures in an all-solid-state flexible supercapacitor. New Journal of Chemistry, 2019, 43, 15177-15186.	1.4	16
24	Intercalation pseudocapacitance in chemically stable Au-Î±-Fe2O3-Mn3O4 composite nanorod: Towards highly efficient solid-state symmetric supercapacitor device. Electrochimica Acta, 2019, 324, 134865.	2.6	28
25	Enhanced electrical, magnetic and optical behaviour of Cr doped Bi0.98Ho0.02FeO3 nanoparticles. Journal of Alloys and Compounds, 2019, 796, 229-236.	2.8	23
26	Fabrication of MoS2 decorated reduced graphene oxide sheets from solid Mo-precursor for electrocatalytic hydrogen evolution reaction. Electrochimica Acta, 2019, 313, 341-351.	2.6	30
27	Redox active nitrogen-containing conjugated porous polymer: An organic heterogeneous electrocatalysts for oxygen reduction reaction. Dyes and Pigments, 2019, 170, 107557.	2.0	2
28	Redox-Mediated Shape Transformation of Fe₃O₄ Nanoflakes to Chemically Stable Auâ˜Fe₂O₃ Composite Nanorods for a High-Performance Asymmetric Solid-State Supercapacitor Device. ACS Sustainable Chemistry and Engineering, 2019, 7, 724-733.	3.2	35
29	Enhanced energy recovery by manganese oxide/reduced graphene oxide nanocomposite as an air-cathode electrode in the single-chambered microbial fuel cell. Journal of Electroanalytical Chemistry, 2018, 815, 1-7.	1.9	33
30	Microwave-Assisted Greener Synthesis of Defect-Rich Tungsten Oxide Nanowires with Enhanced Photocatalytic and Photoelectrochemical Performance. Journal of Physical Chemistry C, 2018, 122, 3183-3193.	1.5	49
31	Nitrogen-Enriched Nanoporous Polytriazine for High-Performance Supercapacitor Application. ACS Sustainable Chemistry and Engineering, 2018, 6, 5895-5902.	3.2	49
32	Flower-Shaped Self-Assembled Ni_{0.5}Cu_{0.5}Co₂O₄ Porous Architecture: A Ternary Metal Oxide as a High-Performance Charge Storage Electrode Material. ACS Applied Nano Materials, 2018, 1, 5812-5822.	2.4	35
33	Synthesis of Au-V₂O₅ composite nanowires through the shape transformation of a vanadium(<scp>iii</scp>) metal complex for high-performance solid-state supercapacitors. Inorganic Chemistry Frontiers, 2018, 5, 1836-1843.	3.0	27
34	Efficient UV photocatalytic dye decomposition activity with cost effective solid state reaction grown Zinc Orthotitanate (Zn2TiO4) nanoparticles. Journal of Alloys and Compounds, 2018, 764, 895-900.	2.8	13
35	VS₂: an efficient catalyst for an electrochemical hydrogen evolution reaction in an acidic medium. Dalton Transactions, 2018, 47, 13792-13799.	1.6	49
36	Microwave-Assisted Solvothermal Synthesis of Cupric Oxide Nanostructures for High-Performance Supercapacitor. Journal of Physical Chemistry C, 2018, 122, 11249-11261.	1.5	66

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37	Growth of significantly low dimensional zinc orthotitanate (Zn2TiO4) nanoparticles by solid state reaction method. Science of Sintering, 2018, 50, 133-138.	0.5	6
38	Crystal Phase and Size-Controlled Synthesis of Tungsten Trioxide Hydrate Nanoplates at Room Temperature: Enhanced Cr(VI) Photoreduction and Methylene Blue Adsorption Properties. ACS Sustainable Chemistry and Engineering, 2017, 5, 2741-2750.	3.2	59
39	Structural and optical properties of Ba,Cr Co-doped BiFeO3 multiferroic nanoparticles. AIP Conference Proceedings, 2017, , .	0.3	3
40	Highly Active Tungsten Oxide Nanoplate Electrocatalysts for the Hydrogen Evolution Reaction in Acidic and Near Neutral Electrolytes. ACS Omega, 2017, 2, 7039-7047.	1.6	68
41	High Performance Solid-State Asymmetric Supercapacitor using Green Synthesized Grapheneâ€“WO₃ Nanowires Nanocomposite. ACS Sustainable Chemistry and Engineering, 2017, 5, 10128-10138.	3.2	136
42	Facile Green Synthesis of WO₃Â·H₂O Nanoplates and WO₃ Nanowires with Enhanced Photoelectrochemical Performance. Crystal Growth and Design, 2017, 17, 4949-4957.	1.4	58
43	Bond-Energy-Driven, Low- or High-Angle-Grain-Boundary-Movement-Mediated Synthesis of Porous Seâ€“Te for Use in Water-Splitting Reactions. ACS Applied Materials & Interfaces, 2017, 9, 41818-41826.	4.0	0
44	Enhanced catalytic activity without the use of an external light source using microwave-synthesized CuO nanopetals. Beilstein Journal of Nanotechnology, 2017, 8, 1167-1173.	1.5	9
45	Improvement of power generation of microbial fuel cell by integrating tungsten oxide electrocatalyst with pure or mixed culture biocatalysts. Electrochimica Acta, 2016, 199, 154-163.	2.6	63
46	Understanding hydrothermal transformation from Mn2O3 particles to Na0.55Mn2O4Â·1.5H2O nanosheets, nanobelts and single crystalline ultra-long Na4Mn9O18 nanowires. Scientific Reports, 2015, 5, 18275.	1.6	34
47	Enhanced ammonia sensing at room temperature with reduced graphene oxide/tin oxide hybrid films. RSC Advances, 2015, 5, 50165-50173.	1.7	77
48	Biomolecule-assisted synthesis of In(OH)₃nanocubes and In₂O₃nanoparticles: photocatalytic degradation of organic contaminants and CO oxidation. Nanotechnology, 2015, 26, 485601.	1.3	35
49	Hierarchical nanostructured WO₃â€“SnO₂for selective sensing of volatile organic compounds. Nanoscale, 2015, 7, 12460-12473.	2.8	179
50	In-vitro bio-fabrication of silver nanoparticle using Adhathoda vasica leaf extract and its anti-microbial activity. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 61, 56-61.	1.3	26
51	Synthesis of In₂S₃microspheres using a template-free and surfactant-less hydrothermal process and their visible light photocatalysis. CrystEngComm, 2014, 16, 8064.	1.3	50
52	Roomâ€temperature ferromagnetic organic magnets derived from fluoroâ€graphite via facile halide exchange. International Journal of Applied Ceramic Technology, 0, , .	1.1	1