

# Arpan Kumar Nayak

## List of Publications by Year in descending order

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Version: 2024-02-01

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	Hierarchical nanostructured WO <sub>3</sub> •SnO <sub>2</sub> for selective sensing of volatile organic compounds. <i>Nanoscale</i> , 2015, 7, 12460-12473.	2.8	179
2	High Performance Solid-State Asymmetric Supercapacitor using Green Synthesized Graphene•WO <sub>3</sub> Nanowires Nanocomposite. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 10128-10138.	3.2	136
3	Recent advancement of biomass-derived porous carbon based materials for energy and environmental remediation applications. <i>Journal of Materials Chemistry A</i> , 2022, 10, 6965-7005.	5.2	98
4	Enhanced ammonia sensing at room temperature with reduced graphene oxide/tin oxide hybrid films. <i>RSC Advances</i> , 2015, 5, 50165-50173.	1.7	77
5	Highly Active Tungsten Oxide Nanoplate Electrocatalysts for the Hydrogen Evolution Reaction in Acidic and Near Neutral Electrolytes. <i>ACS Omega</i> , 2017, 2, 7039-7047.	1.6	68
6	Mn incorporated MoS <sub>2</sub> nanoflowers: A high performance electrode material for symmetric supercapacitor. <i>Electrochimica Acta</i> , 2020, 338, 135815.	2.6	68
7	Microwave-Assisted Solvothermal Synthesis of Cupric Oxide Nanostructures for High-Performance Supercapacitor. <i>Journal of Physical Chemistry C</i> , 2018, 122, 11249-11261.	1.5	66
8	Improvement of power generation of microbial fuel cell by integrating tungsten oxide electrocatalyst with pure or mixed culture biocatalysts. <i>Electrochimica Acta</i> , 2016, 199, 154-163.	2.6	63
9	Crystal Phase and Size-Controlled Synthesis of Tungsten Trioxide Hydrate Nanoplates at Room Temperature: Enhanced Cr(VI) Photoreduction and Methylene Blue Adsorption Properties. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 2741-2750.	3.2	59
10	Facile Green Synthesis of WO <sub>3</sub> •H <sub>2</sub> O Nanoplates and WO <sub>3</sub> Nanowires with Enhanced Photoelectrochemical Performance. <i>Crystal Growth and Design</i> , 2017, 17, 4949-4957.	1.4	58
11	Synthesis of In <sub>2</sub> S <sub>3</sub> microspheres using a template-free and surfactant-less hydrothermal process and their visible light photocatalysis. <i>CrystEngComm</i> , 2014, 16, 8064.	1.3	50
12	Microwave-Assisted Greener Synthesis of Defect-Rich Tungsten Oxide Nanowires with Enhanced Photocatalytic and Photoelectrochemical Performance. <i>Journal of Physical Chemistry C</i> , 2018, 122, 3183-3193.	1.5	49
13	Nitrogen-Enriched Nanoporous Polytriazine for High-Performance Supercapacitor Application. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 5895-5902.	3.2	49
14	VS <sub>2</sub> : an efficient catalyst for an electrochemical hydrogen evolution reaction in an acidic medium. <i>Dalton Transactions</i> , 2018, 47, 13792-13799.	1.6	49
15	Facile single phase synthesis of Sr, Co co-doped BiFeO <sub>3</sub> nanoparticles for boosting photocatalytic and magnetic properties. <i>Applied Surface Science</i> , 2019, 493, 593-604.	3.1	42
16	Biomolecule-assisted synthesis of In(OH) <sub>3</sub> nanocubes and In <sub>2</sub> O <sub>3</sub> nanoparticles: photocatalytic degradation of organic contaminants and CO oxidation. <i>Nanotechnology</i> , 2015, 26, 485601.	1.3	35
17	Flower-Shaped Self-Assembled Ni <sub>0.5</sub> Cu <sub>0.5</sub> Co <sub>2</sub> O <sub>4</sub> Porous Architecture: A Ternary Metal Oxide as a High-Performance Charge Storage Electrode Material. <i>ACS Applied Nano Materials</i> , 2018, 1, 5812-5822.	2.4	35
18	Redox-Mediated Shape Transformation of Fe <sub>3</sub> O <sub>4</sub> Nanoflakes to Chemically Stable Au•Fe <sub>2</sub> O <sub>3</sub> Composite Nanorods for a High-Performance Asymmetric Solid-State Supercapacitor Device. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 724-733.	3.2	35

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19	Understanding hydrothermal transformation from Mn <sub>2</sub> O <sub>3</sub> particles to Na <sub>0.55</sub> Mn <sub>2</sub> O <sub>4</sub> ·1.5H <sub>2</sub> O nanosheets, nanobelts and single crystalline ultra-long Na <sub>4</sub> Mn <sub>9</sub> O <sub>18</sub> nanowires. <i>Scientific Reports</i> , 2015, 5, 18275.	1.6	34
20	Enhanced energy recovery by manganese oxide/reduced graphene oxide nanocomposite as an air-cathode electrode in the single-chambered microbial fuel cell. <i>Journal of Electroanalytical Chemistry</i> , 2018, 815, 1-7.	1.9	33
21	Fabrication of Mn <sub>3</sub> O <sub>4</sub> -WO <sub>3</sub> nanoparticles based nanocomposites symmetric supercapacitor device for enhanced energy storage performance under neutral electrolyte. <i>Electrochimica Acta</i> , 2022, 406, 139870.	2.6	33
22	Fabrication of MoS <sub>2</sub> decorated reduced graphene oxide sheets from solid Mo-precursor for electrocatalytic hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2019, 313, 341-351.	2.6	30
23	Intercalation pseudocapacitance in chemically stable Au-Fe <sub>2</sub> O <sub>3</sub> -Mn <sub>3</sub> O <sub>4</sub> composite nanorod: Towards highly efficient solid-state symmetric supercapacitor device. <i>Electrochimica Acta</i> , 2019, 324, 134865.	2.6	28
24	Synthesis of Au-V <sub>2</sub> O <sub>5</sub> composite nanowires through the shape transformation of a vanadium metal complex for high-performance solid-state supercapacitors. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 1836-1843.	3.0	27
25	In-vitro bio-fabrication of silver nanoparticle using <i>Adhathoda vasica</i> leaf extract and its anti-microbial activity. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2014, 61, 56-61.	1.3	26
26	Enhanced electrical, magnetic and optical behaviour of Cr doped Bi <sub>0.98</sub> Ho <sub>0.02</sub> FeO <sub>3</sub> nanoparticles. <i>Journal of Alloys and Compounds</i> , 2019, 796, 229-236.	2.8	23
27	Partial Dehydration in Hydrated Tungsten Oxide Nanoplates Leads to Excellent and Robust Bifunctional Oxygen Reduction and Hydrogen Evolution Reactions in Acidic Media. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 9507-9518.	3.2	23
28	Sustainable synthesis of heteroatom-doped porous carbon skeleton from <i>Acacia auriculiformis</i> bark for high-performance symmetric supercapacitor device. <i>Electrochimica Acta</i> , 2022, 414, 140205.	2.6	23
29	Novel porous heteroatom-doped biomass activated carbon nanoflakes for efficient solid-state symmetric supercapacitor devices. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2022, 132, 104148.	2.7	21
30	Intercalation pseudocapacitance in Bi <sub>2</sub> Se <sub>3</sub> /MnO <sub>2</sub> nanotube composite for high electrochemical energy storage. <i>Electrochimica Acta</i> , 2021, 367, 137531.	2.6	20
31	Biowaste assisted preparation of self-nitrogen-doped nanoflakes carbon framework for highly efficient solid-state supercapacitor application. <i>Journal of Energy Storage</i> , 2022, 54, 105210.	3.9	19
32	Morphology-dependent charge storage performance of Co <sub>3</sub> O <sub>4</sub> nanostructures in an all-solid-state flexible supercapacitor. <i>New Journal of Chemistry</i> , 2019, 43, 15177-15186.	1.4	16
33	Facile hydrothermal synthesis of Au-Mn <sub>3</sub> O <sub>4</sub> decorated graphene oxide nanocomposites for solid-state supercapacitor. <i>Journal of Energy Storage</i> , 2022, 50, 104615.	3.9	16
34	Surface engineered NiO/Co <sub>3</sub> O <sub>4</sub> nanostructures as high-performance electrocatalysts for oxygen reduction reaction. <i>Ceramics International</i> , 2020, 46, 25351-25358.	2.3	14
35	Degradation of mixed cationic dye pollutant by metal free melem derivatives and graphitic carbon nitride. <i>Chemosphere</i> , 2022, 298, 134249.	4.2	14
36	Efficient UV photocatalytic dye decomposition activity with cost effective solid state reaction grown Zinc Orthotitanate (Zn <sub>2</sub> TiO <sub>4</sub> ) nanoparticles. <i>Journal of Alloys and Compounds</i> , 2018, 764, 895-900.	2.8	13

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37	Facile Synthesis of N-Doped WS <sub>2</sub> Nanosheets as an Efficient and Stable Electrocatalyst for Hydrogen Evolution Reaction in Acidic Media. <i>Catalysts</i> , 2020, 10, 1238.	1.6	13
38	Improved bioelectricity generation of air-cathode microbial fuel cell using sodium hexahydroxostannate as cathode catalyst. <i>Journal of Power Sources</i> , 2020, 450, 227679.	4.0	12
39	Inherent Oxygen- and Nitrogen-Doped Porous Carbon Derived from Biomass of Tamarind Leaf for High-Performance Supercapacitor Application. <i>Energy Technology</i> , 2021, 9, .	1.8	10
40	Enhanced catalytic activity without the use of an external light source using microwave-synthesized CuO nanopetals. <i>Beilstein Journal of Nanotechnology</i> , 2017, 8, 1167-1173.	1.5	9
41	Surface engineered Tb and Co co-doped BiFeO <sub>3</sub> nanoparticles for enhanced photocatalytic and magnetic properties. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 7956-7972.	1.1	9
42	<i>Bos taurus</i> Urine Assisted Biosynthesis of CuO Nanomaterials: A New Paradigm of Antimicrobial and Antineoplastic Therapy. <i>Macromolecular Symposia</i> , 2020, 392, 1900172.	0.4	6
43	Growth of significantly low dimensional zinc orthotitanate (Zn <sub>2</sub> TiO <sub>4</sub> ) nanoparticles by solid state reaction method. <i>Science of Sintering</i> , 2018, 50, 133-138.	0.5	6
44	Crystal structure controlled synthesis of tin oxide nanoparticles for enhanced energy storage activity under neutral electrolyte. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 13668-13683.	1.1	5
45	Structural and optical properties of Ba,Cr Co-doped BiFeO <sub>3</sub> multiferroic nanoparticles. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	3
46	Fundamentals principle of photocatalysis. , 2022, , 1-22.		3
47	Redox active nitrogen-containing conjugated porous polymer: An organic heterogeneous electrocatalysts for oxygen reduction reaction. <i>Dyes and Pigments</i> , 2019, 170, 107557.	2.0	2
48	Room-temperature ferromagnetic organic magnets derived from fluoro-graphite via facile halide exchange. <i>International Journal of Applied Ceramic Technology</i> , 0, , .	1.1	1
49	Bismuth series photocatalytic materials for the treatment of environmental pollutants. , 2022, , 135-151.		1
50	Facet-dependent nanostructures for visible light photocatalysis. , 2022, , 351-374.		1
51	Bond-Energy-Driven, Low- or High-Angle-Grain-Boundary-Movement-Mediated Synthesis of Porous SeTe for Use in Water-Splitting Reactions. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 41818-41826.	4.0	0
52	Carbon-based materials for visible light photocatalysis. , 2022, , 115-134.		0