

Astam K Patra

List of Publications by Year in descending order

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50
papers

2,258
citations

185998

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docs citations

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times ranked

3327
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultrathin nickel oxide nanosheets: Highly exposed Ni ³⁺ -doped high-energy {110} facets. <i>Materials Research Bulletin</i> , 2021, 139, 111251.	2.7	9
2	Synthesis of highly magnetic iron oxide nanomaterials from waste iron by one-step approach. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 589, 124420.	2.3	25
3	Unusual Photoactive Water Oxidation Activity of Pt/PtO _x Cocatalyst Decorated Crystalline Î±-Fe ₂ O ₃ Nanostructures: Exposed Facets Dependent Reactivity. <i>ChemCatChem</i> , 2020, 12, 2315-2323.	1.8	9
4	IrO ₂ and Pt Doped Mesoporous SnO ₂ Nanospheres as Efficient Electrocatalysts for the Facile OER and HER. <i>ChemCatChem</i> , 2019, 11, 583-592.	1.8	82
5	Chemically modified poly(arylene ether ketone)s with pendant imidazolium groups: Anion exchange membranes for alkaline fuel cells. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 4517-4527.	3.8	20
6	Hollow doughnut shaped mesoporous silica nanoparticles for reduction of the thermal expansion coefficient of poly(ether sulfone) films. <i>New Journal of Chemistry</i> , 2018, 42, 5045-5051.	1.4	2
7	Reductant-Free Synthesis of Silver Nanoparticles by Functionalized Hollow Doughnut Mesoporous Silica Nanoparticles for Preparation of Catalytic Nanoreactor. <i>ChemistrySelect</i> , 2018, 3, 1772-1780.	0.7	9
8	Synthesis of Hollow Doughnut Shape Mesoporous Silica Nanoparticle: A Case of Self-Assembly Composite Templates. <i>Langmuir</i> , 2018, 34, 3901-3908.	1.6	14
9	A new microporous oxyfluorinated titanium(IV) phosphate as an efficient heterogeneous catalyst for the selective oxidation of cyclohexanone. <i>Journal of Colloid and Interface Science</i> , 2018, 511, 92-100.	5.0	13
10	Mesoporous CdS via Network of Self-Assembled Nanocrystals: Synthesis, Characterization and Enhanced Photoconducting Property. <i>Journal of Nanoscience and Nanotechnology</i> , 2018, 18, 256-263.	0.9	3
11	Highly robust magnetically recoverable Ag/Fe ₂ O ₃ nanocatalyst for chemoselective hydrogenation of nitroarenes in water. <i>Applied Catalysis A: General</i> , 2017, 538, 148-156.	2.2	51
12	Pore size and concentration effect of mesoporous silica nanoparticles on the coefficient of thermal expansion and optical transparency of poly(ether sulfone) films. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 1937-1944.	1.3	28
13	Smart Design of Self-Assembled Mesoporous Î±-FeOOH Nanoparticles: High-Surface-Area Sorbent for Hg ²⁺ from Wastewater. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 1272-1279.	3.2	34
14	NASICON type ordered mesoporous lithium-aluminum-titanium-phosphate as electrode materials for lithium-ion batteries. <i>Microporous and Mesoporous Materials</i> , 2017, 240, 57-64.	2.2	20
15	New Hybrid Iron Phosphonate Material as an Efficient Catalyst for the Synthesis of Adipic Acid in Air and Water. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 7147-7157.	3.2	44
16	Functionalized graphene oxide as an efficient adsorbent for CO ₂ capture and support for heterogeneous catalysis. <i>RSC Advances</i> , 2016, 6, 72055-72068.	1.7	58
17	Ceria-Containing Ordered Mesoporous Silica: Synthesis, Properties, and Applications. <i>ChemCatChem</i> , 2016, 8, 285-303.	1.8	26
18	Morphology evolution of single-crystalline hematite nanocrystals: magnetically recoverable nanocatalysts for enhanced facet-driven photoredox activity. <i>Nanoscale</i> , 2016, 8, 365-377.	2.8	99

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19	Controlled Synthesis of a Hexagonal-Shaped NiO Nanocatalyst with Highly Reactive Facets {111} and Its Catalytic Activity. ChemCatChem, 2015, 7, 791-798.	1.8	36
20	Synthesis of Hierarchical Mesoporous Mn-MFI Zeolite Nanoparticles: A Unique Architecture of Heterogeneous Catalyst for the Aerobic Oxidation of Thiols to Disulfides. ChemCatChem, 2014, 6, 220-229.	1.8	56
21	Acid functionalized mesoporous PAN monolith as reusable heterogeneous organocatalyst. Microporous and Mesoporous Materials, 2014, 193, 122-126.	2.2	8
22	Self-assembled ultra small ZnO nanocrystals for dye-sensitized solar cell application. Journal of Solid State Chemistry, 2014, 215, 135-142.	1.4	23
23	Efficient Solid Acid Catalyst Containing Lewis and Brønsted Acid Sites for the Production of Furfurals. ChemSusChem, 2014, 7, 2342-2350.	3.6	106
24	Synthesis of 5-Hydroxymethylfurfural from Carbohydrates using Large-Pore Mesoporous Tin Phosphate. ChemSusChem, 2014, 7, 925-933.	3.6	123
25	Synthesis of Cuboid-Shaped Single-Crystalline TiO ₂ Nanocrystals with High-Energy Facets {001} and Its Dye-Sensitized Solar Cell Application. Journal of Physical Chemistry C, 2014, 118, 16703-16709.	1.5	29
26	A palladium-loaded mesoporous polymer monolith as reusable heterogeneous catalyst for cross-coupling reactions. Reactive and Functional Polymers, 2014, 79, 8-13.	2.0	24
27	Self-assembled ultra-small zinc stannate nanocrystals with mesoscopic voids via a salicylate templating pathway and their photocatalytic properties. RSC Advances, 2014, 4, 13626-13634.	1.7	27
28	Poly[3-(2-hydroxyethyl)-2,5-thienylene] grafted reduced graphene oxide: an efficient alternate material of TiO ₂ in dye sensitized solar cells. Chemical Communications, 2013, 49, 4646.	2.2	24
29	Mesoporous Core-Shell Fenton Nanocatalyst: A Mild, Operationally Simple Approach to the Synthesis of Adipic Acid. Chemistry - A European Journal, 2013, 19, 12388-12395.	1.7	43
30	Template-Free Synthesis of a Porous Organic-inorganic Hybrid Tin(IV) Phosphonate and Its High Catalytic Activity for Esterification of Free Fatty Acids. ACS Applied Materials & Interfaces, 2013, 5, 9913-9917.	4.0	33
31	Self-assembled titanium phosphonate nanomaterial having a mesoscopic void space and its optoelectronic application. Dalton Transactions, 2013, 42, 5140.	1.6	35
32	Enhanced photocatalytic performance of novel self-assembled floral In ₂ -Ga ₂ O ₃ nanorods. Current Applied Physics, 2013, 13, 652-658.	1.1	41
33	Organic additives assisted synthesis of mesoporous In ₂ -Ga ₂ O ₃ nanostructures for photocatalytic dye degradation. Semiconductor Science and Technology, 2013, 28, 035015.	1.0	29
34	Adsorption over polyacrylonitrile based carbon monoliths. , 2013, , .		0
35	Self-Assembled Mesoporous TiO ₂ Nanocrystals as Efficient Photocatalyst for the Degradation of an Organic Dye. Advanced Porous Materials, 2013, 1, 187-193.	0.3	2
36	A Multifunctional Porous Organic Schottky Barrier Diode. Angewandte Chemie - International Edition, 2012, 51, 12534-12537.	7.2	37

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37	Self-Assembled TiO ₂ Nanospheres By Using a Biopolymer as a Template and Its Optoelectronic Application. ACS Applied Materials & Interfaces, 2012, 4, 1560-1564.	4.0	73
38	Biopolymer templated porous TiO ₂ : An efficient catalyst for the conversion of unutilized sugars derived from hemicellulose. Applied Catalysis A: General, 2012, 435-436, 197-203.	2.2	48
39	Synthesis and Temperature-Induced Morphological Control in a Hybrid Porous Iron-Phosphonate Nanomaterial and Its Excellent Catalytic Activity in the Synthesis of Benzimidazoles. Chemistry - A European Journal, 2012, 18, 13372-13378.	1.7	54
40	Hybrid porous tin(IV) phosphonate: an efficient catalyst for adipic acid synthesis and a very good adsorbent for CO ₂ uptake. Chemical Communications, 2012, 48, 6738.	2.2	48
41	Highly Ordered Mesoporous TiO ₂ -Fe ₂ O ₃ Mixed Oxide Synthesized by Sol-Gel Pathway: An Efficient and Reusable Heterogeneous Catalyst for Dehalogenation Reaction. ACS Applied Materials & Interfaces, 2012, 4, 5022-5028.	4.0	88
42	Hierarchically porous titanium phosphate nanoparticles: an efficient solid acid catalyst for microwave assisted conversion of biomass and carbohydrates into 5-hydroxymethylfurfural. Journal of Materials Chemistry, 2012, 22, 14094.	6.7	93
43	Fabrication, characterization and catalytic oxidation of propylene over TS-1/Au membranes. Chemical Engineering Science, 2012, 75, 250-255.	1.9	10
44	Porous organic-inorganic hybrid nickel phosphonate: Adsorption and catalytic applications. Microporous and Mesoporous Materials, 2012, 155, 208-214.	2.2	59
45	Self-assembled mesoporous β -Al ₂ O ₃ spherical nanoparticles and their efficiency for the removal of arsenic from water. Journal of Hazardous Materials, 2012, 201-202, 170-177.	6.5	132
46	Self-assembled mesoporous TiO ₂ spherical nanoparticles by a new templating pathway and its enhanced photoconductivity in the presence of an organic dye. Journal of Materials Chemistry, 2011, 21, 3925.	6.7	73
47	Self-assembly of mesoporous TiO ₂ nanospheres via aspartic acid templating pathway and its catalytic application for 5-hydroxymethyl-furfural synthesis. Journal of Materials Chemistry, 2011, 21, 17505.	6.7	89
48	Microwave assisted rapid conversion of carbohydrates into 5-hydroxymethylfurfural catalyzed by mesoporous TiO ₂ nanoparticles. Applied Catalysis A: General, 2011, 409-410, 133-139.	2.2	118
49	Mesoporous MFI zeolite material from silica-alumina/epoxy-resin composite material and its catalytic activity. Microporous and Mesoporous Materials, 2011, 142, 381-388.	2.2	26
50	Cu nanorods and nanospheres and their excellent catalytic activity in chemoselective reduction of nitrobenzenes. Catalysis Communications, 2010, 11, 651-655.	1.6	118