Arumugam Chandra Bose

List of Publications by Year
in descending order

80 papers	3,233 citations	186265 28 h-index	149698 56 g-index
80 all docs	80 docs citations	80 times ranked	4574 citing authors

#	Article	IF	Citations
1	X-ray peak broadening analysis in ZnO nanoparticles. Solid State Communications, 2009, 149, 1919-1923.	1.9	421
2	Flower-like hierarchical h-MoO3: new findings of efficient visible light driven nano photocatalyst for methylene blue degradation. Catalysis Science and Technology, 2013, 3, 1405.	4.1	212
3	Impact of crystalline defects and size on X-ray line broadening: A phenomenological approach for tetragonal SnO2 nanocrystals. AIP Advances, 2015, 5, .	1.3	206
4	Preparation of h-MoO3 and Î±-MoO3 nanocrystals: comparative study on photocatalytic degradation of methylene blue under visible light irradiation. Physical Chemistry Chemical Physics, 2013, 15, 14761.	2.8	202
5	Hydrothermal synthesis of hexagonal and orthorhombic MoO3 nanoparticles. Journal of Alloys and Compounds, 2011, 509, 8105-8110.	5.5	175
6	Hydrothermally Synthesized h-MoO₃ and Î±-MoO₃ Nanocrystals: New Findings on Crystal-Structure-Dependent Charge Transport. Crystal Growth and Design, 2016, 16, 1984-1995.	3.0	169
7	Recent Advances in 2D-MoS₂ and its Composite Nanostructures for Supercapacitor Electrode Application. Energy & Fuels, 2020, 34, 6558-6597.	5.1	143
8	Bursteinâ€“Moss shift and room temperature near-band-edge luminescence in lithium-doped zinc oxide. Applied Physics A: Materials Science and Processing, 2011, 103, 33-42.	2.3	124
9	Î±-MnO₂/h-MoO₃ Hybrid Material for High Performance Supercapacitor Electrode and Photocatalyst. ACS Sustainable Chemistry and Engineering, 2017, 5, 4757-4770.	6.7	99
10	Structural and optical properties of europium doped yttrium oxide nanoparticles for phosphor applications. Journal of Alloys and Compounds, 2010, 496, 472-477.	5.5	93
11	Structural and optical studies of yttrium oxide nanoparticles synthesized by co-precipitation method. Materials Research Bulletin, 2010, 45, 1165-1170.	5.2	85
12	Enhanced electrochemical performances of agglomeration-free LaMnO3 perovskite nanoparticles and achieving high energy and power densities with symmetric supercapacitor design. Chemical Engineering Journal, 2018, 338, 147-156.	12.7	83
13	Metallic 1T-MoS₂ with defect induced additional active edges for high performance supercapacitor application. New Journal of Chemistry, 2018, 42, 12082-12090.	2.8	69
14	Hydrothermal synthesis of Mn-doped ZnCo 2 O 4 electrode material for high-performance supercapacitor. Applied Surface Science, 2017, 425, 201-211.	6.1	68
15	LaMnO₃/RGO/PANI Ternary Nanocomposites for Supercapacitor Electrode Application and Their Outstanding Performance in All-Solid-State Asymmetrical Device Design. ACS Applied Energy Materials, 2018, 1, 2802-2812.	5.1	64
16	High-efficiency new visible light-driven Ag₂MoO₄â€“Ag₃PO₄ composite photocatalyst towards degradation of industrial dyes. Catalysis Science and Technology, 2016, 6, 8449-8463.	4.1	62
17	Surfactant assisted ZnCo2O4 nanomaterial for supercapacitor application. Applied Surface Science, 2018, 449, 105-112.	6.1	61
18	Quantum confined CdS inclusion in graphene oxide for improved electrical conductivity and facile charge transfer in hetero-junction solar cell. RSC Advances, 2015, 5, 16856-16869.	3.6	59

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19	Investigation of defect related photoluminescence property of multicolour emitting Gd₂O₃:Dy³⁺phosphor. RSC Advances, 2014, 4, 34257.	3.6	47
20	Experimental Studies on Heat Transfer and Friction Factor Characteristics of Al₂O₃/Water Nanofluid in a Circular Pipe Under Transition Flow With Wire Coil Inserts. Heat Transfer Engineering, 2011, 32, 485-496.	1.9	41
21	Fabrication of hybrid supercapacitor device based on NiCo2O4@ZnCo2O4 and the biomass-derived N-doped activated carbon with a honeycomb structure. Electrochimica Acta, 2020, 342, 136062.	5.2	39
22	Electrochemical Performance of rGO/NiCo₂O₄@ZnCo₂O₄ Ternary Composite Material and the Fabrication of an all-Solid-State Supercapacitor Device. Energy & Fuels, 2020, 34, 10131-10141.	5.1	38
23	Electrochemical performance of ANiO3 (A= La, Ce) perovskite oxide material and its device performance for supercapattery application. Electrochimica Acta, 2020, 362, 137095.	5.2	37
24	Role of synthesis variables on controlled nucleation and growth of hexagonal molybdenum oxide nanocrystals: investigation on thermal and optical properties. CrystEngComm, 2014, 16, 6175-6186.	2.6	35
25	Visible light driven degradation of methylene blue dye using Ag3PO4. Journal of Environmental Chemical Engineering, 2015, 3, 1872-1881.	6.7	34
26	Gasâ€Sensing Properties of Needleâ€Shaped Niâ€Doped SnO₂ Nanocrystals Prepared by a Simple Solâ€“Gel Chemical Precipitation Method. Chemistry - an Asian Journal, 2010, 5, 2379-2385.	3.3	33
27	Fabrication of RuO2-Ag3PO4 heterostructure nanocomposites: Investigations of band alignment on the enhanced visible light photocatalytic activity. Journal of Hazardous Materials, 2018, 344, 865-874.	12.4	33
28	Metallic MoS2 grown on porous g-C3N4 as an efficient electrode material for supercapattery application. Electrochimica Acta, 2019, 301, 401-410.	5.2	33
29	PVDF mixed matrix nano-filtration membranes integrated with 1D-PANI/TiO₂ NFs for oilâ€“water emulsion separation. RSC Advances, 2016, 6, 18899-18908.	3.6	28
30	Comparative study of effective photoabsorber CuO thin films prepared via different precursors using chemical spray pyrolysis for solar cell application. Journal of Materials Science: Materials in Electronics, 2019, 30, 561-572.	2.2	28
31	ESTIMATION OF LATTICE STRAIN, STRESS, ENERGY DENSITY AND CRYSTALLITE SIZE OF THE SPHERICAL YTTRIUM OXIDE NANOPARTICLES. Functional Materials Letters, 2009, 02, 131-134.	1.2	25
32	Electrochemical Material Processing via Continuous Chargeâ€Discharge Cycling: Enhanced Performance upon Cycling for Porous LaMnO₃ Perovskite Supercapacitor Electrodes. ChemElectroChem, 2018, 5, 3723-3730.	3.4	23
33	Structural, optical and impedance properties of SnO2 nanoparticles. Journal of Materials Science: Materials in Electronics, 2016, 27, 5818-5824.	2.2	22
34	Lemon juice-assisted synthesis of LaMnO3 perovskite nanoparticles for electrochemical detection of dopamine. Microchemical Journal, 2021, 164, 105945.	4.5	22
35	Dielectric relaxation behavior and electrical conduction mechanism in polymer-ceramic composites based on Sr modified Barium Zirconium Titanate ceramic. Journal of Polymer Research, 2012, 19, 1.	2.4	20
36	Significant enhancement of photo-physicochemical properties of Yb doped copper oxide thin films for efficient solid-state solar cell. Journal of Alloys and Compounds, 2019, 795, 187-196.	5.5	20

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37	Band alignment and depletion zone at ZnO/CdS and ZnO/CdSe hetero-structures for temperature independent ammonia vapor sensing. Physical Chemistry Chemical Physics, 2016, 18, 32057-32071.	2.8	18
38	Investigating the effect of La doped CuO thin film as absorber material for solar cell application. Optical Materials, 2022, 127, 112266.	3.6	18
39	Tuning the Properties of the CuAl_(1â€“X)Fe_XS₂ Thin Film as a Potential Absorber for Solar Cell Application. ACS Applied Energy Materials, 2020, 3, 10550-10559.	5.1	17
40	Supercapacitor and non-enzymatic biosensor application of an Mn₂O₃/NiCo₂O₄ composite material. New Journal of Chemistry, 2020, 44, 11316-11323.	2.8	17
41	Structural, optical, electrical and electrochemical properties of Fe:Co3O4 thin films for supercapacitor applications. Journal of Materials Science: Materials in Electronics, 2017, 28, 18951-18965.	2.2	14
42	Structural properties of Sm3+ doped cerium oxide nanorods synthesized by hydrolysis assisted co-precipitation method. Materials Letters, 2010, 64, 1954-1956.	2.6	12
43	Investigation on photoluminescence properties and defect chemistry of GdAlO3:Dy3+ Ba2+ phosphors. Optical Materials, 2016, 58, 524-530.	3.6	12
44	Controllable Synthesis of V₂O₅/Mn₃O₄ Nanoflakes and rGO Nanosheets: To Investigate the Performance of All Solidâ€State Asymmetric Supercapacitor Device. ChemistrySelect, 2019, 4, 7874-7882.	1.5	12
45	Incorporating Mn²⁺/Ni²⁺/Cu²⁺/Zn²⁺ in the Co₃O₄ Nanorod: To Investigate the Effect of Structural Modification in the Co₃O₄ Nanorod and Its Electrochemical Performance. ChemistrySelect, 2019, 4, 160-170.	1.5	11
46	Impedance and Electrical Modulus Study of Microwave-Sintered Ceramic. , 2012, 2012, 1-6.		11
47	Influence of Al3+ on the cross relaxation process and electrical properties of Dy3+ activated Gd2O3 phosphor for white LED application. Ceramics International, 2015, 41, 8801-8808.	4.8	9
48	Oneâ€Pot synthesis of LaMnO₃/Mn₃O₄ Nanocomposite: Impact of Calcination Temperature on the Synergetic Effect Towards High Energy Supercapacitor Performance. ChemistrySelect, 2018, 3, 6459-6467.	1.5	9
49	Three dimensional NiO nanonetwork electrode for efficient electrochemical energy storage application. Electrochimica Acta, 2021, 399, 139392.	5.2	9
50	BLUE EMISSION AND BANDGAP MODIFICATION IN N:ZnO NANORODS. Functional Materials Letters, 2011, 04, 271-275.	1.2	8
51	Enhancement of dielectric and ferroelectric properties of dysprosium substituted SrBi2Ta2O9 ceramics. Journal of Materials Science: Materials in Electronics, 2016, 27, 1602-1608.	2.2	8
52	Perovskite oxide LaCoO3 electrode as high performance pseudocapacitor. AIP Conference Proceedings, 2019, , .	0.4	8
53	Reduced Graphene Oxide Supported Molybdenum Oxide Hybrid Nanocomposites: High Performance Electrode Material for Supercapacitor and Photocatalytic Applications. Journal of Nanoscience and Nanotechnology, 2020, 20, 4035-4046.	0.9	8
54	Systematic Investigation on the Electrochemical Performance of Pristine Silver Metalâ€“Organic Framework as the Efficient Electrode Material for Supercapacitor Application. Energy & Fuels, 2022, 36, 7104-7114.	5.1	8

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55	Facile fabrication of polycaprolactone/h-MoO₃ nanocomposites and their structural, optical and electrical properties. RSC Advances, 2015, 5, 99074-99083.	3.6	7
56	Investigation on photoluminescence, electrical and positron lifetime of Eu3+ activated Gd2O3 phosphors. Materials Chemistry and Physics, 2015, 166, 73-81.	4.0	7
57	STRUCTURAL AND OPTICAL PROPERTIES OF Eu³⁺ DOPED CERIUM OXIDE NANOPHOSPHORS. Functional Materials Letters, 2011, 04, 13-16.	1.2	5
58	Metallic MoS 2 Anchored on Reduced Graphene Oxide Sheets with Edge Orientation, and Its Electrochemical Investigation on Energy Storage Application. ChemistrySelect, 2018, 3, 11993-12000.	1.5	5
59	Investigations of Interfacial Electric Field on Reducedâ€Grapheneâ€Oxideâ€Supported Molybdenum Oxide @ Silver Phosphate Ternary Hybrid Composite: Highly Efficient Visibleâ€Lightâ€Driven Photocatalyst. ChemistrySelect, 2018, 3, 9920-9932.	1.5	5
60	Relaxation and conduction mechanism of Dy3+ substituted SrBi2Ta2O9 ceramics. Journal of Materials Science: Materials in Electronics, 2016, 27, 4760-4770.	2.2	4
61	One pot synthesis of MoO3/MoS2 composite and investigation on its electrochemical charge storage properties. AIP Conference Proceedings, 2019, , .	0.4	4
62	Co-precipitation route for synthesizing CeNiO3 and its application as excellent pseudocapacitor. AIP Conference Proceedings, 2020, , .	0.4	4
63	ZnO-Basedpn Homo-Junction Fabricated by Spin Coating Method. Science of Advanced Materials, 2012, 4, 44-53.	0.7	4
64	One-pot synthesis of porous crystal structured nanosponge-like pristine copper metalâ€“organic framework for hybrid supercapacitor application. New Journal of Chemistry, 2022, 46, 14020-14029.	2.8	4
65	A comparitive investigation of electrochemical charge storage properties on Î², Î³, Î´ and Î»-MnO2 nanoparticles. AIP Conference Proceedings, 2018, , .	0.4	3
66	LaNiO3 perovskite oxides by co-precipitation method as electrode for high performance supercapacitor. AIP Conference Proceedings, 2019, , .	0.4	3
67	Hierarchical porous carbon nanoparticles derived from Helianthus annuus for glucose-sensing application. Emergent Materials, 2021, 4, 755-760.	5.7	3
68	Hydrothermally synthesized Bi2S3 nanorod for supercapacitor electrode application. AIP Conference Proceedings, 2020, , .	0.4	3
69	Annealed Ce Doped ZnO Coated Fiber Optic Gas Sensor. , 2011, , .		2
70	Visible light assisted degradation of organic dye using Ag3PO4. AIP Conference Proceedings, 2015, , .	0.4	2
71	Influence of different synthesis approach on ZnCo2O4 nanomaterial and its supercapacitor behavior. AIP Conference Proceedings, 2018, , .	0.4	2
72	High crystalline CuAlS2 thin films via chemical spray pyrolysis route. AIP Conference Proceedings, 2018, , .	0.4	1

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73	Pseudocapacitive performance of NiCo2O4 nanostructures. AIP Conference Proceedings, 2019, , .	0.4	1
74	Morphology-dependent electrochemical energy storage property of metallic molybdenum sulfide nanosheets. Journal of Materials Science: Materials in Electronics, 2020, 31, 12684-12695.	2.2	1
75	Facile synthesis of the porous MnMo6S8 for highly stable pseudocapacitor. Journal of Materials Science: Materials in Electronics, 0, , .	2.2	1
76	Absorption-Emission study of Zn[sub 1âˆ'x]Al[sub x]O nanostructures. , 2011, , .		0
77	Structural, optical and morphological study on Gd<inf>2</inf>O<inf>3</inf>:Eu³⁺. , 2013, , .		0
78	Effect of dopant concentration on photoluminescence properties of Gd[sub 2]O[sub 3]:Eu[sup 3+]. , 2013, , .		0
79	Photoluminescence and energy transfer study on Gd2O3:Eu3+, Al3+. , 2014, , .		0
80	Comparative study of CuAlS2 thin film by chemical spray pyrolysis and hydrothermal method. AIP Conference Proceedings, 2019, , .	0.4	0