Arghya Banerjee

List of Publications by Year in Descending Order

86 papers	2,829 citations	30 h-index	51 g-index
89 ext. papers	3,198 ext. citations	4.3 avg, IF	5.68 L-index

#	Paper	IF	Citations
86	Facile construction and controllable design of CoTiO3@Co3O4/NCNO hybrid heterojunction nanocomposite electrode for high-performance supercapacitors. *Electrochimica Acta*, **2022**, 407, 139868	6.7	4
85	Urea-assisted hydrothermal synthesis of MnMoO4/MnCO3 hybrid electrochemical electrode and fabrication of high-performance asymmetric supercapacitor. *Journal of Materials Science and Technology*, **2022**, 96, 332-344	9.1	7
84	In-situ design of porous vanadium nitride@carbon nanobelts: a promising material for high-performance asymmetric supercapacitors. *Applied Surface Science*, **2021**, 151734	6.7	8
83	Functionalization of 0-D and 2-D carbon nitride nanostructures on bio-derived carbon spheres for sustainable electrochemical supercapacitors. *Journal of Electroanalytical Chemistry*, **2021**, 902, 115808	4.1	
82	Rapid Classification of COVID-19 Severity by ATR-FTIR Spectroscopy of Plasma Samples. *Analytical Chemistry*, **2021**, 93, 10391-10396	7.8	10
81	High hydrogen uptake by a metal-graphene-microporous carbon network. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2021**, 271, 115275	3.1	1
80	Synthesis of crystalline zinc hydroxystannate and its thermally driven amorphization and recrystallization into zinc orthostannate and their phase-dependent cytotoxicity evaluation. *Materials Chemistry and Physics*, **2020**, 248, 122946	4.4	1
79	Status review on the Cu2SnSe3 (CTSe) thin films for photovoltaic applications. *Solar Energy*, **2020**, 208, 1001-1030	6.8	5
78	Template-Based Synthesis of Hollow Nanotubular ZnO Structures and Nonlinear Electrical Properties under Field-Induced Trap-Assisted Tunneling. *Journal of Physical Chemistry C*, **2020**, 124, 28371-28386	3.8	1
77	Biowaste-derived carbon black applied to polyaniline-based high-performance supercapacitor microelectrodes: Sustainable materials for renewable energy applications. *Electrochimica Acta*, **2019**, 316, 202-218	6.7	24
76	Conductivity inversion of ZnO nanoparticles in ZnO-carbon nanofiber hybrid thin film devices by surfactant-assisted C-doping and non-rectifying, non-linear electrical properties via interfacial trap-induced tunneling for stress-grading applications. *Journal of Applied Physics*, **2019**, 125, 175106	2.5	6
75	Surface modification of titania nanotube arrays with crystalline manganese-oxide nanostructures and fabrication of hybrid electrochemical electrode for high-performance supercapacitors. *Journal of Industrial and Engineering Chemistry*, **2018**, 62, 409-417	6.3	12
74	Enhanced Field-Emission Properties of Sol-Gel-Derived Nanostructured (hbox {SnO}_{2}):F Thin Film for Vacuum Microelectronics. *Arabian Journal for Science and Engineering*, **2018**, 43, 3815-3821	2.5	2
73	Transition from mobility-activated small polaron to carrier density-activated conduction of sol-gel-derived highly-oriented CuAlO2 thin film and enhanced thermoelectric properties. *Ceramics International*, **2018**, 44, 5950-5960	5.1	4
72	Graphene and its derivatives as biomedical materials: future prospects and challenges. *Interface Focus*, **2018**, 8, 20170056	3.9	101
71	In vitro cytotoxicity of in-situ synthesized zinc oxide anchored graphitic carbon nanofiber on HeLa cells. *Materials Science in Semiconductor Processing*, **2017**, 59, 87-92	4.3	7
70	"Electro-Typing" on a Carbon-Nanoparticles-Filled Polymeric Film using Conducting Atomic Force Microscopy. *Advanced Materials*, **2017**, 29, 1703079	24	9

69	Improved electrochemical properties of morphology-controlled titania/titanate nanostructures prepared by in-situ hydrothermal surface modification of self-source Ti substrate for high-performance supercapacitors. *Scientific Reports*, **2017**, 7, 13227	4.9	34
68	Improved electrochemical properties of highly porous amorphous manganese oxide nanoparticles with crystalline edges for superior supercapacitors. *Journal of Industrial and Engineering Chemistry*, **2017**, 56, 212-224	6.3	25
67	Fast degradation of dyes in water using manganese-oxide-coated diatomite for environmental remediation. *Journal of Physics and Chemistry of Solids*, **2016**, 98, 50-58	3.9	33
66	Effect of cerium doping on the structural, morphological, photoluminescent and thermoluminescent properties of sodium strontium pentaborate microstructures. *Applied Physics A: Materials Science and Processing*, **2016**, 122, 1	2.6	1
65	Enhanced electrochemical performance of morphology-controlled titania-reduced graphene oxide nanostructures fabricated via a combined anodization-hydrothermal process. *RSC Advances*, **2016**, 6, 12571-12583	3.7	16
64	Oxygen Vacancy-Induced Structural, Optical, and Enhanced Supercapacitive Performance of Zinc Oxide Anchored Graphitic Carbon Nanofiber Hybrid Electrodes. *ACS Applied Materials & Interfaces*, **2016**, 8, 5025-39	9.5	123
63	Determination of strain, site occupancy, photoluminescent, and thermoluminescent-trapping parameters of Sm3+-doped NaSrB5O9 microstructures. *Ceramics International*, **2016**, 42, 1234-1245	5.1	28
62	Prospects and Challenges of Graphene-Based Nanomaterials in Nanomedicine **2016**, 1,		6
61	A comparative study of the effect of Pd-doping on the structural, optical, and photocatalytic properties of sol□gel derived anatase TiO2 nanoparticles. *Ceramics International*, **2016**, 42, 12010-12026	5.1	34
60	Nonstoichiometry-Induced Enhancement of Electrochemical Capacitance in Anodic TiO2 Nanotubes with Controlled Pore Diameter. *Journal of Physical Chemistry C*, **2016**, 120, 9569-9580	3.8	20
59	Synthesis of amorphous manganese oxide nanoparticles □to □crystalline nanorods through a simple wet-chemical technique using K+ ions as a □growth director□and their morphology-controlled high performance supercapacitor applications. *RSC Advances*, **2016**, 6, 78887-78908	3.7	30
58	Biofilm formation on a TiO□nanotube with controlled pore diameter and surface wettability. *Nanotechnology*, **2015**, 26, 065102	3.4	43
57	Recent developments in TiO2 as n- and p-type transparent semiconductors: synthesis, modification, properties, and energy-related applications. *Journal of Materials Science*, **2015**, 50, 7495-7536	4.3	75
56	Fabrication of hierarchical porous anodized titania nano-network with enhanced active surface area: Ruthenium-based dye adsorption studies for dye-sensitized solar cell (DSSC) application. *Journal of Industrial and Engineering Chemistry*, **2015**, 29, 227-237	6.3	8
55	Enhanced thermo-mechanical performance and strain-induced band gap reduction of TiO2@PVC nanocomposite films. *Bulletin of Materials Science*, **2015**, 38, 283-290	1.7	13
54	Morphology-dependent low macroscopic field emission properties of titania/titanate nanorods synthesized by alkali-controlled hydrothermal treatment of a metallic Ti surface. *Nanotechnology*, **2015**, 26, 355705	3.4	17
53	Enhanced thermo-optical performance and high BET surface area of graphene@PVC nanocomposite fibers prepared by simple facile deposition technique: N 2 adsorption study. *Journal of Industrial and Engineering Chemistry*, **2015**, 21, 828-834	6.3	40
52	Anchoring Mechanism of ZnO Nanoparticles on Graphitic Carbon Nanofiber Surfaces through a Modified Co-Precipitation Method to Improve Interfacial Contact and Photocatalytic Performance. *ChemPhysChem*, **2015**, 16, 3214-32	3.2	30

51	Barrier-oxide layer engineering of TiO2 nanotube arrays to get single- and multi-stage Y-branched nanotubes: Effect of voltage ramping and electrolyte conductivity. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2015**, 195, 1-11	3.1	18
50	Synthesis of Amourphous and Crystalline Hollow Manganese Oxide Nanotubes with Highly Porous Walls Using Carbon Nanotube Templates and Enhanced Catalytic Activity. *Industrial & Engineering Chemistry Research*, **2014**, 53, 9743-9753	3.9	17
49	Nanocrystalline ZnO thin film deposition on flexible substrate by low-temperature sputtering process for plastic displays. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 7970-5	1.3	11
48	Poole-Frenkel effect in sputter-deposited CuAlO(2+x) nanocrystals. *Nanotechnology*, **2013**, 24, 165705	3.4	14
47	Bio-silica coated with amorphous manganese oxide as an efficient catalyst for rapid degradation of organic pollutant. *Colloids and Surfaces B: Biointerfaces*, **2013**, 106, 151-7	6	44
46	Cell electrofusion in microfluidic devices: A review. *Sensors and Actuators B: Chemical*, **2013**, 178, 63-85	8.5	43
45	Effect of Potassium Ions on the Formation of Crystalline Manganese Oxide Nanorods via Acidic Reduction of Potassium Permanganate. *Industrial & Engineering Chemistry Research*, **2013**, 52, 14154-14159	3.9	14
44	Synthesis of metal-incorporated graphitic microporous carbon terminated with highly-ordered graphene walls□controlling the number of graphene layers by ambient-temperature metal sputtering. *Applied Surface Science*, **2013**, 268, 588-600	6.7	6
43	Ambient-temperature fabrication of microporous carbon terminated with graphene walls by sputtering process for hydrogen storage applications. *Thin Solid Films*, **2013**, 537, 49-57	2.2	6
42	A Review on Cu2O and CuI-Based p-Type Semiconducting Transparent Oxide Materials: Promising Candidates for New Generation Oxide Based Electronics. *Reviews in Advanced Sciences and Engineering*, **2013**, 2, 273-304		86
41	Structural studies and optical properties of pearl nucleus irradiated by □ray. *Radiation Effects and Defects in Solids*, **2013**, 168, 696-704	0.9	1
40	Efficient production of ultrapure manganese oxides via electrodeposition. *Journal of Colloid and Interface Science*, **2012**, 379, 141-3	9.3	10
39	A simple biogenic route to rapid synthesis of Au@TiO2 nanocomposites by electrochemically active biofilms. *Journal of Nanoparticle Research*, **2012**, 14, 1	2.3	35
38	Quantum size effect in the photoluminescence properties of p-type semiconducting transparent CuAlO2 nanoparticles. *Journal of Applied Physics*, **2012**, 112, 114329	2.5	20
37	Site-specific fabrication of graphitic microporous carbon terminated with ordered multilayer graphene walls. *Physica Status Solidi - Rapid Research Letters*, **2012**, 6, 315-317	2.5	5
36	Photocatalytic Degradation of Organic Dye by Sol-Gel-Derived Gallium-Doped Anatase Titanium Oxide Nanoparticles for Environmental Remediation. *Journal of Nanomaterials*, **2012**, 2012, 1-14	3.2	35
35	The design, fabrication, and photocatalytic utility of nanostructured semiconductors: focus on TiO2-based nanostructures. *Nanotechnology, Science and Applications*, **2011**, 4, 35-65	3.9	164
34	Large field enhancement at electrochemically grown quasi-1D Ni nanostructures with low-threshold cold-field electron emission. *Nanotechnology*, **2011**, 22, 035702	3.4	9

33	Auto-barrier-thinning effect under rapid anodization of nanoporous alumina membrane. *Physica Status Solidi - Rapid Research Letters*, **2011**, 5, 238-240	2.5	1
32	High-speed droplet actuation on single-plate electrode arrays. *Journal of Colloid and Interface Science*, **2011**, 362, 567-74	9.3	31
31	Wet-chemical dip-coating preparation of highly oriented copper aluminum oxide thin film and its opto-electrical characterization. *Physica B: Condensed Matter*, **2011**, 406, 220-224	2.8	13
30	Low-macroscopic field emission properties of wide bandgap copper aluminium oxide nanoparticles for low-power panel applications. *Nanotechnology*, **2011**, 22, 365705	3.4	13
29	Field emission characterization of vertically oriented uniformly grown nickel nanorod arrays on metal-coated silicon substrate. *Journal of Applied Physics*, **2010**, 107, 114317	2.5	15
28	Electrochemical growth of ordered nickel nano-rods within a composite structure of anodic-alumina-membrane/metal/silicon substrate. *Journal of Nanoscience and Nanotechnology*, **2010**, 10, 4252-8	1.3	8
27	FESEM studies of densely packed aligned nickel nanopillars on silicon substrate by electrochemical deposition through porous alumina membrane. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2010**, 175, 36-40	3.1	6
26	Synthesis and Characterization of Birnessite and Cryptomelane Nanostructures in Presence of Hoffmeister Anions. *Journal of Nanomaterials*, **2009**, 2009, 1-8	3.2	14
25	Isothermal titration calorimetry, transmission electron microscopy, and field emission scanning electron microscopy of a main-chain viologen polymer containing bromide as counterions. *Polymer*, **2009**, 50, 2393-2401	3.9	5
24	Nanostructured p-type semiconducting transparent oxides: promising materials for nano-active devices and the emerging field of "transparent nanoelectronics". *Recent Patents on Nanotechnology* , **2008**, 2, 41-68	1.2	4
23	An ultrahigh vacuum complementary metal oxide silicon compatible nonlithographic system to fabricate nanoparticle-based devices. *Review of Scientific Instruments*, **2008**, 79, 033910	1.7	13
22	Electro-optical properties of all-oxide p-CuAlO2/n-ZnO: Al transparent heterojunction thin film diode fabricated on glass substrate. *Open Physics*, **2008**, 6,	1.3	13
21	Fabrication and characterization of all-oxide heterojunction p-CuAlO2+x/n-Zn1 AlxO transparent diode for potential application in nvisible electronics *Thin Solid Films*, **2007**, 515, 7324-7330	2.2	60
20	Size controlled deposition of Cu and Si nano-clusters by an ultra-high vacuum sputtering gas aggregation technique. *Applied Physics A: Materials Science and Processing*, **2007**, 90, 299-303	2.6	35
19	Implementation of complex nanosystems using a versatile ultrahigh vacuum nonlithographic technique. *Nanotechnology*, **2007**, 18, 445202	3.4	7
18	Low-temperature deposition of ZnO thin films on PET and glass substrates by DC-sputtering technique. *Thin Solid Films*, **2006**, 496, 112-116	2.2	165
17	Size-dependent optical properties of sputter-deposited nanocrystalline p-type transparent CuAlO2 thin films. *Journal of Applied Physics*, **2005**, 97, 084308	2.5	110
16	Thermoelectric properties and electrical characteristics of sputter-deposited p-CuAlO2 thin films. *Thin Solid Films*, **2005**, 474, 261-266	2.2	106

15	Effect of excess oxygen on the electrical properties of transparent p-type conducting CuAlO thin films. *Solar Energy Materials and Solar Cells*, **2005**, 89, 75-83	6.4	87
14	Recent developments in the emerging field of crystalline p-type transparent conducting oxide thin films. *Progress in Crystal Growth and Characterization of Materials*, **2005**, 50, 52-105	3.5	277
13	Electro-optical characteristics and field-emission properties of reactive DC-sputtered p-CuAlO2+x thin films. *Physica B: Condensed Matter*, **2005**, 370, 264-276	2.8	42
12	Poole–Frenkel effect in nanocrystalline SnO2:F thin films prepared by a sol–gel dip-coating technique. *Physica Status Solidi A*, **2004**, 201, 983-989		38
11	Low-threshold field emission from transparent p-type conducting CuAlO2 thin film prepared by dc sputtering. *Applied Surface Science*, **2004**, 225, 243-249	6.7	54
10	Low-macroscopic field emission from fibrous ZnO thin film prepared by catalyst-free solution route. *Applied Surface Science*, **2004**, 236, 231-235	6.7	15
9	Preparation of p-type transparent conducting CuAlO2 thin films by reactive DC sputtering. *Materials Letters*, **2004**, 58, 10-13	3.3	83
8	Synthesis and Characterization of Nano-Crystalline Fluorine-Doped Tin Oxide Thin Films by Sol-Gel Method. *Journal of Sol-Gel Science and Technology*, **2003**, 28, 105-110	2.3	69
7	Synthesis and characterization of p-type transparent conducting CuAlO2 thin film by DC sputtering. *Thin Solid Films*, **2003**, 440, 5-10	2.2	128
6	Synthesis and optical characterization of amorphous carbon nitride thin films by hot filament assisted RF plasma CVD. *Vacuum*, **2003**, 69, 495-500	3.7	15
5	Synthesis of boron-doped diamond films by DC plasma CVD using a CH4+CO2+H2 gas mixture at lower substrate temperature and formation of an n-Si/p-diamond heterojunction. *Vacuum*, **2003**, 72, 129-134	3.7	6
4	Reduced bias synthesis of cubic boron nitride thin films by magnetically enhanced inductively coupled radio frequency plasma chemical vapor deposition. *Materials Letters*, **2003**, 57, 1459-1463	3.3	1
3	Synthesis of crystalline carbon nitride thin films by electrolysis of methanol–urea solution. *Materials Letters*, **2003**, 57, 2193-2197	3.3	68
2	Bioinspired tailoring of nanoarchitectured nickel sulfide@nickel permeated carbon composite as highly durable and redox chemistry enabled battery-type electrode for hybrid supercapacitors. *Journal of Materials Chemistry A*,	13	7
1	Superior energy-power performance of N-doped carbon nano-onions-based asymmetric and symmetric supercapacitor devices. *International Journal of Energy Research*,	4.5	4