

Joydeep Dutta

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

263
papers

10,683
citations

54
h-index

96
g-index

284
ext. papers

12,363
ext. citations

5
avg, IF

6.94
L-index

#	Paper	IF	Citations
263	Perspectives for chitosan based antimicrobial films in food applications. <i>Food Chemistry</i> , 2009 , 114, 1173-1182	15.182	990
262	Hydrothermal growth of ZnO nanostructures. <i>Science and Technology of Advanced Materials</i> , 2009 , 10, 013001	7.1	814
261	Photocatalytic degradation of organic dyes with manganese-doped ZnO nanoparticles. <i>Journal of Hazardous Materials</i> , 2008 , 156, 194-200	12.8	614
260	Zinc oxide nanowires in chemical bath on seeded substrates: Role of hexamine. <i>Journal of Sol-Gel Science and Technology</i> , 2006 , 39, 49-56	2.3	266
259	Heavy-metal ion sensors using chitosan-capped gold nanoparticles. <i>Science and Technology of Advanced Materials</i> , 2005 , 6, 335-340	7.1	250
258	Chitosan based nanocomposite films and coatings: Emerging antimicrobial food packaging alternatives. <i>Trends in Food Science and Technology</i> , 2020 , 97, 196-209	15.3	240
257	Nanotechnology applications in pollution sensing and degradation in agriculture: a review. <i>Environmental Chemistry Letters</i> , 2009 , 7, 191-204	13.3	214
256	Chitosan-zinc oxide nanoparticle composite coating for active food packaging applications. <i>Innovative Food Science and Emerging Technologies</i> , 2016 , 38, 231-237	6.8	205
255	pH-dependent growth of zinc oxide nanorods. <i>Journal of Crystal Growth</i> , 2009 , 311, 2549-2554	1.6	184
254	Effect of seeded substrates on hydrothermally grown ZnO nanorods. <i>Journal of Sol-Gel Science and Technology</i> , 2009 , 50, 456-464	2.3	136
253	Luminescent nanoparticles of Mn doped ZnS passivated with sodium hexametaphosphate. <i>Science and Technology of Advanced Materials</i> , 2005 , 6, 296-301	7.1	131
252	Visible light photocatalytic degradation of microplastic residues with zinc oxide nanorods. <i>Environmental Chemistry Letters</i> , 2019 , 17, 1341-1346	13.3	129
251	Applications of nanotechnology in wastewater treatment--a review. <i>Journal of Nanoscience and Nanotechnology</i> , 2014 , 14, 613-26	1.3	124
250	Enhanced visible light photocatalysis through fast crystallization of zinc oxide nanorods. <i>Beilstein Journal of Nanotechnology</i> , 2010 , 1, 14-20	3	120
249	Chitosan-zinc oxide nanocomposite coatings for the prevention of marine biofouling. <i>Chemosphere</i> , 2017 , 168, 408-417	8.4	114
248	Zinc stannate nanostructures: hydrothermal synthesis. <i>Science and Technology of Advanced Materials</i> , 2011 , 12, 013004	7.1	112
247	Diagnostics of particle genesis and growth in RF silane plasmas by ion mass spectrometry and light scattering. <i>Plasma Sources Science and Technology</i> , 1994 , 3, 278-285	3.5	111

246	Introduction to Nanoscience and Nanotechnology		111
245	Photoreactivity of ZnO nanoparticles in visible light: Effect of surface states on electron transfer reaction. <i>Journal of Applied Physics</i> , 2009 , 105, 074308	2.5	108
244	Growth of ZnO nanowires on nonwoven polyethylene fibers. <i>Science and Technology of Advanced Materials</i> , 2008 , 9, 025009	7.1	106
243	Highly efficient ZnO/Au Schottky barrier dye-sensitized solar cells: Role of gold nanoparticles on the charge-transfer process. <i>Beilstein Journal of Nanotechnology</i> , 2011 , 2, 681-90	3	92
242	Photoselective excited state dynamics in ZnO-Au nanocomposites and their implications in photocatalysis and dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 12488-96	3.6	92
241	Importance of Plasmonic Heating on Visible Light Driven Photocatalysis of Gold Nanoparticle Decorated Zinc Oxide Nanorods. <i>Scientific Reports</i> , 2016 , 6, 26913	4.9	91
240	Photocatalytic paper using zinc oxide nanorods. <i>Science and Technology of Advanced Materials</i> , 2010 , 11, 055002	7.1	90
239	Zinc oxide nanorod mediated visible light photoinactivation of model microbes in water. <i>Nanotechnology</i> , 2011 , 22, 215703	3.4	89
238	Enhanced visible light photocatalysis by manganese doping or rapid crystallization with ZnO nanoparticles. <i>Materials Chemistry and Physics</i> , 2011 , 130, 531-535	4.4	89
237	Efficient solar photocatalytic degradation of textile wastewater using ZnO/ZTO composites. <i>Applied Catalysis B: Environmental</i> , 2015 , 163, 1-8	21.8	88
236	Brackish water desalination by capacitive deionization using zinc oxide micro/nanostructures grafted on activated carbon cloth electrodes. <i>Desalination</i> , 2014 , 344, 236-242	10.3	86
235	Nanostructured Zinc Oxide for Water Treatment. <i>Nanoscience and Nanotechnology - Asia</i> , 2012 , 2, 90-102.	2.7	86
234	Synthesis of supported silver nano-spheres on zinc oxide nanorods for visible light photocatalytic applications. <i>Materials Research Bulletin</i> , 2015 , 63, 134-140	5.1	83
233	Perspectives and applications of nanotechnology in water treatment. <i>Environmental Chemistry Letters</i> , 2016 , 14, 1-14	13.3	82
232	Mie scattering effects from monodispersed ZnS nanospheres. <i>Journal of Applied Physics</i> , 1998 , 83, 7860-7866	2.66	82
231	Fabrication of zinc oxide nanorods modified activated carbon cloth electrode for desalination of brackish water using capacitive deionization approach. <i>Desalination</i> , 2012 , 305, 24-30	10.3	81
230	Bionanocomposite films of agar incorporated with ZnO nanoparticles as an active packaging material for shelf life extension of green grape. <i>Heliyon</i> , 2019 , 5, e01867	3.6	77
229	VISIBLE LIGHT PHOTOCATALYSIS BY TAILORING CRYSTAL DEFECTS IN ZINC OXIDE NANOSTRUCTURES. <i>Nano</i> , 2008 , 03, 399-407	1.1	75

228	High-performance liquefied petroleum gas sensing based on nanostructures of zinc oxide and zinc stannate. <i>Sensors and Actuators B: Chemical</i> , 2011 , 157, 232-239	8.5	74
227	Nutrition-Driven Assembly of Colloidal Nanoparticles: Growing Fungi Assemble Gold Nanoparticles as Microwires. <i>Advanced Materials</i> , 2007 , 19, 77-81	24	74
226	Selective separation of rare earth ions from aqueous solution using functionalized magnetite nanoparticles: kinetic and thermodynamic studies. <i>Chemical Engineering Journal</i> , 2017 , 327, 286-296	14.7	73
225	Defect engineered visible light active ZnO nanorods for photocatalytic treatment of water. <i>Catalysis Today</i> , 2017 , 284, 11-18	5.3	73
224	Gold nanoparticle synthesis in graft copolymer micelles. <i>Colloid and Polymer Science</i> , 1998 , 276, 853-859	2.4	71
223	Rare Earth Ions Adsorption onto Graphene Oxide Nanosheets. <i>Solvent Extraction and Ion Exchange</i> , 2017 , 35, 91-103	2.5	68
222	Atomic structure of amorphous nanosized silicon powders upon thermal treatment. <i>Physical Review B</i> , 1996 , 54, 2856-2862	3.3	63
221	Rational surface modification of Mn ₃ O ₄ nanoparticles to induce multiple photoluminescence and room temperature ferromagnetism. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 1885	7.1	62
220	Controlled Defects of Zinc Oxide Nanorods for Efficient Visible Light Photocatalytic Degradation of Phenol. <i>Materials</i> , 2016 , 9,	3.5	62
219	Chitosan Nanocomposite Coatings for Food, Paints, and Water Treatment Applications. <i>Applied Sciences (Switzerland)</i> , 2019 , 9, 2409	2.6	61
218	Enhancement of Photocatalytic Degradation of Methyl Orange by Supported Zinc Oxide Nanorods/Zinc Stannate (ZnO/ZTO) on Porous Substrates. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 13629-13636	3.9	61
217	Synthesis of Controlled Spherical Zinc Sulfide Particles by Precipitation from Homogeneous Solutions. <i>Journal of the American Ceramic Society</i> , 2005 , 81, 2699-2705	3.8	59
216	Desalination and disinfection of inland brackish ground water in a capacitive deionization cell using nanoporous activated carbon cloth electrodes. <i>Desalination</i> , 2015 , 362, 126-132	10.3	58
215	Hematoporphyrin-ZnO nanohybrids: twin applications in efficient visible-light photocatalysis and dye-sensitized solar cells. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 7027-35	9.5	57
214	Growth of Zinc Oxide Nanowires and Nanobelts for Gas Sensing Applications. <i>Journal of Metastable and Nanocrystalline Materials</i> , 2005 , 23, 27-30	0.2	57
213	Photocatalytic degradation of phenol by iodine doped tin oxide nanoparticles under UV and sunlight irradiation. <i>Journal of Alloys and Compounds</i> , 2015 , 618, 366-371	5.7	56
212	Antifouling properties of zinc oxide nanorod coatings. <i>Biofouling</i> , 2014 , 30, 871-82	3.3	56
211	Hydrophobic/hydrophilic switching on zinc oxide micro-textured surface. <i>Applied Surface Science</i> , 2013 , 264, 344-348	6.7	54

210	Visible light photocatalytic degradation of polypropylene microplastics in a continuous water flow system. <i>Journal of Hazardous Materials</i> , 2021 , 406, 124299	12.8	54
209	Effects of cosurfactant on ZnS nanoparticle synthesis in microemulsion. <i>Science and Technology of Advanced Materials</i> , 2005 , 6, 266-271	7.1	53
208	Sol-Gel-Assisted Microwave-Derived Synthesis of Anatase Ag/TiO ₂ /GO Nanohybrids toward Efficient Visible Light Phenol Degradation. <i>Catalysts</i> , 2017 , 7, 133	4	52
207	Self-organization of gold nanoparticles on silanated surfaces. <i>Beilstein Journal of Nanotechnology</i> , 2015 , 6, 2345-53	3	52
206	Role of surface defects on visible light enabled plasmonic photocatalysis in Au@ZnO nanocatalysts. <i>RSC Advances</i> , 2015 , 5, 96670-96680	3.7	50
205	Enhanced Visible Light Photodegradation of Microplastic Fragments with Plasmonic Platinum/Zinc Oxide Nanorod Photocatalysts. <i>Catalysts</i> , 2019 , 9, 819	4	50
204	Paper modified with ZnO nanorods - antimicrobial studies. <i>Beilstein Journal of Nanotechnology</i> , 2012 , 3, 684-91	3	49
203	Enhancement in ion adsorption rate and desalination efficiency in a capacitive deionization cell through improved electric field distribution using electrodes composed of activated carbon cloth coated with zinc oxide nanorods. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 10113-20	9.5	47
202	Superhydrophobic surfaces using selected zinc oxide microrod growth on ink-jetted patterns. <i>Journal of Colloid and Interface Science</i> , 2011 , 354, 810-5	9.3	47
201	Air pollution monitoring and GIS modeling: a new use of nanotechnology based solid state gas sensors. <i>Science and Technology of Advanced Materials</i> , 2005 , 6, 251-255	7.1	46
200	Dependence of intrinsic stress in hydrogenated amorphous silicon on excitation frequency in a plasma-enhanced chemical vapor deposition process. <i>Journal of Applied Physics</i> , 1992 , 72, 3220-3222	2.5	46
199	Dual-Sensitization via Electron and Energy Harvesting in CdTe Quantum Dots Decorated ZnO Nanorod-Based Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 14248-14256	3.8	45
198	Modulation of defect-mediated energy transfer from ZnO nanoparticles for the photocatalytic degradation of bilirubin. <i>Beilstein Journal of Nanotechnology</i> , 2013 , 4, 714-25	3	45
197	Role of Resonance Energy Transfer in Light Harvesting of Zinc Oxide-Based Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 10390-10395	3.8	45
196	Toxicity of ZnO and TiO ₂ Nanoparticles on Germinating Rice Seed <i>Oryza sativa</i> L. <i>International Journal of Bioscience, Biochemistry, Bioinformatics (IJBBB)</i> , 2011 , 282-285	0.3	45
195	Microwave-enhanced degradation of phenol over Ni-loaded ZnO nanorods catalyst. <i>Applied Catalysis B: Environmental</i> , 2014 , 156-157, 456-465	21.8	44
194	Zinc oxide/zinc stannate core/shell nanorod arrays for CdS quantum dot sensitized solar cells. <i>Electrochimica Acta</i> , 2012 , 68, 141-145	6.7	44
193	Biodegradable Hybrid Nanocomposite of Chitosan/Gelatin and Green Synthesized Zinc Oxide Nanoparticles for Food Packaging. <i>Foods</i> , 2020 , 9,	4.9	44

192	Critical Review of Low-Temperature CO Oxidation and Hysteresis Phenomenon on Heterogeneous Catalysts. <i>Catalysts</i> , 2018 , 8, 660	4	44
191	Efficient photocatalytic degradation of phenol in aqueous solution by SnO ₂ :Sb nanoparticles. <i>Applied Surface Science</i> , 2016 , 370, 229-236	6.7	43
190	Visible light photocatalysis of mixed phase zinc stannate/zinc oxide nanostructures precipitated at room temperature in aqueous media. <i>Ceramics International</i> , 2014 , 40, 8743-8752	5.1	42
189	Development of a visible light active photocatalytic portable water purification unit using ZnO nanorods. <i>Catalysis Science and Technology</i> , 2012 , 2, 918	5.5	41
188	Raman Spectroscopy detects changes in Bone Mineral Quality and Collagen Cross-linkage in Staphylococcus Infected Human Bone. <i>Scientific Reports</i> , 2018 , 8, 9417	4.9	40
187	Bioinspired nanocoatings for biofouling prevention by photocatalytic redox reactions. <i>Scientific Reports</i> , 2017 , 7, 3624	4.9	40
186	Improved desalination by zinc oxide nanorod induced electric field enhancement in capacitive deionization of brackish water. <i>Desalination</i> , 2015 , 359, 64-70	10.3	40
185	VHF Plasma Deposition: A Comparative Overview. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 258, 15		40
184	Dynamics of light harvesting in ZnO nanoparticles. <i>Nanotechnology</i> , 2010 , 21, 265703	3.4	39
183	Variations in structural and electrical properties of magnetron-sputtered indium tin oxide films with deposition parameters. <i>Thin Solid Films</i> , 1988 , 162, 119-127	2.2	39
182	Chlorination disadvantages and alternative routes for biofouling control in reverse osmosis desalination. <i>Npj Clean Water</i> , 2019 , 2,	11.2	38
181	One pot synthesis of opposing 'rose petal' and 'lotus leaf' superhydrophobic materials with zinc oxide nanorods. <i>Journal of Colloid and Interface Science</i> , 2014 , 415, 32-8	9.3	38
180	Photocatalytic degradation of phenol in aqueous solution by rare earth-doped SnO ₂ nanoparticles. <i>Journal of Materials Science</i> , 2014 , 49, 5151-5159	4.3	37
179	. <i>IEEE Nanotechnology Magazine</i> , 2013 , 12, 255-262	2.6	37
178	Selective growth of zinc oxide nanorods on inkjet printed seed patterns. <i>Journal of Crystal Growth</i> , 2009 , 311, 2352-2358	1.6	36
177	Nanocomposite Zinc Oxide-Chitosan Coatings on Polyethylene Films for Extending Storage Life of Okra (). <i>Nanomaterials</i> , 2018 , 8,	5.4	35
176	Introduction to Nanoscience		34
175	Zinc oxide nanorods based catalysts for hydrogen production by steam reforming of methanol. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 5518-5526	6.7	33

174	Visible light photocatalytic degradation of HPAM polymer in oil produced water using supported zinc oxide nanorods. <i>Chemical Engineering Journal</i> , 2018 , 351, 56-64	14.7	32
173	Role of central metal ions in hematoporphyrin-functionalized titania in solar energy conversion dynamics. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 18562-70	3.6	32
172	Nanostructured Zinc Sulphide Phosphors. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 501, 369		32
171	Effective medium theory characterization of Au/Ag nanoalloy-porous alumina composites. <i>Scripta Materialia</i> , 1997 , 9, 571-574		32
170	Removal and regrowth inhibition of microalgae using visible light photocatalysis with ZnO nanorods: A green technology. <i>Separation and Purification Technology</i> , 2016 , 162, 61-67	8.3	31
169	Nanoporous aggregates of ZnS nanocrystallites 1998 , 12, 327-335		31
168	Nano zero-valent iron on activated carbon cloth support as Fenton-like catalyst for efficient color and COD removal from melanoidin wastewater. <i>Chemosphere</i> , 2021 , 263, 127945	8.4	31
167	Antimicrobial Activity Enhancement of Poly(ether sulfone) Membranes by in Situ Growth of ZnO Nanorods. <i>ACS Omega</i> , 2017 , 2, 3157-3167	3.9	29
166	Influence of Atomic Hydrogen, Band Bending, and Defects in the Top Few Nanometers of Hydrothermally Prepared Zinc Oxide Nanorods. <i>Nanoscale Research Letters</i> , 2017 , 12, 22	5	28
165	Self-decontaminating photocatalytic zinc oxide nanorod coatings for prevention of marine microfouling: a mesocosm study. <i>Biofouling</i> , 2016 , 32, 383-95	3.3	28
164	Heavy metal ion sensing in water using surface plasmon resonance of metallic nanostructures. <i>Groundwater for Sustainable Development</i> , 2015 , 1, 1-11	6	28
163	Application of Eh-pH diagram for room temperature precipitation of zinc stannate microcubes in an aqueous media. <i>Materials Research Bulletin</i> , 2014 , 49, 645-650	5.1	28
162	Nanoparticle-Sensitized Photodegradation of Bilirubin and Potential Therapeutic Application. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 9608-9615	3.8	28
161	Phase Transformation of Metastable ZnSnO ₃ Upon Thermal Decomposition by In-Situ Temperature-Dependent Raman Spectroscopy. <i>Journal of the American Ceramic Society</i> , 2015 , 98, 4044-4049	2.8	27
160	Heterogeneous photocatalysis for removal of microbes from water. <i>Environmental Chemistry Letters</i> , 2012 , 10, 145-151	13.3	27
159	Pyrosol deposition of fluorine-doped tin dioxide thin films. <i>Journal of Materials Science</i> , 1995 , 30, 53-62	4.3	27
158	Effect of a semiconductor dielectric coating on the salt adsorption capacity of a porous electrode in a capacitive deionization cell. <i>Electrochimica Acta</i> , 2015 , 166, 329-337	6.7	25
157	Visible photoluminescence from hydrogenated silicon particles suspended in a silane plasma. <i>Journal of Applied Physics</i> , 1995 , 78, 61-66	2.5	25

156	Key activity descriptors of nickel-iron oxygen evolution electrocatalysts in the presence of alkali metal cations. <i>Nature Communications</i> , 2020 , 11, 6181	17.4	25
155	Copper zinc oxide nanocatalysts grown on cordierite substrate for hydrogen production using methanol steam reforming. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 22936-22946	6.7	24
154	Efficient visible light photocatalysis of benzene, toluene, ethylbenzene and xylene (BTEX) in aqueous solutions using supported zinc oxide nanorods. <i>PLoS ONE</i> , 2017 , 12, e0189276	3.7	24
153	Controlled side coupling of light to cladding mode of ZnO nanorod coated optical fibers and its implications for chemical vapor sensing. <i>Sensors and Actuators B: Chemical</i> , 2014 , 202, 543-550	8.5	23
152	Manganese doped zinc sulfide quantum dots for detection of Escherichia coli. <i>Journal of Fluorescence</i> , 2012 , 22, 403-8	2.4	23
151	Gadolinium doped tin dioxide nanoparticles: an efficient visible light active photocatalyst. <i>Journal of Rare Earths</i> , 2015 , 33, 1275-1283	3.7	23
150	Intermediate formation during photodegradation of phenol using lanthanum doped tin dioxide nanoparticles. <i>Research on Chemical Intermediates</i> , 2016 , 42, 3055-3069	2.8	21
149	Dynamic Langmuir Model: A Simpler Approach to Modeling Capacitive Deionization. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 16479-16485	3.8	21
148	Bilayer SnO ₂ :In/SnO ₂ thin films as transparent electrodes of amorphous silicon solar cells. <i>Thin Solid Films</i> , 1991 , 199, 201-207	2.2	21
147	The effects of ZnO nanostructures of different morphology on bioenergetics and stress response biomarkers of the blue mussels <i>Mytilus edulis</i> . <i>Science of the Total Environment</i> , 2019 , 694, 133717	10.2	20
146	Nanotechnology in environmental protection and pollution. <i>Science and Technology of Advanced Materials</i> , 2005 , 6, 219-220	7.1	20
145	Application of pyrosol deposition process for large-area deposition of fluorine-doped tin dioxide thin films. <i>Thin Solid Films</i> , 1994 , 239, 150-155	2.2	20
144	Synthesis of hierarchically porous silica aerogel supported Palladium catalyst for low-temperature CO oxidation under ignition/extinction conditions. <i>Microporous and Mesoporous Materials</i> , 2020 , 292, 109758	5.3	20
143	Demonstration of side coupling to cladding modes through zinc oxide nanorods grown on multimode optical fiber. <i>Optics Letters</i> , 2013 , 38, 3620-2	3	19
142	Capacitive deionization with asymmetric electrodes: Electrode capacitance vs electrode surface area. <i>Electrochimica Acta</i> , 2015 , 176, 420-425	6.7	16
141	Comparison of photocatalytic activity of zinc stannate particles and zinc stannate/zinc oxide composites for the removal of phenol from water, and a study on the effect of pH on photocatalytic efficiency. <i>Materials Science in Semiconductor Processing</i> , 2015 , 36, 124-133	4.3	16
140	An Easy-to-Use Tool for Modeling the Dynamics of Capacitive Deionization. <i>Journal of Physical Chemistry A</i> , 2019 , 123, 6628-6634	2.8	16
139	Optimization of the sublethal dose of silver nanoparticle through evaluating its effect on intestinal physiology of Nile tilapia (<i>Oreochromis niloticus</i> L.). <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2015 , 50, 814-23	2.3	16

138	Dynamical Maxwell-Garnett optical modeling of nanogold-porous alumina composites: Mie and Kappa influence on absorption maxima. <i>Scripta Materialia</i> , 1997 , 9, 575-578		16
137	Processing of nano-scaled silicon powders to prepare slip cast structural ceramics. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1995 , 204, 107-112	5.3	16
136	Multilayered silicon/silicon nitride thin films deposited by plasma-CVD: Effects of crystallization. <i>Scripta Materialia</i> , 1995 , 6, 843-846		16
135	Two step copper impregnated zinc oxide microball synthesis for the reduction of activation energy of methanol steam reformation. <i>Chemical Engineering Journal</i> , 2013 , 223, 304-308	14.7	15
134	Structure of nanometersized silicon particles prepared by various gas phase processes. <i>Journal of Non-Crystalline Solids</i> , 1998 , 232-234, 182-187	3.9	15
133	Fundamentals of Nanotechnology		15
132	Controlled growth of zinc oxide microrods by hydrothermal process on porous ceramic supports for catalytic application. <i>Journal of Alloys and Compounds</i> , 2014 , 586, 169-175	5.7	14
131	One-Diode Model Equivalent Circuit Analysis for ZnO Nanorod-Based Dye-Sensitized Solar Cells: Effects of Annealing and Active Area. <i>IEEE Nanotechnology Magazine</i> , 2012 , 11, 763-768	2.6	14
130	Chitosan nanocomposite coatings with enhanced corrosion inhibition effects for copper. <i>International Journal of Biological Macromolecules</i> , 2020 , 162, 1566-1577	7.9	14
129	Tailoring the pressure drop and fluid distribution of a capacitive deionization device. <i>Desalination</i> , 2019 , 449, 111-117	10.3	14
128	Plasmonic Photocatalyst Design: Metal-Semiconductor Junction Affecting Photocatalytic Efficiency. <i>Journal of Nanoscience and Nanotechnology</i> , 2019 , 19, 383-388	1.3	13
127	Nanoparticulate Dielectric Overlayer for Enhanced Electric Fields in a Capacitive Deionization Device. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 5941-5948	9.5	12
126	Chitosan Capped Colloidal Gold Nanoparticles for Sensing Zinc Ions in Water. <i>Journal of Nano Research</i> , 2012 , 16, 55-61	1	12
125	Design of electric-field assisted surface plasmon resonance system for the detection of heavy metal ions in water. <i>AIP Advances</i> , 2015 , 5, 107226	1.5	11
124	Plasmon resonance tuning of gold and silver nanoparticle-insulator multilayered composite structures for optical filters. <i>Micro and Nano Letters</i> , 2011 , 6, 342	0.9	11
123	Effect of CuO additives on the reversibility of zirconia crystalline phase transitions. <i>Journal of Materials Science</i> , 1999 , 34, 2207-2215	4.3	11
122	Comparison of the properties of hydrogenated microcrystalline silicon films deposited by photochemical-vapor deposition and glow-discharge deposition processes. <i>Journal of Applied Physics</i> , 1989 , 66, 4709-4714	2.5	11
121	Simplified Prediction of Ion Removal in Capacitive Deionization of Multi-Ion Solutions. <i>Langmuir</i> , 2020 , 36, 1338-1344	4	10

120	Optical thin film filters of colloidal gold and silica nanoparticles prepared by a layer-by-layer self-assembly method. <i>Journal of Materials Science</i> , 2011 , 46, 6877-6882	4.3	10
119	Studies on Chitosan Stabilised ZnS:Mn ²⁺ Nanoparticles. <i>Journal of Bionanoscience</i> , 2008 , 2, 42-48		10
118	Microstructure, Optoelectronic Properties and Saturated Defect Density of A-SL:H Prepared in VHF-Glow Discharge Using AR and XE Dilution. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 258, 135		10
117	Radiofrequency-plasma-deposited hydrogenated fluorinated silicon-carbon alloy films. <i>Physical Review B</i> , 1989 , 40, 3830-3836	3.3	10
116	Conduction Properties of Layer-by-Layer Self-Assembled Multilayer Nanoparticulate Structures. <i>Journal of Nanoelectronics and Optoelectronics</i> , 2008 , 3, 184-189	1.3	10
115	Multimodal Imaging of Pancreatic Ductal Adenocarcinoma Using Multifunctional Nanoparticles as Contrast Agents. <i>ACS Applied Materials & Interfaces</i> , 2020 ,	9.5	10
114	Effects of synthesis methods on performance of CuZn/MCM-41 catalysts in methanol steam reforming. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 3539-3553	6.7	10
113	Enhanced hydrogen selectivity via photo-engineered surface defects for methanol steam reformation using zinc oxide/copper nanocomposite catalysts. <i>Applied Catalysis A: General</i> , 2014 , 471, 63-69	5.1	9
112	Visible-Light-Induced Directed Gold Microwires by Self-Organization of Nanoparticles on <i>Aspergillus Niger</i> . <i>Particle and Particle Systems Characterization</i> , 2013 , 30, 473-480	3.1	9
111	Growth, microstructure and sintering behavior of nanosized silicon powders. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1997 , 127, 263-272	5.1	9
110	Growth of gold/zinc sulphide multilayer films using layer-by-layer assembly of colloidal nanoparticles. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008 , 41, 285-291	3	9
109	Current-voltage characteristics of layer-by-layer self-assembled colloidal thin films. <i>Applied Physics Letters</i> , 2006 , 89, 133123	3.4	9
108	Influence of higher deposition temperature on a-Si:H material properties, powder formation and light-induced degradation, using the VHF (70 MHz) glow discharge technique. <i>Journal of Non-Crystalline Solids</i> , 1993 , 164-166, 59-62	3.9	9
107	Role of bonding mechanisms during transfer hydrogenation reaction on heterogeneous catalysts of platinum nanoparticles supported on zinc oxide nanorods. <i>Applied Surface Science</i> , 2016 , 377, 200-206	6.7	9
106	Applied light-side coupling with optimized spiral-patterned zinc oxide nanorod coatings for multiple optical channel alcohol vapor sensing. <i>Journal of Nanophotonics</i> , 2016 , 10, 036009	1.1	8
105	Side coupling of multiple optical channels by spiral patterned zinc oxide coatings on large core plastic optical fibers. <i>Micro and Nano Letters</i> , 2016 , 11, 122-126	0.9	8
104	Microwave assisted hydrothermal synthesis of zinc hydroxystannate films on glass substrates. <i>Journal of Sol-Gel Science and Technology</i> , 2012 , 62, 495-504	2.3	8
103	Optical fiber-based sensor for in situ monitoring of cadmium sulfide thin-film growth. <i>Optics Letters</i> , 2013 , 38, 5385-8	3	8

102	Microstructural properties of silicon powder produced in a low pressure silane discharge. <i>Journal of Applied Physics</i> , 1995 , 77, 3729-3733	2.5	8
101	Crystallization of amorphous nano-sized silicon powders. <i>Scripta Materialia</i> , 1995 , 6, 493-496		8
100	Supported versus colloidal zinc oxide for advanced oxidation processes. <i>Applied Surface Science</i> , 2017 , 411, 285-290	6.7	7
99	Nanocomposite functionalized membranes based on silica nanoparticles cross-linked to electrospun nanofibrous support for arsenic(v) adsorption from contaminated underground water.. <i>RSC Advances</i> , 2019 , 9, 8280-8289	3.7	7
98	Predicting and Enhancing the Ion Selectivity in Multi-Ion Capacitive Deionization. <i>Langmuir</i> , 2020 , 36, 8476-8484	4	7
97	Optical dynamic range maximization for humidity sensing by controlling growth of zinc oxide nanorods. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2018 , 30, 57-64	2.6	7
96	Phase transformation behavior of zinc metastannates obtained by aqueous precipitation at different temperatures. <i>Journal of Materials Science</i> , 2014 , 49, 7282-7289	4.3	7
95	Excitation of core modes through side coupling to multimode optical fiber by hydrothermal growth of ZnO nanorods for wide angle optical reception. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2014 , 31, 2232	1.7	7
94	Cluster-induced crystallization of nano-silicon particles. <i>Scripta Materialia</i> , 1997 , 9, 359-362		7
93	Novel Synthesis of Gold Nanoparticles in Aqueous Media. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 901, 1		7
92	Chemical synthesis and characterization of nano-crystalline palladium oxide. <i>Scripta Materialia</i> , 1995 , 6, 313-316		7
91	Effect of ultraviolet irradiation on the white light degraded electronic properties of hydrogenated amorphous silicon films. <i>Applied Physics Letters</i> , 1989 , 55, 1975-1977	3.4	7
90	Chitosan Nanocomposite Coatings Containing Chemically Resistant ZnO-SnO Core-shell Nanoparticles for Photocatalytic Antifouling. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	7
89	Design principles for enhanced up-scaling of flow-through capacitive deionization for water desalination. <i>Desalination</i> , 2021 , 500, 114842	10.3	7
88	Hydrothermal Growth of ZnO Hexagonal Nanocrystals: Effect of Growth Conditions. <i>Journal of Nano Research</i> , 2012 , 21, 57-63	1	6
87	Zinc stannate nanostructures: hydrothermal synthesis. <i>Science and Technology of Advanced Materials</i> , 2011 , 12, 013004	7.1	6
86	Facile synthesis of ZnS/Ag ₂ S core-shell nanospheres with enhanced nonlinear refraction. <i>Journal of Materials Science: Materials in Electronics</i> , 2020 , 31, 1283-1292	2.1	6
85	Graphene Oxide/Polyethylene Glycol-Stick for Thin Film Microextraction of Blockers from Human Oral Fluid by Liquid Chromatography-Tandem Mass Spectrometry. <i>Molecules</i> , 2019 , 24,	4.8	6

84	Oriented zinc oxide nanorods: A novel saturable absorber for lasers in the near-infrared. <i>Beilstein Journal of Nanotechnology</i> , 2018 , 9, 2730-2740	3	6
83	TEMPERATURE SENSING BY SIDE COUPLING OF LIGHT THROUGH ZINC OXIDE NANORODS ON OPTICAL FIBERS. <i>Sensors and Actuators A: Physical</i> , 2017 , 257, 15-19	3.9	5
82	Photocatalytic Inactivation of Escherichia Coli Using Zinc Stannate Nanostructures under Visible Light. <i>Advanced Materials Research</i> , 2015 , 1131, 203-209	0.5	5
81	UVA radiation induced ultrafast electron transfer from a food carcinogen benzo[a]pyrene to organic molecules, biological macromolecules, and inorganic nano structures. <i>Journal of Physical Chemistry B</i> , 2013 , 117, 3726-37	3.4	5
80	Studies on hydrothermally synthesised zinc oxide nanorod arrays for their enhanced visible light photocatalysis. <i>International Journal of Environmental Technology and Management</i> , 2013 , 16, 146	0.6	5
79	Crystallization of nanosized silicon powder prepared by plasma-induced clustering reactions. <i>AIChE Journal</i> , 1997 , 43, 2610-2615	3.6	5
78	Optically induced restructuring of a hydrogenated amorphous silicon thin-film surface. <i>Applied Physics Letters</i> , 1990 , 57, 1227-1229	3.4	5
77	Heterogeneous photo-Fenton reaction and its enhancement upon addition of chelating agents 2020 , 303-330		5
76	Improved chlorate production with platinum nanoparticles deposited on fluorinated activated carbon cloth electrodes. <i>Cleaner Engineering and Technology</i> , 2020 , 1, 100016	2.7	5
75	Low-Cost Integrated Zinc Oxide Nanorod-Based Humidity Sensors for Arduino Platform. <i>IEEE Sensors Journal</i> , 2019 , 19, 2442-2449	4	5
74	X-Fe (X = Mn, Co, Cu) Prussian Blue Analogue-Modified Carbon Cloth Electrodes for Capacitive Deionization. <i>ACS Applied Energy Materials</i> , 2021 , 4, 8275-8284	6.1	5
73	CO Oxidation Efficiency and Hysteresis Behavior over Mesoporous Pd/SiO ₂ Catalyst. <i>Catalysts</i> , 2021 , 11, 131	4	5
72	Potential of Nanosized Ceramic Powder for Functional Applications. <i>Ceramic Engineering and Science Proceedings</i> , 687-694	0.1	5
71	Lagrange multipliers, (exact) regularization and error bounds for monotone variational inequalities. <i>Mathematical Programming</i> , 2017 , 161, 519-549	2.1	4
70	Basis and Prospects of Combining Electroadsorption Modeling Approaches for Capacitive Deionization 2020 , 2, 309-324	2.1	4
69	Improved Sensitization of Zinc Oxide Nanorods by Cadmium Telluride Quantum Dots through Charge Induced Hydrophilic Surface Generation. <i>Journal of Nanomaterials</i> , 2014 , 2014, 1-8	3.2	4
68	Chromatic tuning of plasmon resonance of tri-layered composites: silver, gold and copper nanoparticles for optical thin film colour filter. <i>Micro and Nano Letters</i> , 2012 , 7, 146	0.9	4
67	Synthesis of Zirconia-coated Gold Nanoparticles. <i>Journal of Materials Science Letters</i> , 1998 , 17, 1665-1667		4

66	Synthesis and Optical Properties of Transition Metal Doped ZnO Nanoparticles 2007 ,		4
65	Photocatalytic activities of ZnO nanoparticles synthesized by wet chemical techniques 2006 ,		4
64	Plasma-Produced Silicon Nanoparticle Growth and Crystallization Processes 173-205		4
63	Spray Pyrolyzed Pre-coating Layers for Controlled Growth of Zinc Oxide Nanorods by Hydrothermal Process. <i>Nanoscience and Nanotechnology - Asia</i> , 2011 , 1, 92-96	0.7	4
62	Asymmetric electrode capacitive deionization for energy efficient desalination. <i>Electrochimica Acta</i> , 2020 , 358, 136939	6.7	4
61	Solar selective reflector materials: Another option for enhancing the efficiency of the high-temperature solar receivers/reactors. <i>Solar Energy Materials and Solar Cells</i> , 2021 , 224, 110995	6.4	4
60	Efficient and low-energy mechanochemical extraction of lead from dumped crystal glass waste. <i>Environmental Chemistry Letters</i> , 2021 , 19, 1879-1885	13.3	4
59	Flexible modeling and control of capacitive-deionization processes through a linear-state-space dynamic Langmuir model. <i>Npj Clean Water</i> , 2021 , 4,	11.2	4
58	Ladder Mechanisms of Ion Transport in Prussian Blue Analogues.. <i>ACS Applied Materials & Interfaces</i> , 2021 ,	9.5	4
57	The influence of initial gold nanoparticles layer on migration of silver nanoparticles in silver/glass matrix. <i>Thin Solid Films</i> , 2019 , 685, 216-224	2.2	3
56	Observation of exchanging role of gold and silver nanoparticles in bimetallic thin film upon annealing above the glass transition temperature. <i>Materials Research Express</i> , 2017 , 4, 086409	1.7	3
55	Synthesis and Electrical Characterization of Multilayer Thin Films Designed by Layer-by-Layer Self Assembly of Nanoparticles. <i>Journal of Nano Research</i> , 2010 , 11, 1-6	1	3
54	Colloidal self-organization for nanoelectronics 2004 ,		3
53	Directed Self-Assembly of Multilayer Thin Films of ZnS and Gold Nanoparticles by Modified Polyelectrolyte Deposition Technique. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 901, 1		3
52	Prediction of heterogeneous Fenton process in treatment of melanoidin-containing wastewater using data-based models.. <i>Journal of Environmental Management</i> , 2022 , 307, 114518	7.9	3
51	Engineering FRET-Based Solar Cells: Manipulation of Energy and Electron Transfer Processes in a Light Harvesting Assembly. <i>Springer Series in Materials Science</i> , 2014 , 267-318	0.9	3
50	Highly Porous and Ultra-Lightweight Aero-GaO: Enhancement of Photocatalytic Activity by Noble Metals. <i>Materials</i> , 2021 , 14,	3.5	3
49	An Extended Randles Circuit and a Systematic Model-Development Approach for Capacitive Deionization. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 013502	3.9	3

48	Zinc Oxide Nanowires on Non-Epitaxial Substrates from Colloidal Processing, for Gas Sensing Applications 2005 , 335-338		3
47	Measurement of aluminum oxide film by Fabry-Pérot interferometry and scanning electron microscopy. <i>Journal of Saudi Chemical Society</i> , 2017 , 21, 938-942	4.3	2
46	Nanotechnology in Water Treatment. <i>Environmental Chemistry for A Sustainable World</i> , 2015 , 51-84	0.8	2
45	Resistance Values of Aluminum Oxide Film in Situ during Anodization of Aluminum by Fabry-Pérot Interferometry. <i>ECS Transactions</i> , 2017 , 80, 1221-1229	1	2
44	Oriented ZnO nanorods: A novel saturable absorber for lasers at 10 μm 2017 ,		2
43	Plasmon Resonance Enhanced Zinc Oxide Photoelectrodes for Improvement in Performance of Dye Sensitized Solar Cells. <i>Materials Science Forum</i> , 2013 , 771, 91-101	0.4	2
42	Self-organization of colloidal nanoparticles into functional pressure sensing device. <i>Journal of Nanoscience and Nanotechnology</i> , 2012 , 12, 8143-6	1.3	2
41	Tin Dioxide Nano-Powders for Gas Sensor Applications. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 501, 41		2
40	ZnS:Mn ²⁺ Phosphors Capped with Chitosan. <i>Microscopy and Microanalysis</i> , 2005 , 11,	0.5	2
39	Nanoscale Ordering in Amorphous Silicon Powders Formed by Plasma Induced Reaction of Silane. <i>Materials Science Forum</i> , 1996 , 235-238, 595-600	0.4	2
38	Effect of Ion Bombardment on the Properties of Hydrogenated Amorphous Silicon Prepared from Undiluted and Xenon-Diluted Silane. <i>Japanese Journal of Applied Physics</i> , 1992 , 31, L299-L302	1.4	2
37	Chitosan-Based Antimicrobial Coating for Improving Postharvest Shelf Life of Pineapple. <i>Coatings</i> , 2021 , 11, 1366	2.9	2
36	Predicting capacitive deionization processes using an electrolytic-capacitor (ELC) model: 2D dynamics, leakages, and multi-ion solutions. <i>Desalination</i> , 2022 , 525, 115493	10.3	2
35	Antifouling properties of chitosan coatings on plastic substrates. <i>Journal of Agricultural and Marine Sciences</i> , 2019 , 23, 92	0.7	2
34	Silica and carbon decorated silica nanosheet impact on primary human immune cells. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018 , 172, 779-789	6	2
33	Improved third-order optical nonlinearities in Ag/MoS ₂ Schottky-type nano/hetero-junctions. <i>Optics and Laser Technology</i> , 2021 , 140, 107092	4.2	2
32	Microbial Pathogen Inactivation Using Heterogeneous Photocatalysis. <i>Environmental Chemistry for A Sustainable World</i> , 2012 , 511-541	0.8	1
31	Multilayer thin films of colloidal gold and silica nanoparticles: Effect of polyelectrolyte coating. <i>Canadian Journal of Chemical Engineering</i> , 2012 , 90, 919-924	2.3	1

30	DEVELOPMENT OF INTEGRATED MICROFLUIDIC DEVICE FOR OPTICAL FLOW RATE SENSING. <i>Journal of Circuits, Systems and Computers</i> , 2013 , 22, 1340016	0.9	1
29	Optical properties of gold-containing Poly(acrylic acid) composites. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 501, 79		1
28	Chitosan Clad Manganese Doped Zing Sulphide Nanocrystallites for Biolabeling. <i>Advanced Materials Research</i> , 2008 , 55-57, 589-592	0.5	1
27	DC Analysis of Layer by Layer Devices Fabricated by Nanotechnology 2007 ,		1
26	Forensic Fingerprint Enhancement using Bioadhesive Chitosan and Gold Nanoparticles 2007 ,		1
25	Diode fabricated by layer by layer deposition of semiconductor nanoparticles 2005 ,		1
24	European consortium on nanomaterials. <i>Advanced Materials</i> , 1996 , 8, 555-557	24	1
23	Capacitive Deionization for removal of arsenic from water. <i>Arsenic in the Environment Proceedings</i> , 2016 , 521-522		1
22	Disinfection of Bacteria in Water by Capacitive Deionization. <i>Frontiers in Chemistry</i> , 2020 , 8, 774	5	1
21	Hollow ZnO microspheres self-assembled from rod-like nanostructures: morphology-dependent linear and Kerr-type nonlinear optical properties. <i>Journal of Materials Science: Materials in Electronics</i> , 2021 , 32, 23385-23398	2.1	1
20	A New High-Temperature Durable Absorber Material Solution through a Spinel-Type High Solar Absorptivity Coating on TiAlC MAX Phase Material. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 45008-45017	9.5	1
19	Fabrication and thermo-physical properties characterization of ethylene glycol/MoS ₂ heat exchange fluids. <i>International Communications in Heat and Mass Transfer</i> , 2017 , 89, 185-189	5.8	0
18	Comparative investigation of structure and operating parameters on the performance and reaction dynamic of CO conversion on silica aerogel and fumed-silica-supported Pd catalysts. <i>Surfaces and Interfaces</i> , 2022 , 29, 101776	4.1	0
17	Green Approaches to Prepare Polymeric Composites for Wastewater Treatment. <i>Materials Horizons</i> , 2021 , 531-570	0.6	0
16	Nanomaterials in Food Packaging 2022 , 336-367		0
15	Biopolymers 2022 , 29-65		0
14	An Overview of Natural Biopolymers in Food Packaging 2022 , 1-28		0
13	Edible Films and Coatings 2022 , 445-475		0

- 12 Silver and Zinc Oxide Nanoparticles in Films and Coatings **2022**, 368-393 0
- 11 Multilayered gold/silica nanoparticulate bilayer devices using layer-by-layer self organisation for flexible bending and pressure sensing applications. *Applied Physics Letters*, **2014**, 104, 073106 3-4
- 10 Optical Properties of Gold Clusters Precipitated on Zirconia Particles. *Materials Research Society Symposia Proceedings*, **1997**, 501, 85
- 9 Direct Synthesis of Anisotropic Metal Particles by Ink Jet Printing Technique. *Advanced Materials Research*, **2008**, 55-57, 585-588 0.5
- 8 Sustainable extraction of hazardous metals from crystal glass waste using biodegradable chelating agents. *Journal of Material Cycles and Waste Management*, **2022**, 24, 692 3-4
- 7 ATMOSPHERIC PARAMETERS SENSING USING NANOTECHNOLOGY BASED SENSORS AND IMAGE PROCESSED REAL-TIME SATELLITE DATA. *NATO Science Series Series II, Mathematics, Physics and Chemistry*, **2006**, 443-448
- 6 Developing innovations for adsorptive removal of arsenic from drinking water sources in North Mara gold mining area, Tanzania. *Arsenic in the Environment Proceedings*, **2016**, 559-560
- 5 Pollution Treatment, Remediation and Sensing125
- 4 Poor Man's Nanotechnology From the Bottom Up (Thailand). *Perspectives in Nanotechnology*, **2011**, 141-154
- 3 Optical fiber coated with zinc oxide nanorods toward light side coupling for sensing application **2020**, 293-304
- 2 Functionalized graphene oxide tablets for sample preparation of drugs in biological fluids: Extraction of ritonavir, a HIV protease inhibitor, from human saliva and plasma using LC-MS/MS. *Biomedical Chromatography*, **2021**, 35, e5111 1.7
- 1 Electrochemical parameters of aluminum oxide film in situ during anodization of aluminum by white light-optical interferometry. *Optical Review*, **2021**, 28, 18-26 0.9