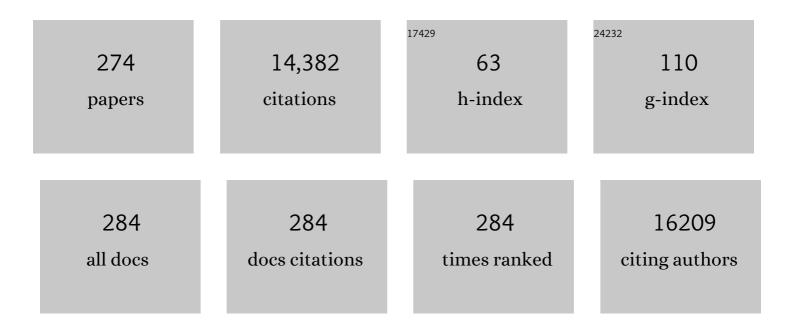
Joydeep Dutta

List of Publications by Year in descending order

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Ιονήεες Πιίττα

#	Article	IF	CITATIONS
1	Perspectives for chitosan based antimicrobial films in food applications. Food Chemistry, 2009, 114, 1173-1182.	4.2	1,165
2	Hydrothermal growth of ZnO nanostructures. Science and Technology of Advanced Materials, 2009, 10, 013001.	2.8	956
3	Photocatalytic degradation of organic dyes with manganese-doped ZnO nanoparticles. Journal of Hazardous Materials, 2008, 156, 194-200.	6.5	741
4	Chitosan based nanocomposite films and coatings: Emerging antimicrobial food packaging alternatives. Trends in Food Science and Technology, 2020, 97, 196-209.	7.8	463
5	Zinc oxide nanowires in chemical bath on seeded substrates: Role of hexamine. Journal of Sol-Gel Science and Technology, 2006, 39, 49-56.	1.1	298
6	Chitosan-zinc oxide nanoparticle composite coating for active food packaging applications. Innovative Food Science and Emerging Technologies, 2016, 38, 231-237.	2.7	290
7	Visible light photocatalytic degradation of microplastic residues with zinc oxide nanorods. Environmental Chemistry Letters, 2019, 17, 1341-1346.	8.3	287
8	Nanotechnology applications in pollution sensing and degradation in agriculture: a review. Environmental Chemistry Letters, 2009, 7, 191-204.	8.3	286
9	Heavy-metal ion sensors using chitosan-capped gold nanoparticles. Science and Technology of Advanced Materials, 2005, 6, 335-340.	2.8	278
10	Visible light photocatalytic degradation of polypropylene microplastics in a continuous water flow system. Journal of Hazardous Materials, 2021, 406, 124299.	6.5	231
11	pH-dependent growth of zinc oxide nanorods. Journal of Crystal Growth, 2009, 311, 2549-2554.	0.7	200
12	Applications of Nanotechnology in Wastewater Treatment—A Review. Journal of Nanoscience and Nanotechnology, 2014, 14, 613-626.	0.9	166
13	Chitosan-zinc oxide nanocomposite coatings for the prevention of marine biofouling. Chemosphere, 2017, 168, 408-417.	4.2	163
14	Luminescent nanoparticles of Mn doped ZnS passivated with sodium hexametaphosphate. Science and Technology of Advanced Materials, 2005, 6, 296-301.	2.8	154
15	Effect of seeded substrates on hydrothermally grown ZnO nanorods. Journal of Sol-Gel Science and Technology, 2009, 50, 456-464.	1.1	154
16	Zinc stannate nanostructures: hydrothermal synthesis. Science and Technology of Advanced Materials, 2011, 12, 013004.	2.8	150
17	Enhanced visible light photocatalysis through fast crystallization of zinc oxide nanorods. Beilstein Journal of Nanotechnology, 2010, 1, 14-20.	1.5	149
10	Introduction to Nanoscience and Nanotechnology 0		146

#	Article	IF	CITATIONS
19	Bionanocomposite films of agar incorporated with ZnO nanoparticles as an active packaging material for shelf life extension of green grape. Heliyon, 2019, 5, e01867.	1.4	143
20	Enhanced Visible Light Photodegradation of Microplastic Fragments with Plasmonic Platinum/Zinc Oxide Nanorod Photocatalysts. Catalysts, 2019, 9, 819.	1.6	125
21	Photoreactivity of ZnO nanoparticles in visible light: Effect of surface states on electron transfer reaction. Journal of Applied Physics, 2009, 105, .	1.1	122
22	Importance of Plasmonic Heating on Visible Light Driven Photocatalysis of Gold Nanoparticle Decorated Zinc Oxide Nanorods. Scientific Reports, 2016, 6, 26913.	1.6	120
23	Diagnostics of particle genesis and growth in RF silane plasmas by ion mass spectrometry and light scattering. Plasma Sources Science and Technology, 1994, 3, 278-285.	1.3	119
24	Growth of ZnO nanowires on nonwoven polyethylene fibers. Science and Technology of Advanced Materials, 2008, 9, 025009.	2.8	117
25	Selective separation of rare earth ions from aqueous solution using functionalized magnetite nanoparticles: kinetic and thermodynamic studies. Chemical Engineering Journal, 2017, 327, 286-296.	6.6	117
26	Nanostructured Zinc Oxide for Water Treatment. Nanoscience and Nanotechnology - Asia, 2012, 2, 90-102.	0.3	115
27	Synthesis of supported silver nano-spheres on zinc oxide nanorods for visible light photocatalytic applications. Materials Research Bulletin, 2015, 63, 134-140.	2.7	114
28	Perspectives and applications of nanotechnology in water treatment. Environmental Chemistry Letters, 2016, 14, 1-14.	8.3	114
29	Chitosan Nanocomposite Coatings for Food, Paints, and Water Treatment Applications. Applied Sciences (Switzerland), 2019, 9, 2409.	1.3	113
30	Fabrication of zinc oxide nanorods modified activated carbon cloth electrode for desalination of brackish water using capacitive deionization approach. Desalination, 2012, 305, 24-30.	4.0	106
31	Efficient solar photocatalytic degradation of textile wastewater using ZnO/ZTO composites. Applied Catalysis B: Environmental, 2015, 163, 1-8.	10.8	106
32	Zinc oxide nanorod mediated visible light photoinactivation of model microbes in water. Nanotechnology, 2011, 22, 215703.	1.3	104
33	Highly efficient ZnO/Au Schottky barrier dye-sensitized solar cells: Role of gold nanoparticles on the charge-transfer process. Beilstein Journal of Nanotechnology, 2011, 2, 681-690.	1.5	103
34	Brackish water desalination by capacitive deionization using zinc oxide micro/nanostructures grafted on activated carbon cloth electrodes. Desalination, 2014, 344, 236-242.	4.0	102
35	Rare Earth lons Adsorption onto Graphene Oxide Nanosheets. Solvent Extraction and Ion Exchange, 2017, 35, 91-103.	0.8	102
36	Defect engineered visible light active ZnO nanorods for photocatalytic treatment of water. Catalysis Today, 2017, 284, 11-18.	2.2	102

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37	Photocatalytic paper using zinc oxide nanorods. Science and Technology of Advanced Materials, 2010, 11, 055002.	2.8	101
38	Enhanced visible light photocatalysis by manganese doping or rapid crystallization with ZnO nanoparticles. Materials Chemistry and Physics, 2011, 130, 531-535.	2.0	101
39	Photoselective excited state dynamics in ZnO–Au nanocomposites and their implications in photocatalysis and dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2011, 13, 12488.	1.3	96
40	Biodegradable Hybrid Nanocomposite of Chitosan/Gelatin and Green Synthesized Zinc Oxide Nanoparticles for Food Packaging. Foods, 2020, 9, 1143.	1.9	96
41	Antifouling properties of zinc oxide nanorod coatings. Biofouling, 2014, 30, 871-882.	0.8	89
42	Sol-Gel-Assisted Microwave-Derived Synthesis of Anatase Ag/TiO2/GO Nanohybrids toward Efficient Visible Light Phenol Degradation. Catalysts, 2017, 7, 133.	1.6	87
43	Mie scattering effects from monodispersed ZnS nanospheres. Journal of Applied Physics, 1998, 83, 7860-7866.	1.1	86
44	VISIBLE LIGHT PHOTOCATALYSIS BY TAILORING CRYSTAL DEFECTS IN ZINC OXIDE NANOSTRUCTURES. Nano, 2008, 03, 399-407.	0.5	86
45	Raman Spectroscopy detects changes in Bone Mineral Quality and Collagen Cross-linkage in Staphylococcus Infected Human Bone. Scientific Reports, 2018, 8, 9417.	1.6	86
46	Nutrition-Driven Assembly of Colloidal Nanoparticles: Growing Fungi Assemble Gold Nanoparticles as Microwires. Advanced Materials, 2007, 19, 77-81.	11.1	84
47	High-performance liquefied petroleum gas sensing based on nanostructures of zinc oxide and zinc stannate. Sensors and Actuators B: Chemical, 2011, 157, 232-239.	4.0	84
48	Desalination and disinfection of inland brackish ground water in a capacitive deionization cell using nanoporous activated carbon cloth electrodes. Desalination, 2015, 362, 126-132.	4.0	80
49	Key activity descriptors of nickel-iron oxygen evolution electrocatalysts in the presence of alkali metal cations. Nature Communications, 2020, 11, 6181.	5.8	80
50	Gold nanoparticle synthesis in graft copolymer micelles. Colloid and Polymer Science, 1998, 276, 853-859.	1.0	79
51	Nano zero-valent iron on activated carbon cloth support as Fenton-like catalyst for efficient color and COD removal from melanoidin wastewater. Chemosphere, 2021, 263, 127945.	4.2	79
52	Rational surface modification of Mn3O4 nanoparticles to induce multiple photoluminescence and room temperature ferromagnetism. Journal of Materials Chemistry C, 2013, 1, 1885.	2.7	76
53	Critical Review of Low-Temperature CO Oxidation and Hysteresis Phenomenon on Heterogeneous Catalysts. Catalysts, 2018, 8, 660.	1.6	75
54	Hydrophobic/hydrophilic switching on zinc oxide micro-textured surface. Applied Surface Science, 2013, 264, 344-348.	3.1	72

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55	Enhancement of Photocatalytic Degradation of Methyl Orange by Supported Zinc Oxide Nanorods/Zinc Stannate (ZnO/ZTO) on Porous Substrates. Industrial & Engineering Chemistry Research, 2013, 52, 13629-13636.	1.8	71
56	Self-organization of gold nanoparticles on silanated surfaces. Beilstein Journal of Nanotechnology, 2015, 6, 2345-2353.	1.5	71
57	Controlled Defects of Zinc Oxide Nanorods for Efficient Visible Light Photocatalytic Degradation of Phenol. Materials, 2016, 9, 238.	1.3	71
58	Chlorination disadvantages and alternative routes for biofouling control in reverse osmosis desalination. Npj Clean Water, 2019, 2, .	3.1	71
59	Atomic structure of amorphous nanosized silicon powders upon thermal treatment. Physical Review B, 1996, 54, 2856-2862.	1.1	69
60	Photocatalytic degradation of phenol by iodine doped tin oxide nanoparticles under UV and sunlight irradiation. Journal of Alloys and Compounds, 2015, 618, 366-371.	2.8	69
61	Synthesis of Controlled Spherical Zinc Sulfide Particles by Precipitation from Homogeneous Solutions. Journal of the American Ceramic Society, 1998, 81, 2699-2705.	1.9	66
62	Growth of Zinc Oxide Nanowires and Nanobelts for Gas Sensing Applications. Journal of Metastable and Nanocrystalline Materials, 2005, 23, 27-30.	0.1	66
63	Nanocomposite Zinc Oxide-Chitosan Coatings on Polyethylene Films for Extending Storage Life of Okra (Abelmoschus esculentus). Nanomaterials, 2018, 8, 479.	1.9	66
64	Bioinspired nanocoatings for biofouling prevention by photocatalytic redox reactions. Scientific Reports, 2017, 7, 3624.	1.6	63
65	Effects of cosurfactant on ZnS nanoparticle synthesis in microemulsion. Science and Technology of Advanced Materials, 2005, 6, 266-271.	2.8	62
66	Efficient photocatalytic degradation of phenol in aqueous solution by SnO2:Sb nanoparticles. Applied Surface Science, 2016, 370, 229-236.	3.1	61
67	Hematoporphyrin–ZnO Nanohybrids: Twin Applications in Efficient Visible-Light Photocatalysis and Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2012, 4, 7027-7035.	4.0	59
68	Role of surface defects on visible light enabled plasmonic photocatalysis in Au–ZnO nanocatalysts. RSC Advances, 2015, 5, 96670-96680.	1.7	59
69	Visible light photocatalytic degradation of HPAM polymer in oil produced water using supported zinc oxide nanorods. Chemical Engineering Journal, 2018, 351, 56-64.	6.6	59
70	Toxicity of ZnO and TiO2 Nanoparticles on Germinating Rice Seed Oryza sativa L. International Journal of Bioscience, Biochemistry, Bioinformatics (IJBBB), 2011, , 282-285.	0.2	59
71	Paper modified with ZnO nanorods – antimicrobial studies. Beilstein Journal of Nanotechnology, 2012, 3, 684-691.	1.5	58
72	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. ACS Applied Materials & Interfaces, 2014, 6, 10113-10120.	4.0	55

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73	Photocatalytic degradation of phenol in aqueous solution by rare earth-doped SnO2 nanoparticles. Journal of Materials Science, 2014, 49, 5151-5159.	1.7	54
74	Dependence of intrinsic stress in hydrogenated amorphous silicon on excitation frequency in a plasmaâ€enhanced chemical vapor deposition process. Journal of Applied Physics, 1992, 72, 3220-3222.	1.1	53
75	Air pollution monitoring and GIS modeling: a new use of nanotechnology based solid state gas sensors. Science and Technology of Advanced Materials, 2005, 6, 251-255.	2.8	53
76	Modulation of defect-mediated energy transfer from ZnO nanoparticles for the photocatalytic degradation of bilirubin. Beilstein Journal of Nanotechnology, 2013, 4, 714-725.	1.5	53
77	Improved desalination by zinc oxide nanorod induced electric field enhancement in capacitive deionization of brackish water. Desalination, 2015, 359, 64-70.	4.0	53
78	Superhydrophobic surfaces using selected zinc oxide microrod growth on ink-jetted patterns. Journal of Colloid and Interface Science, 2011, 354, 810-815.	5.0	51
79	Role of Resonance Energy Transfer in Light Harvesting of Zinc Oxide-Based Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2010, 114, 10390-10395.	1.5	50
80	Dual-Sensitization via Electron and Energy Harvesting in CdTe Quantum Dots Decorated ZnO Nanorod-Based Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2012, 116, 14248-14256.	1.5	50
81	Visible light photocatalysis of mixed phase zinc stannate/zinc oxide nanostructures precipitated at room temperature in aqueous media. Ceramics International, 2014, 40, 8743-8752.	2.3	50
82	Zinc oxide–zinc stannate core–shell nanorod arrays for CdS quantum dot sensitized solar cells. Electrochimica Acta, 2012, 68, 141-145.	2.6	49
83	Development of a visible light active photocatalytic portable water purification unit using ZnO nanorods. Catalysis Science and Technology, 2012, 2, 918.	2.1	48
84	One pot synthesis of opposing â€~rose petal' and â€~lotus leaf' superhydrophobic materials with zinc oxid nanorods. Journal of Colloid and Interface Science, 2014, 415, 32-38.	le _{5.0}	48
85	Variations in structural and electrical properties of magnetron-sputtered indium tin oxide films with deposition parameters. Thin Solid Films, 1988, 162, 119-127.	0.8	47
86	Development and Improvement of Carbon Nanotube-Based Ammonia Gas Sensors Using Ink-Jet Printed Interdigitated Electrodes. IEEE Nanotechnology Magazine, 2013, 12, 255-262.	1.1	47
87	Microwave-enhanced degradation of phenol over Ni-loaded ZnO nanorods catalyst. Applied Catalysis B: Environmental, 2014, 156-157, 456-465.	10.8	47
88	VHF Plasma Deposition: A Comparative Overview. Materials Research Society Symposia Proceedings, 1992, 258, 15.	0.1	45
89	Dynamics of light harvesting in ZnO nanoparticles. Nanotechnology, 2010, 21, 265703.	1.3	45
90	Efficient visible light photocatalysis of benzene, toluene, ethylbenzene and xylene (BTEX) in aqueous solutions using supported zinc oxide nanorods. PLoS ONE, 2017, 12, e0189276.	1.1	45

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91	Removal and regrowth inhibition of microalgae using visible light photocatalysis with ZnO nanorods: A green technology. Separation and Purification Technology, 2016, 162, 61-67.	3.9	43
92	Copper zinc oxide nanocatalysts grown on cordierite substrate for hydrogen production using methanol steam reforming. International Journal of Hydrogen Energy, 2019, 44, 22936-22946.	3.8	43
93	Phase Transformation of Metastable ZnSnO ₃ Upon Thermal Decomposition by <i>In‧itu</i> Temperatureâ€Dependent Raman Spectroscopy. Journal of the American Ceramic Society, 2015, 98, 4044-4049.	1.9	42
94	Dynamic Langmuir Model: A Simpler Approach to Modeling Capacitive Deionization. Journal of Physical Chemistry C, 2019, 123, 16479-16485.	1.5	42
95	Antimicrobial Activity Enhancement of Poly(ether sulfone) Membranes by in Situ Growth of ZnO Nanorods. ACS Omega, 2017, 2, 3157-3167.	1.6	41
96	Introduction to Nanoscience. , 0, , .		41
97	Heavy metal ion sensing in water using surface plasmon resonance of metallic nanostructures. Groundwater for Sustainable Development, 2015, 1, 1-11.	2.3	40
98	Selective growth of zinc oxide nanorods on inkjet printed seed patterns. Journal of Crystal Growth, 2009, 311, 2352-2358.	0.7	39
99	Self-decontaminating photocatalytic zinc oxide nanorod coatings for prevention of marine microfouling: a mesocosm study. Biofouling, 2016, 32, 383-395.	0.8	38
100	Influence of Atomic Hydrogen, Band Bending, and Defects in the Top Few Nanometers of Hydrothermally Prepared Zinc Oxide Nanorods. Nanoscale Research Letters, 2017, 12, 22.	3.1	38
101	The effects of ZnO nanostructures of different morphology on bioenergetics and stress response biomarkers of the blue mussels Mytilus edulis. Science of the Total Environment, 2019, 694, 133717.	3.9	38
102	Zinc oxide nanorods based catalysts for hydrogen production by steam reforming of methanol. International Journal of Hydrogen Energy, 2012, 37, 5518-5526.	3.8	37
103	X-Fe (X = Mn, Co, Cu) Prussian Blue Analogue-Modified Carbon Cloth Electrodes for Capacitive Deionization. ACS Applied Energy Materials, 2021, 4, 8275-8284.	2.5	37
104	Nanostructured zinc sulphide phosphors. Materials Research Society Symposia Proceedings, 1997, 501, 369.	0.1	35
105	Role of central metal ions in hematoporphyrin-functionalized titania in solar energy conversion dynamics. Physical Chemistry Chemical Physics, 2013, 15, 18562.	1.3	35
106	Nanoporous aggregates of ZnS nanocrystallites. Applied Organometallic Chemistry, 1998, 12, 327-335.	1.7	34
107	An Easy-to-Use Tool for Modeling the Dynamics of Capacitive Deionization. Journal of Physical Chemistry A, 2019, 123, 6628-6634.	1.1	34
108	Pyrosol deposition of fluorine-doped tin dioxide thin films. Journal of Materials Science, 1995, 30, 53-62.	1.7	33

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109	Effective medium theory characterization of Au/Ag nanoalloy-porous alumina composites. Scripta Materialia, 1997, 9, 571-574.	0.5	33
110	Application of Eh-pH diagram for room temperature precipitation of zinc stannate microcubes in an aqueous media. Materials Research Bulletin, 2014, 49, 645-650.	2.7	33
111	Synthesis of hierarchically porous silica aerogel supported Palladium catalyst for low-temperature CO oxidation under ignition/extinction conditions. Microporous and Mesoporous Materials, 2020, 292, 109758.	2.2	33
112	Effect of a semiconductor dielectric coating on the salt adsorption capacity of a porous electrode in a capacitive deionization cell. Electrochimica Acta, 2015, 166, 329-337.	2.6	32
113	Heterogeneous photocatalysis for removal of microbes from water. Environmental Chemistry Letters, 2012, 10, 145-151.	8.3	31
114	Controlled side coupling of light to cladding mode of ZnO nanorod coated optical fibers and its implications for chemical vapor sensing. Sensors and Actuators B: Chemical, 2014, 202, 543-550.	4.0	31
115	Gadolinium doped tin dioxide nanoparticles: an efficient visible light active photocatalyst. Journal of Rare Earths, 2015, 33, 1275-1283.	2.5	30
116	Visible photoluminescence from hydrogenated silicon particles suspended in a silane plasma. Journal of Applied Physics, 1995, 78, 61-66.	1.1	29
117	Nanoparticle-Sensitized Photodegradation of Bilirubin and Potential Therapeutic Application. Journal of Physical Chemistry C, 2012, 116, 9608-9615.	1.5	29
118	Tailoring the pressure drop and fluid distribution of a capacitive deionization device. Desalination, 2019, 449, 111-117.	4.0	28
119	Chitosan nanocomposite coatings with enhanced corrosion inhibition effects for copper. International Journal of Biological Macromolecules, 2020, 162, 1566-1577.	3.6	28
120	Asymmetric electrode capacitive deionization for energy efficient desalination. Electrochimica Acta, 2020, 358, 136939.	2.6	27
121	Manganese Doped Zinc Sulfide Quantum Dots for Detection of Escherichia coli. Journal of Fluorescence, 2012, 22, 403-408.	1.3	26
122	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. Materials Science in Semiconductor Processing, 2015, 36, 124-133.	1.9	26
123	Effects of synthesis methods on performance of CuZn/MCM-41 catalysts in methanol steam reforming. International Journal of Hydrogen Energy, 2021, 46, 3539-3553.	3.8	26
124	Chitosan Nanocomposite Coatings Containing Chemically Resistant ZnO–SnOx Core–shell Nanoparticles for Photocatalytic Antifouling. International Journal of Molecular Sciences, 2021, 22, 4513.	1.8	26
125	Bilayer SnO2:In/SnO2 thin films as transparent electrodes of amorphous silicon solar cells. Thin Solid Films, 1991, 199, 201-207.	0.8	25
126	Intermediate formation during photodegradation of phenol using lanthanum doped tin dioxide nanoparticles. Research on Chemical Intermediates, 2016, 42, 3055-3069.	1.3	25

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127	Application of pyrosol deposition process for large-area deposition of fluorine-doped tin dioxide thin films. Thin Solid Films, 1994, 239, 150-155.	0.8	24
128	Nanotechnology in environmental protection and pollution. Science and Technology of Advanced Materials, 2005, 6, 219-220.	2.8	24
129	Simplified Prediction of Ion Removal in Capacitive Deionization of Multi-Ion Solutions. Langmuir, 2020, 36, 1338-1344.	1.6	24
130	Fundamentals of Nanotechnology. , 0, , .		23
131	Chitosan-Based Antimicrobial Coating for Improving Postharvest Shelf Life of Pineapple. Coatings, 2021, 11, 1366.	1.2	22
132	Prediction of heterogeneous Fenton process in treatment of melanoidin-containing wastewater using data-based models. Journal of Environmental Management, 2022, 307, 114518.	3.8	22
133	Processing of nano-scaled silicon powders to prepare slip cast structural ceramics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1995, 204, 107-112.	2.6	21
134	Dynamical Maxwell-Garnett optical modeling of nanogold-porous alumina composites: Mie and Kappa influence on absorption maxima. Scripta Materialia, 1997, 9, 575-578.	0.5	21
135	Controlled growth of zinc oxide microrods by hydrothermal process on porous ceramic supports for catalytic application. Journal of Alloys and Compounds, 2014, 586, 169-175.	2.8	21
136	Capacitive deionization with asymmetric electrodes: Electrode capacitance vs electrode surface area. Electrochimica Acta, 2015, 176, 420-425.	2.6	21
137	Ecosafety Screening of Photo-Fenton Process for the Degradation of Microplastics in Water. Frontiers in Marine Science, 2022, 8, .	1.2	21
138	Demonstration of side coupling to cladding modes through zinc oxide nanorods grown on multimode optical fiber. Optics Letters, 2013, 38, 3620.	1.7	20
139	Optimization of the sublethal dose of silver nanoparticle through evaluating its effect on intestinal physiology of Nile tilapia (<i>Oreochromis niloticus</i> L.). Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2015, 50, 814-823.	0.9	20
140	Two step copper impregnated zinc oxide microball synthesis for the reduction of activation energy of methanol steam reformation. Chemical Engineering Journal, 2013, 223, 304-308.	6.6	19
141	Nanoparticulate Dielectric Overlayer for Enhanced Electric Fields in a Capacitive Deionization Device. ACS Applied Materials & Interfaces, 2018, 10, 5941-5948.	4.0	19
142	Plasmonic Photocatalyst Design: Metal—Semiconductor Junction Affecting Photocatalytic Efficiency. Journal of Nanoscience and Nanotechnology, 2019, 19, 383-388.	0.9	19
143	Multimodal Imaging of Pancreatic Ductal Adenocarcinoma Using Multifunctional Nanoparticles as Contrast Agents. ACS Applied Materials & Interfaces, 2020, 12, 53665-53681.	4.0	19
144	Design of electric-field assisted surface plasmon resonance system for the detection of heavy metal ions in water. AIP Advances, 2015, 5, .	0.6	18

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145	Facile synthesis of ZnS–Ag2S core–shell nanospheres with enhanced nonlinear refraction. Journal of Materials Science: Materials in Electronics, 2020, 31, 1283-1292.	1.1	18
146	Design principles for enhanced up-scaling of flow-through capacitive deionization for water desalination. Desalination, 2021, 500, 114842.	4.0	18
147	Multilayered silicon/silicon nitride thin films deposited by plasma-CVD: Effects of crystallization. Scripta Materialia, 1995, 6, 843-846.	0.5	17
148	Structure of nanometersized silicon particles prepared by various gas phase processes. Journal of Non-Crystalline Solids, 1998, 232-234, 182-187.	1.5	17
149	Flexible modeling and control of capacitive-deionization processes through a linear-state-space dynamic Langmuir model. Npj Clean Water, 2021, 4, .	3.1	17
150	CO Oxidation Efficiency and Hysteresis Behavior over Mesoporous Pd/SiO2 Catalyst. Catalysts, 2021, 11, 131.	1.6	17
151	One-Diode Model Equivalent Circuit Analysis for ZnO Nanorod-Based Dye-Sensitized Solar Cells: Effects of Annealing and Active Area. IEEE Nanotechnology Magazine, 2012, 11, 763-768.	1.1	16
152	Nanocomposite functionalized membranes based on silica nanoparticles cross-linked to electrospun nanofibrous support for arsenic(<scp>v</scp>) adsorption from contaminated underground water. RSC Advances, 2019, 9, 8280-8289.	1.7	16
153	Plasmon resonance tuning of gold and silver nanoparticle-insulator multilayered composite structures for optical filters. Micro and Nano Letters, 2011, 6, 342.	0.6	15
154	Predicting and Enhancing the Ion Selectivity in Multi-Ion Capacitive Deionization. Langmuir, 2020, 36, 8476-8484.	1.6	15
155	Improved third-order optical nonlinearities in Ag/MoS2 Schottky-type nano/hetero-junctions. Optics and Laser Technology, 2021, 140, 107092.	2.2	15
156	Ladder Mechanisms of Ion Transport in Prussian Blue Analogues. ACS Applied Materials & Interfaces, 2022, 14, 1102-1113.	4.0	15
157	Side coupling of multiple optical channels by spiral patterned zinc oxide coatings on large core plastic optical fibers. Micro and Nano Letters, 2016, 11, 122-126.	0.6	14
158	Predicting capacitive deionization processes using an electrolytic-capacitor (ELC) model: 2D dynamics, leakages, and multi-ion solutions. Desalination, 2022, 525, 115493.	4.0	14
159	Effect of CuO additives on the reversibility of zirconia crystalline phase transitions. Journal of Materials Science, 1999, 34, 2207-2215.	1.7	13
160	Chitosan Capped Colloidal Gold Nanoparticles for Sensing Zinc Ions in Water. Journal of Nano Research, 0, 16, 55-61.	0.8	13
161	Optical dynamic range maximization for humidity sensing by controlling growth of zinc oxide nanorods. Photonics and Nanostructures - Fundamentals and Applications, 2018, 30, 57-64.	1.0	13
162	An Extended Randles Circuit and a Systematic Model-Development Approach for Capacitive Deionization. Journal of the Electrochemical Society, 2021, 168, 013502.	1.3	13

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163	Nanocoating Is a New Way for Biofouling Prevention. Frontiers in Nanotechnology, 2021, 3, .	2.4	13
164	Applied light-side coupling with optimized spiral-patterned zinc oxide nanorod coatings for multiple optical channel alcohol vapor sensing. Journal of Nanophotonics, 2016, 10, 036009.	0.4	12
165	Low-Cost Integrated Zinc Oxide Nanorod-Based Humidity Sensors for Arduino Platform. IEEE Sensors Journal, 2019, 19, 2442-2449.	2.4	12
166	Solar selective reflector materials: Another option for enhancing the efficiency of the high-temperature solar receivers/reactors. Solar Energy Materials and Solar Cells, 2021, 224, 110995.	3.0	12
167	COST Action PRIORITY: An EU Perspective on Micro- and Nanoplastics as Global Issues. Microplastics, 2022, 1, 282-290.	1.6	12
168	Radiofrequency-plasma-deposited hydrogenated fluorinated silicon-carbon alloy films. Physical Review B, 1989, 40, 3830-3836.	1.1	11
169	Comparison of the properties of hydrogenated microcrystalline silicon films deposited by photo–chemicalâ€vapor deposition and glowâ€discharge deposition processes. Journal of Applied Physics, 1989, 66, 4709-4714.	1.1	11
170	Microstructural properties of silicon powder produced in a low pressure silane discharge. Journal of Applied Physics, 1995, 77, 3729-3733.	1.1	11
171	Current-voltage characteristics of layer-by-layer self-assembled colloidal thin films. Applied Physics Letters, 2006, 89, 133123.	1.5	11
172	Studies on Chitosan Stabilised ZnS:Mn ²⁺ Nanoparticles. Journal of Bionanoscience, 2008, 2, 42-48.	0.4	11
173	Optical thin film filters of colloidal gold and silica nanoparticles prepared by a layer-by-layer self-assembly method. Journal of Materials Science, 2011, 46, 6877-6882.	1.7	11
174	A New High-Temperature Durable Absorber Material Solution through a Spinel-Type High Solar Absorptivity Coating on Ti ₂ AlC MAX Phase Material. ACS Applied Materials & Interfaces, 2021, 13, 45008-45017.	4.0	11
175	Conduction Properties of Layer-by-Layer Self-Assembled Multilayer Nanoparticulate Structures. Journal of Nanoelectronics and Optoelectronics, 2008, 3, 184-189.	0.1	11
176	Microstructure, Optoelectronic Properties and Saturated Defect Density of A-SL:H Prepared in VHF-Glow Discharge Using AR and XE Dilution. Materials Research Society Symposia Proceedings, 1992, 258, 135.	0.1	10
177	Growth, microstructure and sintering behavior of nanosized silicon powders. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1997, 127, 263-272.	2.3	10
178	Growth of gold/zinc sulphide multilayer films using layer-by-layer assembly of colloidal nanoparticles. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 41, 285-291.	1.3	10
179	Graphene Oxide/Polyethylene Glycol-Stick for Thin Film Microextraction of β-Blockers from Human Oral Fluid by Liquid Chromatography-Tandem Mass Spectrometry. Molecules, 2019, 24, 3664.	1.7	10
180	Heterogeneous photo-Fenton reaction and its enhancement upon addition of chelating agents. , 2020, , 303-330.		10

#	Article	IF	CITATIONS
181	Improved chlorate production with platinum nanoparticles deposited on fluorinated activated carbon cloth electrodes. Cleaner Engineering and Technology, 2020, 1, 100016.	2.1	10
182	A new automated model brings stability to finiteâ€element simulations of capacitive deionization. Nano Select, 2022, 3, 1021-1035.	1.9	10
183	Sodium to cesium ions: a general ladder mechanism of ion diffusion in prussian blue analogs. Physical Chemistry Chemical Physics, 2022, 24, 12374-12382.	1.3	10
184	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. Journal of Non-Crystalline Solids, 1993, 164-166, 59-62.	1.5	9
185	Novel Synthesis of Gold Nanoparticles in Aqueous Media. Materials Research Society Symposia Proceedings, 2005, 901, 1.	0.1	9
186	Microwave assisted hydrothermal synthesis of zinc hydroxystannate films on glass substrates. Journal of Sol-Gel Science and Technology, 2012, 62, 495-504.	1.1	9
187	Optical fiber-based sensor for in situ monitoring of cadmium sulfide thin-film growth. Optics Letters, 2013, 38, 5385.	1.7	9
188	Visibleâ€Lightâ€Induced Directed Gold Microwires by Selfâ€Organization of Nanoparticles on <i>Aspergillus Niger</i> . Particle and Particle Systems Characterization, 2013, 30, 473-480.	1.2	9
189	Excitation of core modes through side coupling to multimode optical fiber by hydrothermal growth of ZnO nanorods for wide angle optical reception. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 2232.	0.9	9
190	Enhanced hydrogen selectivity via photo-engineered surface defects for methanol steam reformation using zinc oxide–copper nanocomposite catalysts. Applied Catalysis A: General, 2014, 471, 63-69.	2.2	9
191	Role of bonding mechanisms during transfer hydrogenation reaction on heterogeneous catalysts of platinum nanoparticles supported on zinc oxide nanorods. Applied Surface Science, 2016, 377, 200-206.	3.1	9
192	Supported versus colloidal zinc oxide for advanced oxidation processes. Applied Surface Science, 2017, 411, 285-290.	3.1	9
193	Highly Porous and Ultra-Lightweight Aero-Ga2O3: Enhancement of Photocatalytic Activity by Noble Metals. Materials, 2021, 14, 1985.	1.3	9
194	Zinc stannate nanostructures: hydrothermal synthesis. Science and Technology of Advanced Materials, 2011, 12, 013004.	2.8	9
195	Chemical synthesis and characterization of nano-crystalline palladium oxide. Scripta Materialia, 1995, 6, 313-316.	0.5	8
196	Crystallization of amorphous nano-sized silicon powders. Scripta Materialia, 1995, 6, 493-496.	0.5	8
197	TEMPERATURE SENSING BY SIDE COUPLING OF LIGHT THROUGH ZINC OXIDE NANORODS ON OPTICAL FIBERS. Sensors and Actuators A: Physical, 2017, 257, 15-19.	2.0	8
198	Observation of exchanging role of gold and silver nanoparticles in bimetallic thin film upon annealing above the glass transition temperature. Materials Research Express, 2017, 4, 086409.	0.8	8

#	Article	IF	CITATIONS
199	Oriented zinc oxide nanorods: A novel saturable absorber for lasers in the near-infrared. Beilstein Journal of Nanotechnology, 2018, 9, 2730-2740.	1.5	8
200	Basis and Prospects of Combining Electroadsorption Modeling Approaches for Capacitive Deionization. Physics, 2020, 2, 309-324.	0.5	8
201	Effect of ultraviolet irradiation on the white light degraded electronic properties of hydrogenated amorphous silicon films. Applied Physics Letters, 1989, 55, 1975-1977.	1.5	7
202	Optically induced restructuring of a hydrogenated amorphous silicon thinâ€film surface. Applied Physics Letters, 1990, 57, 1227-1229.	1.5	7
203	Cluster-induced crystallization of nano-silicon particles. Scripta Materialia, 1997, 9, 359-362.	0.5	7
204	Hydrothermal Growth of ZnO Hexagonal Nanocrystals: Effect of Growth Conditions. Journal of Nano Research, 2012, 21, 57-63.	0.8	7
205	Phase transformation behavior of zinc metastannates obtained by aqueous precipitation at different temperatures. Journal of Materials Science, 2014, 49, 7282-7289.	1.7	7
206	Photocatalytic Inactivation of Escherichia Coli Using Zinc Stannate Nanostructures under Visible Light. Advanced Materials Research, 0, 1131, 203-209.	0.3	7
207	The influence of initial gold nanoparticles layer on migration of silver nanoparticles in silver/glass matrix. Thin Solid Films, 2019, 685, 216-224.	0.8	7
208	Langmuir-Based Modeling Produces Steady Two-Dimensional Simulations of Capacitive Deionization via Relaxed Adsorption-Flow Coupling. Langmuir, 2022, 38, 3350-3359.	1.6	7
209	Crystallization of nanosized silicon powder prepared by plasma-induced clustering reactions. AICHE Journal, 1997, 43, 2610-2615.	1.8	6
210	Synthesis of Zirconia-coated Gold Nanoparticles. Journal of Materials Science Letters, 1998, 17, 1665-1667.	0.5	6
211	UVA Radiation Induced Ultrafast Electron Transfer from a Food Carcinogen Benzo[<i>a</i>]pyrene to Organic Molecules, Biological Macromolecules, and Inorganic Nano Structures. Journal of Physical Chemistry B, 2013, 117, 3726-3737.	1.2	6
212	Improved Sensitization of Zinc Oxide Nanorods by Cadmium Telluride Quantum Dots through Charge Induced Hydrophilic Surface Generation. Journal of Nanomaterials, 2014, 2014, 1-8.	1.5	6
213	Efficient and low-energy mechanochemical extraction of lead from dumped crystal glass waste. Environmental Chemistry Letters, 2021, 19, 1879-1885.	8.3	6
214	Hollow ZnO microspheres self-assembled from rod-like nanostructures: morphology-dependent linear and Kerr-type nonlinear optical properties. Journal of Materials Science: Materials in Electronics, 2021, 32, 23385-23398.	1.1	6
215	Ruthenium containing molecular electrocatalyst on glassy carbon for electrochemical water splitting. Dalton Transactions, 2022, 51, 7957-7965.	1.6	6

Plasma-Produced Silicon Nanoparticle Growth and Crystallization Processes. , 0, , 173-205.

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#	Article	IF	CITATIONS
217	Colloidal self-organization for nanoelectronics. , 2004, , .		5
218	Studies on hydrothermally synthesised zinc oxide nanorod arrays for their enhanced visible light photocatalysis. International Journal of Environmental Technology and Management, 2013, 16, 146.	0.1	5
219	Potential of Nanosized Ceramic Powder for Functional Applications. Ceramic Engineering and Science Proceedings, 0, , 687-694.	0.1	5
220	Zinc Oxide Nanowires on Non-Epitaxial Substrates from Colloidal Processing, for Gas Sensing Applications. , 2005, , 335-338.		5
221	Spray Pyrolized Pre-coating Layers for Controlled Growth of Zinc Oxide Nanorods by Hydrothermal Process. Nanoscience and Nanotechnology - Asia, 2011, 1, 92-96.	0.3	5
222	Photocatalytic activities of ZnO nanoparticles synthesized by wet chemical techniques. , 2006, , .		4
223	Synthesis and Optical Properties of Transition Metal Doped ZnO Nanoparticles. , 2007, , .		4
224	Chromatic tuning of plasmon resonance of tri-layered composites: silver, gold and copper nanoparticles for optical thin film colour filter. Micro and Nano Letters, 2012, 7, 146.	0.6	4
225	Lagrange multipliers, (exact) regularization and error bounds for monotone variational inequalities. Mathematical Programming, 2017, 161, 519-549.	1.6	4
226	Silica and carbon decorated silica nanosheet impact on primary human immune cells. Colloids and Surfaces B: Biointerfaces, 2018, 172, 779-789.	2.5	4
227	Optical fiber coated with zinc oxide nanorods toward light side coupling for sensing application. , 2020, , 293-304.		4
228	Nanoscale Ordering in Amorphous Silicon Powders Formed by Plasma Induced Reaction of Silane. Materials Science Forum, 1997, 235-238, 595-600.	0.3	3
229	ZnS:Mn2+ Phosphors Capped with Chitosan. Microscopy and Microanalysis, 2005, 11, .	0.2	3
230	Directed Self-Assembly of Multilayer Thin Films of ZnS and Gold Nanoparticles by Modified Polyelectrolyte Deposition Technique. Materials Research Society Symposia Proceedings, 2005, 901, 1.	0.1	3
231	Synthesis and Electrical Characterization of Multilayer Thin Films Designed by Layer-by-Layer Self Assembly of Nanoparticles. Journal of Nano Research, 2010, 11, 1-6.	0.8	3
232	Fabrication and thermo-physical properties characterization of ethylene glycol—MoS2 heat exchange fluids. International Communications in Heat and Mass Transfer, 2017, 89, 185-189.	2.9	3
233	Resistance Values of Aluminum Oxide Film in Situ during Anodization of Aluminum by Fabry-Pérot Interferometry. ECS Transactions, 2017, 80, 1221-1229.	0.3	3
234	Antifouling properties of chitosan coatings on plastic substrates. Journal of Agricultural and Marine Sciences, 2019, 23, 92.	0.5	3

#	Article	IF	CITATIONS
235	Freestanding Activated Carbon Nanocomposite Electrodes for Capacitive Deionization of Water. Polymers, 2022, 14, 2891.	2.0	3
236	Effect of Ion Bombardment on the Properties of Hydrogenated Amorphous Silicon Prepared from Undiluted and Xenon-Diluted Silane. Japanese Journal of Applied Physics, 1992, 31, L299-L302.	0.8	2
237	European consortium on nanomaterials. Advanced Materials, 1996, 8, 555-557.	11.1	2
238	Tin Dioxide Nano-Powders for Gas Sensor Applications. Materials Research Society Symposia Proceedings, 1997, 501, 41.	0.1	2
239	Forensic Fingerprint Enhancement using Bioadhesive Chitosan and Gold Nanoparticles. , 2007, , .		2
240	Self-Organization of Colloidal Nanoparticles Into Functional Pressure Sensing Device. Journal of Nanoscience and Nanotechnology, 2012, 12, 8143-8146.	0.9	2
241	Microbial Pathogen Inactivation Using Heterogeneous Photocatalysis. Environmental Chemistry for A Sustainable World, 2012, , 511-541.	0.3	2
242	Multilayer thin films of colloidal gold and silica nanoparticles: Effect of polyelectrolyte coating. Canadian Journal of Chemical Engineering, 2012, 90, 919-924.	0.9	2
243	Plasmon Resonance Enhanced Zinc Oxide Photoelectrodes for Improvement in Performance of Dye Sensitized Solar Cells. Materials Science Forum, 2013, 771, 91-101.	0.3	2
244	Measurement of aluminum oxide film by Fabry–Pérot interferometry and scanning electron microscopy. Journal of Saudi Chemical Society, 2017, 21, 938-942.	2.4	2
245	Oriented ZnO nanorods: A novel saturable absorber for lasers at 1–2 μm. , 2017, , .		2
246	Disinfection of Bacteria in Water by Capacitive Deionization. Frontiers in Chemistry, 2020, 8, 774.	1.8	2
247	Capacitive Deionization for removal of arsenic from water. Arsenic in the Environment Proceedings, 2016, , 521-522.	0.0	2
248	Efficient Desalination of Brackish Ground Water via a Novel Capacitive Deionization Cell Using Nanoporous Activated Carbon Cloth Electrodes. Journal of Engineering Research, 2017, 12, 22.	0.2	2
249	Optical properties of gold-containing Poly(acrylic acid) composites. Materials Research Society Symposia Proceedings, 1997, 501, 79.	0.1	1
250	Diode fabricated by layer by layer deposition of semiconductor nanoparticles. , 2005, , .		1
251	DC Analysis of Layer by Layer Devices Fabricated by Nanotechnology. , 2007, , .		1
252	Direct Synthesis of Anisotropic Metal Particles by Ink Jet Printing Technique. Advanced Materials Research, 2008, 55-57, 585-588.	0.3	1

#	Article	IF	CITATIONS
253	Chitosan Clad Manganese Doped Zing Sulphide Nanocrystallites for Biolabeling. Advanced Materials Research, 2008, 55-57, 589-592.	0.3	1
254	DEVELOPMENT OF INTEGRATED MICROFLUIDIC DEVICE FOR OPTICAL FLOW RATE SENSING. Journal of Circuits, Systems and Computers, 2013, 22, 1340016.	1.0	1
255	Green Approaches to Prepare Polymeric Composites for Wastewater Treatment. Materials Horizons, 2021, , 531-570.	0.3	1
256	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.	0.8	1
257	Nanoparticle Self-Assembly via Facile (Bio)Chemistry: Charge-Stabilized Metal Nanoparticles on Microbial Cell Surfaces. Journal of Bionanoscience, 2010, 4, 92-98.	0.4	1
258	Estimation of ion adsorption using iterative analytical model in capacitive deionization process. , 0, 116, 75-82.		1
259	Spray Pyrolized Pre-coating Layers for Controlled Growth of Zinc Oxide Nanorods by Hydrothermal Process. Nanoscience and Nanotechnology - Asia, 2011, 1, 92-96.	0.3	1
260	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. Surfaces and Interfaces, 2022, 29, 101776.	1.5	1
261	Optical properties of gold clusters precipitated on zirconia particles. Materials Research Society Symposia Proceedings, 1997, 501, 85.	0.1	0
262	Pyrosol Generation of ZnO Nanoparticles and Structured Thin Films. , 2006, , .		0
263	Growth Process of Novel Thin Films by Directed Self Organization of Nanoparticles. , 2007, , .		0
264	Chitosan Clad Manganese Doped Zinc Suiphide Nanoparticles as Biological Labels. , 2007, , .		0
265	Development of integrated optical characterization bench for sensing microfluidic channel. , 2012, , .		0
266	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.	1.5	0
267	Electrochemical parameters of aluminum oxide film in situ during anodization of aluminum by white light-optical interferometry. Optical Review, 2021, 28, 18-26.	1.2	0
268	Method for manufacturing an ear device and ear device. Journal of the Acoustical Society of America, 2005, 117, 2696.	0.5	0
269	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.	0.1	0
270	Poor Man's Nanotechnology—From the Bottom Up (Thailand). Perspectives in Nanotechnology, 2011, , 141-154.	0.1	0

#	Article	IF	CITATIONS
271	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.	0.0	Ο
272	Photocatalytic degradation of organic dyes using TiO2 nanotube arrays and aero-ZnO- ZnS under UV and visible light illumination. , 2020, , .		0
273	Sustainable extraction of hazardous metals from crystal glass waste using biodegradable chelating agents. Journal of Material Cycles and Waste Management, 2022, 24, 692.	1.6	0
274	Large-Sized Nanocrystalline Ultrathin β-Ga2O3 Membranes Fabricated by Surface Charge Lithography. Nanomaterials, 2022, 12, 689.	1.9	0